A QUASI-EXPERIMENTAL STUDY TO EVALUATE AN EDUCATIONAL PROGRAMME IN PERINEAL REPAIR FOR MIDWIVES AND STUDENTS

By

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Statement of Originality

The work submitted in this thesis is the result of my own research and the results of my own efforts. Any research or text from other authors is fully referenced both in the text and bibliography. This thesis has not been submitted in part or whole for any other professional qualification or degree.
ABSTRACT

Aims of the research
The main aim of this study was to evaluate the effectiveness of a work-based module and in-service educational programme in perineal repair for midwives on their perceived level of competency undertaking this skill in clinical practice.

Background
The reduction in the practice of episiotomy, lack of formal instruction in perineal repair and inconsistency in perineal trauma management amongst midwives and students has resulted in the lack of perceived confidence and competency in perineal repair locally, necessitating a structured training programme in perineal repair.

Methodology
A Quasi-experimental pre-post intervention case study design combining a non-equivalent comparison group undertaken in six NHS consultant/midwifery led Trusts in South East England between December 2001 and January 2006.

Main findings
Significantly greater numbers of midwives were able to practise perineal repair at higher levels of competency following an educational intervention in five experimental trusts ($P < .006$). There was a non-significant difference in the comparison Trust ($P < .535$). Decisions taken to undertake specific perineal trauma management were largely influenced by the midwives' professional expertise, clinical judgement, reference to the newly developed trauma proforma and National RCOG (2004) guidelines. In addition, an educational programme for midwives was also successful in increasing the numbers of senior student midwives who were able to participate in perineal repair confidently under the direct supervision of their mentor when they perceived that their mentor was confident and competent undertaking the procedure.

Conclusion
The outcomes of this study make an original contribution towards a new body of expert knowledge in pre- and post-registration midwifery education surrounding the midwives’ and students’ confidence, competency and decision making process associated with the assessment and management of perineal trauma. It has provided a greater understanding and insight into the complex nature of workplace learning, competency development and assessment alongside the multiple factors influencing the midwives’ and students’ perceived competency in perineal repair.
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DEDICATION

This thesis is dedicated to my father, Keith Quinten Reynolds who died peacefully on January 4th 2009 after completing my Doctorate. Dad, your support, faith and prayers were always with me.
Preface

A QUASI-EXPERIMENTAL STUDY TO EVALUATE AN EDUCATIONAL PROGRAMME IN PERINEAL REPAIR FOR MIDWIVES AND STUDENTS

Preface

Since commencing this study in 2002, the PErineal Assessment and Repair Longitudinal Study (PEARLS, RCM 2006) was launched in 2006 (RCM 2006). This was a welcome initiative which was long overdue and has the potential to make a significant difference to women's perineal trauma management and the role of the midwife undertaking perineal repair nationally. In addition, the National Institute for Health and Clinical Excellence (NICE) published guidance for Intrapartum Care, specifying the assessment and management of perineal trauma by clinicians underpinned by current best-evidence (NICE 2007). These two areas were sadly lacking in the early conception and implementation of this study. Therefore, it is necessary to journey back to the beginning of this research and the events which have led to the current management of perineal trauma by midwives.

Great changes have occurred in midwifery practice and education during the last two decades. Childbearing women have been encouraged to take a more active role in the choices and decisions they make to empower them in their maternity care. Similarly, midwives have become more autonomous and independent practitioners. In many respects midwifery has moved forward. Midwives have taken on consultancy roles, and through necessity have taken on greater responsibility. Yet, there are still areas of midwifery practice which continue to lag behind. These areas have been largely under-researched, which has caused confusion and uncertainty for midwives, students and childbearing women themselves. One such area of midwifery practice which required investigation was the role of the midwife in the recognition, assessment and repair of perineal trauma. Research in this area is necessary if we are to reduce maternal morbidity resulting from the rising incidence of postnatal perineal problems.

My initial interest in undertaking this research project stems from my experience as a community midwife in the early 1980s. This period marked the beginning of the modern era in obstetric technology. Midwifery was practised largely under a dominant model of scientific medical care, which was representative of the
dominant positivist paradigm during this period. This approach to midwifery care was in conflict with the developments emerging in the maternity services and clinical practice at that time. Emphasis on the medical model of care was also in conflict with my own personal philosophy of holistic midwifery care.

In my role as a community midwife the demand for the continuity of women-centred care made it necessary to become skilled in the practice of perineal repair. Post-registration midwifery education was in its infancy during the 1980s and perineal repair was not a pre-requisite in the midwifery curriculum. However, wishing to provide continuity of care as an autonomous practitioner, I subsequently acquired this skill through the instruction of a senior obstetric registrar. However, I recognised at that time the ad hoc and fragmented way in which clinical skills were being taught in the workplace. Clearly, theory and practice were not adequately integrated which resulted in little professional preparation to underpin competent practice and clinical decision making in perineal repair.

In my role as Director of Studies for post-registration midwifery education in 2003-2005, my interest in bridging this theory-practice gap and facilitating skills in perineal repair at the University of Surrey for midwives and students became of central interest to me. My early investigation into practice-based learning and continuing professional development in this area was prompted further by midwives and students who expressed the inconsistency and lack of formal instruction and supervision in perineal repair in current practice.

Up to 2006, there were no national or local evidence-based guidelines or risk management initiatives defining the role and responsibilities of the midwife undertaking perineal repair. I concluded from these findings that there was a theory-practice gap and an urgent need to explore a practice epistemology in perineal repair in midwifery education. With a focus on integrated practical knowledge and the demand on midwives to extend their role undertaking perineal repair there was a need to develop an educational work-based programme which would meet the educational requirements of pre- and post-registration midwives. Thus, to investigate the views, attitudes, knowledge and lived experiences of
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both midwives and students in respect to perineal repair and to evaluate a work-based programme of learning, the following question was considered:

Would a work-based module and in-service education programme in perineal repair, effectively increase the perceived level of confidence and competency for both midwives and students undertaking this skill?

The first three chapters of this thesis will set the scene for the project and provide the background for which the research questions will be answered in subsequent chapters both by the literature and the research itself.
CHAPTER ONE

A REVIEW OF THE LITERATURE SURROUNDING WOMEN'S EXPERIENCE OF PERINEAL TRAUMA AND THE ROLE AND EDUCATION OF THE MIDWIFE UNDERTAKING PERINEAL REPAIR

Introduction

Three areas of concerns voiced by midwives in clinical practice and women using the maternity services prompted the implementation of this project at the University of Surrey in 2003. These were: inconsistency in perineal trauma management by some midwives due to the trend of non-repair of second degree perineal tears; the lack of formal instruction and assessment in perineal repair for midwives and students; and the short and long term problems affecting some women associated with substandard perineal management following delivery.

This chapter reviews the evidence surrounding women's experience of perineal trauma and the role of the midwife undertaking perineal repair placing the research in context with the cultural, political and educational changes which have taken place in midwifery practice over the last two decades. Two issues were identified which have made a substantial impact on the midwives' perceived level of confidence and competence undertaking perineal repair in the last ten years. Firstly, the current trend in clinical practice to leave some second degree perineal tears un-repaired despite the lack of robust evidence to support this practice. Secondly, the lack of education and surgical skills training for midwives in the recognition, assessment and repair of perineal trauma.

The lack of formal instruction and supervision for midwives in recent years may have contributed in part to a decrease in their confidence and competence in this important skill. Inconsistency of practice and the lack of education and training in perineal repair may also be responsible for some of the increasing problems surrounding women's physical and psychosocial postnatal perineal morbidity.
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This chapter is divided into four sections: the first identifies the increasing problems some women encounter as a result of substandard perineal management following delivery; the second identifies the changes in midwifery practice which have led to the current debate behind non-repair of some second degree perineal tears; the third reviews the provision of education and training in surgical skills for midwives in perineal repair management both nationally and locally leading up to the commencement of the project in 2003; the final part of the chapter poses the main and subsidiary research questions with the aims of the project and the outline of the thesis. The literature review is limited to perineal skills training in the United Kingdom as this role is mainly undertaken globally by medical staff. In order for the reader to have an understanding of the terms used in this thesis a glossary is provided in appendix A.

Women's experiences of perineal trauma

Spontaneous perineal trauma is defined as any injury to the posterior vagina, the perineal skin and muscles, the anal sphincter and mucosa, sustained during vaginal birth (Spendlove 2005:45). RCOG (2004) and NICE (2007) classifications of trauma are described in the glossary.

Perineal trauma has been reported to be a source of significant morbidity for a considerable number of women following delivery both in the short and long term (Sultan 1994, MacArthur et al 2001, Handa 2001 et al, Upton 2002, Kettle et al 2002, Andrews et al 2005). Stretching and bruising of the perineal muscles and related structures are a normal consequence of an uncomplicated vaginal birth and can also result in some discomfort. Approximately 85% women having a spontaneous vaginal birth will sustain some form of perineal trauma with 60-70% requiring perineal repair (Olah 1994:67, Lewis and Rouse 1996:39, McCandlish et al 1998:262, Lee 2002:298 and Kettle 2002:2217). Trauma to the perineal tissues can affect a woman's physical and psychosocial wellbeing which may influence successful breastfeeding and attachment to the newborn baby, sexual relations with their partner and the adaptation to family life in the early puerperium and long term.

In the United Kingdom, approximately 23-42% of women will continue to experience perineal pain and discomfort up to 10-12 days postpartum. 7-10% of women will continue to experience long term problems from 3-18 months (Grant 1989, Sleep 1984, Glazener et al 1995, 1997, McCandlish 1998). Superficial dyspareunia is not uncommon in 23% of women
at three months. 3-10% of women report faecal incontinence and 24% continue to experience urinary problems (Kettle 2004, Premkumar 2005). Symptoms may also include pain on micturition, defecation and accompanying exercise, wound infection and breakdown and the need for re-suturing (Brimacome 1995). Woodman & O’Graney (2002) have also identified aerovagina (air in the vagina) and pelvic organ prolapse from a gaping introitus.

The increasing trend not to repair some second degree tears has necessitated the readmittance of some women to hospital due to gaping perinea and difficulties in perineal healing, causing a source of complaint and dissatisfaction amongst women with the maternity services (Spiby & Bratten 2005). Midwives may be unaware of the consequences of inappropriate non-repair due to early discharge from hospital and the shorter duration of maternity care provision in the community.

Direct muscular damage to the anal sphincter occurring as a result of an identifiable third degree tear or denervation may lead to persistent faecal incontinence in up to 50% women (Fitzpatrick 2000). Not surprisingly, women who sustain third or fourth degree sphincter damage are reported to be five times less likely to be sexually active compared to women with an intact perineum (Williams & Lavender et al 2005, van Brummen & Bruinse et al 2006).

Recognised obstetric anal sphincter injuries (OASIS) have been identified in 0.5 and 2.5% of vaginal deliveries (Byrd et al 2005) with figures reported as high as 22-24% following postpartum endosonographic examinations (Haadem K et al 1990). In obstetric units where medio-lateral and midline episiotomies are performed, rates of 0.4 -19% have been reported. Although 20 - 41% of OASIS are occult, there has been some concern over the numbers of injuries incorrectly classified as second degree tears, or missed altogether ((Andrews & Sultan 2006). In an interview with 75 trainee doctors and 75 midwives, Sultan et al (1995) found that there was inconsistency in the classifications of trauma and a lack of awareness that anal incontinence could result from a normal delivery.

Women rarely volunteer to report altered faecal incontinence to their general practitioner due to embarrassment and the stigma attached to the condition. Some women also consider a small degree of incontinence to be a normal consequence of childbirth (Mason et al 2001). Persistent incontinence of flatus or urgency of defecation is likely to affect a woman’s social and psychological health status, often delaying their return to work following delivery.
(Fitzpatrick et al 2001). Approximately one third to a half of women sustaining third degree tears experience sexual difficulties, as well as a lack of body image and relationship difficulties with their partner. Lack of information and poor communication between midwives and other health professionals has been highlighted by a number of women in a qualitative study undertaken by Williams & Lavender et al (2005). This lack of communication emphasises the importance of both identification and discussion of the consequences of third degree tears by midwives post delivery.

In recent years there has been an identifiable move towards women requesting an elective caesarean section in order to avoid severe pelvic floor dysfunction, and by some obstetricians to avoid the risk of litigation in the event of colorectal and obstetric complications. A survey of female obstetricians in 1997 identified that 31% would prefer a caesarean section over a vaginal delivery to avoid urinary and faecal incontinence (Handa 2001).

Negligence claims for potentially avoidable anal sphincter injuries have increased in the UK with 60% of women attending a major centre for anal sphincter repair following perineal trauma seeking compensation (Thornton & Lubowski 2006:470). The clinical negligence department at Leigh Day and Co Solicitors (2007) has identified an increasing number of women who have sustained third degree perineal trauma which have been unrecognised, negligently misdiagnosed and repaired as a superficial tear, leaving the anal sphincter irreversibly damaged. Due to misdiagnosis the opportunity to achieve a satisfactory repair was lost leaving the woman incontinent of flatus and faeces. Obstetric experts have also stressed that when a thorough examination is performed by the midwife with the correct identification of a third degree tear, the repair can be undertaken by an expert obstetrician at the time of delivery thus reducing future morbidity.

In summary, the long term perineal problems women encounter can be associated with the following factors: lack of recognition and identification of the classifications of trauma, particularly anal sphincter disruption due to a lack of knowledge and experience by midwives and doctors; the trend to leave perineal tears extending into the perineal muscle to heal naturally; and the anatomically incorrect approximation of wound edges. It is not surprising therefore, that the expertise of the practitioner undertaking perineal repair is considered to be equally, if not more important than the suturing materials and techniques adopted to undertake the repair (Grant 1989:1281, Kettle 2002: 2217).
Inconsistency in clinical practice and the lack of education and training in perineal repair for midwives has contributed in part to the rising number of perineal trauma clinics implemented across the UK (McCandlish 2002, Fitzpatrick et al 2002). Traditionally, only women who have sustained a third or fourth degree tear have been provided obstetric follow-up care. Increasingly, women are being referred following second degree trauma. Although the majority of women attending these clinics return to normality following minimal treatment, there are a proportion of women who will require intensive investigations, management and support to enable them to return to an acceptable quality of life. The competence of midwives and the techniques employed by them therefore, can make a significant impact on the woman’s future recovery following childbirth. With increasing confidence changes can and have occurred through education and training.

Changes in midwifery practice leading to the trend and debate in the management of perineal trauma.

Despite the introduction of perineal repair instruction into the midwifery curriculum in 1983 through the Central Midwives Board (CMB 1983) and European Community Midwives Directives (80/154/EEC & Second Midwifery Directive as amended by Directive 89/594/EEC), there was little formal education and training for this skill in pre- and post-registration midwifery programmes. It was not until the 1990s that midwives started to integrate perineal repair into their role as a consequence of the flexibility of the UKCC (1992) document The Scope of Professional Practice, taking instruction from obstetric registrars. During this period all episiotomies and tears were repaired routinely. Further to this, the skill of perineal repair was extended into the midwives' role as a result of doctors’ reduced working hours through the European Working Time Directive (DoH 2004a), necessitating instruction from senior labour ward experts.

The unfounded practice amongst some midwives towards leaving second degree tears to heal naturally may be attributed to several factors. Firstly, midwives started to exert greater autonomy in perineal management when they were permitted to undertake perineal repair themselves. Secondly, non-repair has reflected the increased involvement of childbearing women themselves who have taken a more proactive role in the choices made regarding their perineal management. A third factor can be attributed to the reduction in intervention by obstetric staff and the orientation in practice towards a more holistic women-centred approach to midwifery care. Organisational problems, such as staff shortages and heavy
work loads, have exacerbated these problems extensively (Lee 2002, Woodman & O'Graney 2002). Reduced numbers of expert midwives working in the delivery suite has also resulted in reduced capacity for instruction and supervision of colleagues in perineal repair. Inexperienced midwives unable to undertake repair without some supervision may have also believed that a tear could heal naturally or they intentionally underestimated the size of the trauma to justify their decision not to repair (Gomme et al 2001:38).

Confusion and diversity in clinical practice amongst midwives occurred for three main reasons: a deficiency in midwives' surgical skills training locally and nationally; the lack of robust evidence to guide midwives in their perineal management; and the increased awareness of women of choices in childbirth.

**Repair or non-repair of second degree perineal trauma: current evidence**

The principle aims of repair are to achieve haemostasis and anatomical integrity restoring the perineal muscles to their pre-pregnancy function. Repaired trauma using the recommended continuous technique to the vaginal wall and muscles with subcuticular repair to the perineal skin using Vicryl Rapide has been shown to reduce postnatal perineal pain in the first 10 days postnatal (Kettle et al 2002) making a substantial difference to perineal healing (Grant 1989, Olah 1994, Kettle et al 1998 & 2002). Long term studies to date have failed to provide a definitive answer to support the non-repair of second degree trauma. How midwives reach their decisions to leave tears to heal naturally is not always clear. Are decisions based on professional judgement and expertise, the depth of the tear or hospital policy? Second degree tears (equivalent to an episiotomy) may be small, medium or large/severe involving the superficial and deep muscle layers. The discrepancy in the size of the tear and whether repair is required causes the greatest controversy for many midwives.

Three small retrospective studies conducted in the UK and two small randomised controlled trials (RCTs) conducted in Scotland and Sweden have evaluated the effects of leaving spontaneous perineal tears to heal naturally. Two retrospective studies specifically, have influenced practice in the non-suturing of second degree tears. These were undertaken by Head (1993) and Clement and Reed (1999). Neither study was able to provide any statistical evidence to support non-repair. The reliability and validity of these studies therefore make their findings unsuitable as a basis for midwifery practice. However, both
studies highlighted the importance of involving women in their own care by offering them informed choices and joint decision making.

One RCT undertaken in Sweden by Lundquist et al (2000) followed 80 women who were randomised equally into repair/non-repair groups. There was no statistical difference in short term perineal pain or the healing process between the two groups. The rationale for non-repair was clearly stated in this study. Lacerations should not be bleeding and were classified as minor and not exceeding 2 x 2 cms into the muscle layers. This is the first study to report the size of the trauma and has clear implications for midwifery practice and the necessity for the accurate assessment of perineal trauma. Despite this evidence the study is too small to detect minor differences in the outcomes. More robust evidence is required.

A second small RCT undertaken in Scotland by Fleming & Hagen et al (2003) sought to examine the difference in outcomes between 74 primiparous (first-time mothers) randomised into sutured and non-sutured groups. Using the REEDA scale for the wound approximation score (Davidson 1974:7), healing was significantly better (lower) in the sutured group at day 1, 10 days and at 6 weeks At 6 weeks there was a significantly higher proportion of women with closed tears ($P = 0.001$) in the sutured group (26/31 84%) compared to the un-sutured group (16/36 44%) with a confidence interval (CI) 16.5% to 56.9%. Women who had not been sutured had poorer wound approximation and gaping. Measures of trauma were not identified in this study and again it is difficult to determine which sizes of trauma are likely to heal more rapidly. These findings contradict those of Lundquist et al. The inconsistency in the literature only adds to the confusion midwives already experience in practice.

A prospective cohort study comparing women with a sutured or un-sutured second degree perineal tear was undertaken in five maternity units in Birmingham implementing the new Peri-Rule for the objective measurement of tears for comparison (Metcalfe et al 2006). Of the 282 women, 86 were un-sutured and 196 sutured. Urinary frequency was more prevalent at 10 days post partum ($p< 0.04$) with increased self-referral for perineal problems ($p<0.02$), and increased postnatal depression scores $\geq 13$ ($p<0.01$) at 12 months in the un-sutured group. However there were no statistical differences in the frequency or severity of perineal pain, use of analgesia or perineal wound infection, or resumption of sexual intercourse. Although dyspareunia was reported to be higher in the un-sutured group the difference was not significant. Differences in perineal healing however were not reported in
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Literature Review

this study which was disappointing given the size of the study. Despite the size of the study the researchers acknowledged that compliance with study protocols was poor and midwives neglected to record important data. The study findings did not support a change in practice from suturing to non-suturing. However, issues relating to protocol compliance and training for midwives were recommended for future RCTs and the direct comparison of management outcomes.

Langley et al (2006) assessed the healing rates, levels of pain and the return of normal urinary and sexual function between 200 women who had repair or non-repair of second degree tears. Findings demonstrated that there were no significant differences between the two groups in respect of rate of healing long term. However, non-suturing of non-bleeding and opposed tears resulted in non-significant slower rates of healing at 5 days. There was no significant difference in postpartum incontinence or resumption of sexual activity. However, the authors did not discuss the size of the trauma left to heal naturally making comparisons questionable. The evidence to support the practice of non-repair of the perineum on the grounds of healing still remains inconclusive. Nevertheless, three large RCTs have demonstrated that there are no major adverse effects associated with leaving well opposed perineal skin to heal naturally (Gordon et al 1998, Grant 2001 Oboro & Tabowei 2003:5). This is currently common practice and has not been questioned. There has been mounting anecdotal evidence from midwives that second degree tears left to heal naturally heal well. In contrast, some wounds continue to gape well into the postnatal period. Midwives are not always aware of the long term problems associated with perineal trauma and many are unable to audit perineal healing due to the early discharge home of women from hospital, lack of continuity of carer, staff shortages and time constraints.

A Danish study undertaken by Kindberg et al (2008) compared a continuous repair technique, with an interrupted technique using inverted knots to the sin layer. The continuous technique used was a loose, continuous non-locking stitch to close the vaginal mucosa, and muscle layer. The perineal skin edges are closed using a continuous subcuticular technique and a terminal knot in the vaginal mucosa in front of the hymenal ring. The inverted interrupted technique used in this study involves closing the vaginal mucosa with a continuous non-locking stitch ending at the hymenal ridge. Interrupted stitches are placed in the muscle layer and the skin is approximated using inverted, interrupted stitches in the subcutaneous tissue 1-2mm under the perineal skin edges. The knots are ‘buried’ under the skin edges. Vicryl Rapide was used for the repair. Results of
this double-blind RCT of 400 primiparous women having a normal vaginal delivery showed that there was no difference between the techniques in perineal pain at 10 days postpartum, wound healing, patient satisfaction, need for re-suturing or dyspareunia. This is the first study to compare a combination of techniques. The researchers recognised that the continuous technique is faster and requires less suture material which is an important recourse consideration. It would appear then that midwives can feel assured that using a combination of techniques is effective but need to leave the skin surface free to reduce perineal pain. In comparison, Morano et al (2006) found that using the continuous versus standard interrupted technique to skin that there was no difference in the same outcomes at 3 months. However, there was less perineal pain at 10 days postpartum with the continuous subcuticular technique. These findings are consistent with Kettle et al (2002). NICE (2007) intrapartum care guidelines recommend the continuous non-locking subcuticular technique.

The above studies have evaluated the outcomes of repair techniques and non-repair to the perineum which have important consequences for both childbearing women and midwives. High levels of evidence are required to guide and support midwives when discussing choices with women about their trauma management. Decisions must be underpinned by clear and unbiased information with all potential outcomes considered. With the lack of robust evidence to support non-repair of small second degree tears and the absence of specific national or local guidelines in perineal trauma management during early 2004 confusion continued amongst midwives and students.

Education and training in surgical skills workshops for all midwives and students using up-to-date evidence will help to minimise the adverse outcomes associated with perineal trauma. The fourth part of this chapter reviews the provision of education and surgical skills training in perineal repair nationally and locally prior to the study intervention in 2004.

*The provision of education and surgical skills training in perineal repair for midwives leading up to 2004.*

In the UK, midwives are responsible for the repair of the majority of uncomplicated second degree perineal trauma sustained following a spontaneous vaginal delivery. There are wide variations in the competence, methods and materials used by midwives both locally and nationally. Many midwives continue to use repair techniques in which they were first instructed rather than evaluating their own practice and considering current evidence.
Greenshields and Hume (1993) reported that 81.4% (n = 224) of midwives in their survey used an interrupted technique with only 14.25% (n=39) of midwives using the recommended subcuticular technique to the perineal skin. This practice has continued well into the 21st Century despite a comprehensive review by Grant (1989) and Kettle (2002) advocating the subcuticular technique for the reduction of perineal pain and improved healing.

In 1993, Olah (1994) reported that 68% midwives repaired the perineum following a normal delivery. These figures were compared with a nationwide survey of consultant maternity units where 60% midwives were undertaking perineal repair and a further 10% were planning to undertake training in the near future to improve the quality of repair (Garcia et al 1986). Approximately 65-85% of midwives claimed to undertake perineal repair in 2001 across the five NHS Trusts contracted to the University of Surrey. However, there were no regular structured educational surgical skills workshops provided for midwives in any of the five Trusts. With the introduction of Clinical Negligence Scheme for Trusts (CNST), risk management and clinical governance in midwifery care nationally, a review of the current provision of education in perineal repair was necessary to evaluate its effectiveness on midwifery practice.

Changing Childbirth - Report of the Expert Maternity Group (DoH 1993:) reiterates that research, audit and evaluation of services are pivotal processes in providing effective and efficient care. An audit of maternity services is an important component in perineal care, yet it is rarely undertaken. Brownlee (1994) sought to retrain midwives in a standardised technique to ensure they were all competent practitioners through a comprehensive teaching programme. Student midwives were included in the training, with the aim that all staff would be competent in repair at the end of their first rotation to the delivery suite. Following this educational programme in 1992, 84% of the repairs following a spontaneous normal delivery were undertaken by midwives using the recommended continuous subcuticular technique to the skin layer (Brownlee 1994).

A similar educational programme was introduced by Kettle (2002) in North Staffordshire in 1995. 75 midwives took part in the audit. The audit revealed that: 84% of midwives had not received any formal training; 93% considered that they required more training; 38% did not consider themselves confident to perform perineal repair unless they were supervised; and 71% of midwives, who had received training, carried out the skill based on the ‘see one, do two, now you are on your own’ method. Following a standardised training programme by
Kettle a re-audit was undertaken in 1999. The results revealed that: of the 79 midwives who were re-audited, 6% had not received formal training; 54% requested further training; 18% did not feel confident undertaking perineal repair unsupervised and 54% of midwives were supervised for more than four repairs prior to practising unsupervised. This audit revealed that a systematic and multidisciplinary rolling programme of skills workshops, and a training video with support and logged experience was beneficial for increasing midwives' confidence and competence in perineal repair. To add to the success of the programme a formal perineal repair proforma was also developed and became an accepted part of the woman's records. Kettle's findings are further supported by Sultan (1995) who found that perineal anatomy was poorly understood with perineal trauma incorrectly identified by trainee doctors and midwives. 75 midwives and 75 trainee doctors from neighbouring hospitals were randomly selected to complete a semi-structured questionnaire. The results identified that only 20% of doctors and 48% of midwives were satisfied with their surgical skills training in perineal repair. More worryingly, 41% of doctors and 16% of midwives incorrectly identified anal sphincter damage as a second degree tear.

Incorrect classification of tears and the failure to recognise third degree trauma with inadequate repair have been the principle causes of successful negligence claims which could be avoided with good identification (Eddy 1999:178). Groom and Paterson (2001) found that with increased vigilance in the recognition and assessment of perineal trauma using bi-digital anal assessment, 3rd degree tears (anal sphincter involvement) could be reduced by 40%. This study highlights further the need for improved education and training for midwives and trainee doctors in perineal anatomy, assessment, and the recognition of severe tears.

Limitations which have been shown to restrict the current teaching of perineal repair at the bedside include lack of time, clinical expertise and the availability of suitable scenarios for teaching. An evaluation of surgical skills training using a three dimensional perineal trainer has shown to be effective in enabling junior doctors perform perineal repair consistently eight months following initial instruction (Cain and Shirar 1996:107). No evidence has been found to date identifying the formal assessment of midwives implementing perineal repair. Mandel et al (2000:783 & Kneebone 2001:909) concur with the limited published evidence of formal assessment in surgical skills, many of which are undertaken by subjective evaluation, a technique with unknown validity and reliability. This study proposes that formal
assessment of competency be undertaken at the bedside by competent senior midwives in the delivery suite using an Objective Structured Clinical Examination (OSCE).

Clearly, intensive and focused training is required. Midwives and students who are appropriately educated and competent are more likely to provide consistently high standards of perineal management and care making a significant difference to the short and long term problems encountered by childbearing women.

In summary, a review of the literature has revealed that there is an urgent need for the dissemination of robust evidence to guide best practice. Limited research has been carried out to evaluate methods of education and training in midwifery, with no evidence to support the necessity for the assessment of midwives' competency undertaking perineal repair. An unskilled practitioner may contribute significantly to the extent and severity of maternal morbidity associated with perineal trauma and repair. Evidence from the literature, and midwifery colleagues in practice highlighted that radical changes were needed to introduce a post-registration work-based education programme in perineal repair to improve the competence and confidence of practitioners.

Rationale for the educational project

In light of the above findings, the study at the University of Surrey was introduced with the following aims. These were to:

- Establish a Perineal Repair Working Group (PRWG) across five NHS Trusts
- Investigate the role and perceived competence and confidence of midwives and students undertaking perineal repair in clinical practice.
- Provide a structured and flexible post-registration work-based module
- Provide alternative flexible monthly in-service perineal repair workshop across five NHS Trusts.
- Design a perineal trauma proforma for the assessment of perineal trauma
• Introduce and implement ‘Evidence for Best Practice’ guidelines for midwives undertaking perineal repair.

• Introduce standards, areas and levels of competencies/proficiencies in perineal repair

• Design and implement an objective structured clinical examination (OSCE) for the assessment of midwives’ competency undertaking perineal repair.

• Evaluate the effectiveness of the education programme

The aim of this study was to: critically analyse and evaluate the effectiveness of a work-based module and in-service educational programme on the perceived level of midwives’ and students’ competency undertaking perineal repair in clinical practice.

The main research question asks:

Will a work-based module and in-service education programme in perineal repair for midwives be effective in increasing their perceived level of confidence and competency undertaking this skill in clinical practice?

Specific areas emerged from the literature which helped to formulate four subsidiary research questions. These were: factors influencing midwives’ working practices; the multiple influences and complexities of workplace learning within a bureaucratic hierarchical organisation such as the NHS; power structures within the organisation; factors influencing the midwives’ decision making process in perineal repair; and the sensitivity of midwives and students towards women’s short and long term problems related to perineal trauma and perineal care. Four subsidiary questions ask:

To what extent do individual practices, clinical guidelines, and government policies influence midwives decision making when managing perineal trauma and repair?

To what extent does power and control in the workplace influence the midwives’ implementation of perineal repair in clinical practice?
In midwifery practice that is highly sensitive to gender sensitive issue, to what extent do midwives and students consider women’s short and long term problems associated with perineal trauma and care?

Will an educational programme for midwives in perineal repair facilitate greater student participation in undertaking this skill in clinical practice?

This thesis will show that significant changes in the midwives’ and students’ perceived level of competency can occur through a well designed and implemented work-based module and in-service education programme in perineal repair. The effectiveness of this programme will be instrumental in providing the midwifery profession with a new practice epistemology and recommendations for perineal repair at local, national and global levels.

This thesis is presented in three parts. Part one comprises five chapters which answer the main and subsidiary research questions from the literature and proposed research providing the theoretical framework underpinning the thesis. In part two, chapter’s six and seven identify the research approach, methodological considerations, and phases of the project’s investigation and methods of data collection. The third part comprises chapter’s eight to thirteen and provides the initial investigation, intervention, analysis, results and discussion of the project. The evaluation of the research and thesis, conclusion and recommendations for future practice is presented in the final chapter.

Chapter two now identifies the national policies surrounding the NHS maternity services, pre- and post-registration midwifery education and the broader context of higher education which have been the driving force behind the implementation of this educational project.
CHAPTER TWO

HEALTH CARE AND EDUCATIONAL POLICY UNDERPINNING THE DEVELOPMENT OF AN EDUCATIONAL PROGRAMME IN PERINEAL REPAIR FOR MIDWIVES.

Introduction

In chapter one, recommendations for a structured educational programme in perineal repair were proposed. Successful implementation of such a programme can assist midwifery education and care in three ways. Firstly, by increasing the midwives’ and students’ perceived level of confidence and competency in perineal repair; secondly, by alleviating the current inconsistency and confusion in perineal management; and thirdly by reducing the rising incidence of women’s perineal morbidity. The effectiveness of a specialised educational programme is founded on the sound integration of government policy and innovative midwifery curricula planning and implementation. Recommendations taken from: The Department of Health; Maternity Services, Midwifery and Higher Education and the Nursing and Midwifery Council (NMC) have been the driving force behind this project.

The aim of this chapter is to identify how healthcare policy, global and educational influences have underpinned the recommendations of the Department of Health’s pre-registration education - ‘Fitness for Practice’ (UKCC 1999), and the framework for post-registration education, Working Together – Learning Together (DH 2001). For the purpose of this thesis I will only be referring to the midwifery discipline of the curriculum as this is my specific area of professional practice.

This chapter comprises three parts: part one considers current maternity service provision and asks whether current policies have embraced former recommendations made by the Department of Health’s Changing Childbirth – Report of the Expert Maternity Group (DoH 1993); part two discusses how the Department of Health’s recommendations for maternity care (Changing Childbirth
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1993) and midwifery competencies and standards of proficiency (NMC 2004) have been integrated into the pre-registration Fitness for Practice (FFP) programme and post-registration Framework for Lifelong Learning curricula at the University of Surrey; and part three looks briefly at higher educational policy and the requirement to embrace lifelong learning in midwifery education.

**Healthcare policy within the maternity services**

Government policies have been affected by technological advances within midwifery practice, which in turn have been affected by wider global processes emerging in the 21st Century. Policy has affected the way in which the maternity services and midwifery education have been planned and delivered. Therefore, investing in the skills and potential of midwives working in the NHS is fundamental in a rapidly changing global healthcare market. The principles supporting the policies which provide a framework for educational programmes are essential to the modernisation and re-shaping of future maternity services within the NHS.

Since 1992, there has been considerable debate about the provision of effective maternity care, demonstrated by the number of government publications about the efficiency and effectiveness of the service (DoH 1993, NHS Executive 1996, DoH Audit Commission – First Class delivery 1997, House of Commons Health Committee 2003, CEMACH 2004, NSF 2004 and Recorded Delivery: a national survey of women’s experience of maternity care 2006 (npeu 2007). These reports have all stressed the need to provide flexible, individual, supportive midwifery care to assure good clinical and psychological outcomes for women and their babies through the clinical governance framework. The maternity services have been high on the management agenda in England as health authorities and Trusts have endeavoured to meet the challenges set by the National Service Framework (NSF) and maternity services standard 11 which recommend that:

'Women have easy access to supportive, high quality maternity services, designed around their individual needs and those of their babies'

The key principles guiding the Changing Childbirth initiative in 1993 (DoH 1993) were that the maternity services should be women-focused, readily accessible, responsive to need and involving women in the planning of their care. Choice became the central tenant for good quality maternity care and one of the three main principles adopted by Changing Childbirth which stated:

"The woman must be the focus of maternity care. She should be able to feel that she is in control of what is happening to her and able to make decisions about her care, based on her needs, having discussed matters fully with the professionals involved".

(Changing Childbirth: Report of the Expert Maternity Group, Department of Health 1993:8)

Women, therefore, were to be afforded choice, control and continuity of carer led by a named midwife. The majority of women hold firm views about how their maternity care should be provided and have contributed widely to the policy process through consumer groups and the National Childbirth Trust (NCT). The policy agenda for maternity care currently prioritises 'women-centred' services. While it focuses on efficiency and effectiveness of service objectives, emphasis is on information, choice, continuity of carer, flexibility and listening to women's views. However, this ideal has posed concerns for midwives, particularly about the degree to which expanding the range of options and providing women more choice is compatible with an efficient service based on finite resources.

The Government report First Class Delivery (1997) identified that women received fragmented care and were afforded limited information, choice and control over key aspects of their care. When women were asked about the degree and extent to which choices were offered and were taken into account in reaching decisions during labour, 50% of women felt they had no say at all. Problems with staffing levels on the delivery suite were an issue with only three out of thirteen Trusts having reviewed their staffing in relation to indicators of need and workload. Further recommendations from the report included:
improvements in communication skills through continuing professional education and the integration of evidence-based practice.

Developing a trusting relationship between women and midwives was one of the key ideals of the NSF (2004). Indeed many of the recommendations of the DoH in Changing Childbirth were reflected in the NHS Plan (DoH 2000a) with patient [women]-centred care, user involvement, striving to provide a seamless service between hospital and community services. One of the fundamental differences between the NSF and Changing Childbirth is the mandatory nature of the policy, which was intended to move the maternity services into the 21st Century.

Integrating recommended maternity services policy into midwifery curricula and clinical practice has not been a straight forward process for a number of reasons. For example, since 2002 there has been a national shortage of midwives which together with the devolved responsibilities of doctors and reduced working hours associated with the European Working Directive, has necessitated that midwives take on new roles and responsibilities. Areas of action identified explicitly by women are: the need for good communication and interpersonal skills; informed choice; continuity of care and the recognition of vulnerable groups. Women's views of their maternity care, published in Recorded Delivery: a national survey of women's experience of maternity care 2006 (npeu 2007), are representative of a time in the maternity services where service provision, organisational and staffing issues are a major concern.

Much of government's publicly stated policy has been to support the informed choice agenda. Recommendations made from the above policies have been subsequently integrated into pre- and post-registration midwifery curricula and the Nursing and Midwifery Council's (NMC 2004a) professional statutory regulations in order to empower women by enabling them to make informed choices.
Integrating NHS and maternity services policy into pre- and post-registration midwifery curricula

This part of the chapter now looks at how the recommendations from healthcare policy are being achieved through current pre-registration midwifery programmes. There are two sections: one reviews the current pre-registration curriculum at the University of Surrey and the other discusses how post-registration education has been influenced by this curriculum.

The pre-registration midwifery curriculum – Fitness for Practice (FFP) 2001

Midwifery: Delivering our Future (DH 1998), Fitness for Practice – The UKCC Commission for Nursing and Midwifery Education (UKCC 1999), Making a Difference (DoH 1999), the NHS Plan (DoH 2000) and the NMC Standards of Proficiency for Pre-registration Midwifery Education (NMC 2004a) have all charted the standards and recognised the changes and developments that have been necessary to deliver women-centred care and guidance for pre- and post-registration education. The current midwifery curriculum has been driven in part by an ever-changing consumer orientated society where individual choice, continuity of care and good interpersonal skills has become the focus in woman-centred care. These policy documents therefore have provided the framework for this study.

Changes to the pre-and post-registration nursing and midwifery curricula at the University of Surrey in 2001, resulted in part from the problems identified in the traditional hospital apprentice style of learning in earlier curricula. These included the midwives’ lack of clinical competence at the point of registration. Many newly qualified midwives lacked the practical skills and integrated knowledge that was expected by their employers (ENB 1997, DH 1999). The apprentice model was further criticised for imparting mainly factual knowledge. Further to this criticism, the authoritative culture of nursing and midwifery did not support independent and critical thinking, an attribute required by future professionals in light of the rapidly changing nature of medical knowledge (Davey 2002:140). In addition the maternity services were undergoing rapid organisational and political change (McGuire 1999). For this reason McGuire recognised the need for a curriculum
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and style of learning which was grounded in midwifery knowledge, practice and research, moving from an apprentice model to a more academic approach.

At the point of registration midwives are expected to take on the full responsibility for the provision of women-centred care throughout pregnancy, labour and the puerperium (World Health Organisation 1996). With the focus on graduate midwives in the near future midwifery education requires that students are prepared for professional and autonomous practice. This preparation should enable midwives to possess the full range of competencies: knowledge, skills, attitudes and values with the ability to work independently and inter-professionally in complex situations, utilizing decision making and advocacy skills in order to represent the views of the women in their care (RCM 2002).

The English National Board (ENB) for Nursing Midwifery and Health Visiting (2001), subsequently the NMC, reiterated further, the need to embrace a learning environment which would support and enable students to experience the full scope of midwifery provision in preparation for autonomous practice at the point of registration. Achieving autonomous midwifery practice by adopting an autonomous model of care therefore, has been the main focus in midwifery and educational policy documents in pre-registration curricula since 1996. Further problems were highlighted in Education in Focus: Strengthening Pre-registration Nursing and Midwifery Education (ENB 2001c). Teaching and learning in the workplace were variable with an identified need for greater integration of theory and practice in order to close the theory-practice gap. To address the issue of achieving competency at the point of registration, the Nursing and Midwifery Council (NMC) recommended competency-based learning outcomes subsequently stated as standards of proficiency (NMC 2004a), which would embrace the assessment of knowledge, skills values and attitudes with transferable skills. NMC changes were made in recognition of the changes that were taking place globally, within higher educational policy and to meet the demands of social and demographic changes occurring in maternity care and healthcare policy.

The FFP curriculum was developed therefore for professional preparation that would ensure that midwives were effectively prepared for a career of changing
roles, continuing professional development (CPD) and lifelong learning (LLL). These changes included radical teaching and learning strategies such as enquiry and problem-based learning and self-directed study. Experiential learning through critical reflection was encouraged in all aspects of theory and practice. A modular approach to education was developed in 1999 with 50% of the learning taking place in the workplace. Workplace learning was considered pivotal in developing students who would be fit for practice, purpose and award at the point of registration.

One of the many roles of the NMC required by the Nursing and Midwifery order (NMC 2001 SI 2002/253) is to establish standards of proficiency which midwives are required to meet at the point of registration, necessary for safe and effective practice. Relating specifically to episiotomy and perineal repair the standards reflect the requirements of the European Community (EC) Midwifery Directives 80/154/ECC and Second Midwifery Directives 80/155/EEC (as amended by Directive 89/594/EEC). The second Directive (article 4) directly relates to the student's experience in perineal repair and states that:

"Performance of episiotomy and initiation into suturing shall include theoretic instruction and clinical practice. The practice of suturing includes suturing of the wound following an episiotomy and simple perineal laceration. This may be in a simulated situation if absolutely necessary". (European Union Council Directive 1989:6)

The student's experience therefore, needed to include close links between academic learning and practice with a specific focus on practice-based learning. Facilitating the achievement of a threshold competency for student midwives in episiotomy and perineal repair endeavours to prepare them for independent practice following registration.

Part of the Government's modernisation agenda and NHS Plan towards quality health professional educational programmes is to ensure that all key stakeholders provide students and midwives with the opportunity to get the most out of their practice placements, with mentors/assessors and education facilitators valuing the quality of that experience (Placements in Focus ENB, DoH
2001a). NMC Standards for the Preparation of Mentors and Teachers - A new framework of guidance (ENB & DoH 2001c) and standards to support learning and assessment in practice (NMC 2006) relates to student support in pre- and post-registration education. The former United Kingdom Central Council (UKCC) for nursing, midwifery and health visitors emphasised the need to take on a new approach to pre-registration programmes, adapting to new and changing health care needs stating:

"It is essential that those who act as mentors and teachers have the appropriate skills to prepare students for the new world of health care and to ensure student learning experiences and needs are fully supported and valued."

(ENB 2001b:7)

For the effective development and implementation of midwifery programmes of education, the NMC (2004:14) reiterated further that:

"It is essential that midwifery programmes of education meet the needs of users of the maternity services as well as students". It is therefore essential that women who use the maternity services are involved in all stages of curriculum planning, development and programme evaluation. This will enable student midwives at the point of registration to meet the needs of women and their babies”.

Currently, users of the maternity services are invited to join the midwifery curriculum planning team so that their views of care are acknowledged and integrated into students' teaching and learning.

Standards which support learning and assessment in practice (NMC 2006), emphasise the importance of mentors' 'fitness for practice' and appropriate preparation to assess students' performance against the NMC's standards of proficiency emphasising:

"... a duty to facilitate students of nursing and midwifery and others to develop their competency (NMC 2006:13).

As a pre-requisite to post-registration education, pre-registration programmes for midwives are required to adapt to meet new and challenging healthcare needs
and developing roles by raising standards and encouraging lifelong learning. The following section discusses the importance of post-registration education for the midwife and its influence on the students' learning in perineal repair.

**Post-registration midwifery curriculum – a Framework for Lifelong Learning**

Robustness in pre-registration education represents the foundation for professional practice, continuing professional development and lifelong learning. Thus, lifelong learning and development are central to delivering the Government's vision of patient-centred care in the NHS. Women have become empowered and knowledgeable consumers of the service with increased expectations of their maternity care. New roles and responsibilities have shifted the 'balance of power' to midwives as fully independent practitioners in the delivery of women-centred care. However, practitioners undertaking new, extended or advanced roles are not expected to do so without undertaking and developing specialist knowledge, skills and expertise. With these changes in mind, the consultation document Post-registration Development (DH 2004c) emphasised the requirement for practitioners' development of their competencies in areas of specialist and advanced practice exceeding those associated with initial qualification and registration.

General government policy on lifelong learning: Learning to Succeed (House of Commons 1999), Continuing Professional Development: Quality in the New NHS (DoH 2000b) and the NHS policy on education, training and development (Working Together- Learning Together DoH 2001a), have already provided guidance on the principles and criteria for establishing local systems of continuing professional development (CPD). The principles for post-registration education and CPD underpinning this project are to provide opportunities for midwives to support clinical governance and clinical excellence. Achieving personal, professional and local service needs in perineal repair are proposed in two ways: access to an accredited Level 3 work-based module or attendance at a certificated in-service perineal repair workshop in the workplace.

With the changes in pre-registration curricula enabling students to acquire diploma and degree status, it was necessary to provide a post-registration
framework by which midwives could extend their career pathway through a similar route. The Higher Award Framework in post-registration education introduced in 1992 was a move towards developing a more structured and equitable means of providing a career pathway for midwives. This provided part-time access to award bearing programmes through stand-alone credit-rated modules. The development and implementation of the post-registration curriculum, incorporated the positive elements of the Higher Award. These included a flexible modular framework, valuing work-based learning which could be underpinned by credit accumulation and transfer (CATS) and accreditation of prior experiential learning (AP(E)L). Building on the recommendations of the Fitness for Practice (UKCC 1999) curriculum, it was also necessary to facilitate learning using similar educational strategies, consistent with pre-registration education. The primary aim of the “Framework for Lifelong Learning in Health and Social Care Practice” (2002, 2007) at the University of Surrey reflects the principles for continuing professional development set out within the Department of Health’s document Working Together – Learning Together: A Framework for Lifelong learning (DH 2001). These principles extend flexible educational opportunities for personal and professional development for all staff. These can be achieved by integrating academic study and work-based learning. It was envisaged that this flexibility in education would engender a culture of lifelong learning within health and social care contexts, specifically within midwifery practice. Changes in pre-and post-registration midwifery education have also been influenced by higher educational policy. The final part of the chapter provides an overview of the factors which have affected these changes.

**Integrating higher education policy into midwifery curricula**

Encouraging lifelong learning in professional practice is fundamental if we are to enable practitioners to keep abreast of the current and future pace of changing healthcare needs in a modern society. Curriculum changes have in part, taken into account the more recent thinking behind higher educational policy, focusing on an appropriate balance between teaching and learning. The general aims for academic achievement which were incorporated into midwifery curricula were stressed by Dearing (1997:19). His sentiments were:
"...through the promotion of effective learning and teaching, and enhancing the professional skills and status of teachers and that all institutions of higher education give priority to developing learning strategies which focus on students’ learning... further identifying ... work-based learning as the way forward to enable a workforce that is skilled and competent to practice within today's postmodern society”.

This was a radical view at the time towards learning which coincided with the Kennedy Report of 1997 (Merricks 2001:11) emphasising the importance of innovative learning strategies for both economic prosperity and the health of society. While the Labour Government in 1998 supported this view, placing learning at the heart of their ambition, there was still a strong view that this was an economy-led policy. This view was succinctly conveyed by Tony Blair when he stated:

"Education is the best economic policy we have".
(The Learning Age: A Renaissance for a new Great Britain DfEE 1998:9).

While there was a clear focus on economics in this statement, it reflected the drive to create a stable state with learning as the corner stone in maintaining both a productive and learning society which would be necessary to keep pace with the continuing demands of globalisation. However, the organisational complexities and scarce resources in a modern NHS have often been in conflict with this ideal. Thus, when planning future educational programmes it is necessary to be continually mindful of future employment needs and the requirements for transferable skills in a permanently changing economy which compels changes to education and training systems (European White Paper 1995:18). Midwives can no longer be complacent and ignore the progress expected of them in developing their competencies to meet the needs of an advanced health service. David Blunkett, Secretary of State for Education and Employment in 2000 stated in his forward to the Green paper:

"...Learning is the key to prosperity – for each of us as individuals, as well as for the nation as a whole. Investment in human capital will be the foundation of success in the knowledge-based global economy of the twenty-first century".
This statement clearly identifies the need to recognise that lifelong learning promotes both human and social potential. In most of adult education and lifelong learning policy statements, citizenship, social order and global competition feature as major elements. These elements cannot be neglected in professional midwifery education. Midwives and students are part of this process within society.

Adult education and lifelong learning policies in the UK have largely been influenced by economic imperatives such as the Organisation for Economic Co-operation and Development (OECD). Research in education and inter-governmental bodies such as The United Nations Educational, Social and Cultural Organisation (UNESCO) influenced Faure’s classical work ‘Learning to Be’ (1972). This work was a turning point for adult education and lifelong learning because it represented Faure’s humanistic perspective on adult education. It focused on the ‘fulfilment of man’ through flexible learning and access to higher levels of education recognising informal and formal learning, incorporating the new curricular ideals of health, cultural and environmental education. This concept paved the way for an optimistic phase of international educational policy and reform, and also initiated the debate about lifelong education (Field 2001:6).

The European Year of Lifelong Learning in 1996, declared by UNESCO and the European Union marked the reawakening in lifelong learning in key policy documents within education and the Department of Health. The demands of a rapidly changing technological and economic structure within Western society and the need to train a more highly skilled and flexible workforce were made implicit in these policies. Global competitive pressures and changes inherent in the technologies were recognised by the OECD and an emphasis was placed on bridging the links between informal learning and formal education and training, bringing with it a new form of scientific and practical knowledge. Jarvis (2001:83) reiterated the sentiments of the British Government report: The Learning Age. He believed that a learning society needed to be created, educative in nature. Thus, in a new learning age, a workforce would be required to show imagination
and confidence. The skills required by the workforce are now diverse and require teachers and trainers with innovation who are able to facilitate different types of knowledge and skills to meet the needs of all occupations. Ultimately, the emphasis in much of higher educational policy is the learners' present and future employability. Employers and employees are recognising that competency, performativity and transferable skills are not only necessary for work but they are also acknowledging the importance of learning from work through continuing professional development and lifelong learning.

Embracing work-based teaching and learning strategies within a professional curriculum will enable the individual within society to become critical and creative during their working lives. Critical thinking can assist practitioners in the construction of their own social reality, enabling them to decide what knowledge is important and legitimate in clinical practice. This critical rationality is necessary to keep pace with the speed by which knowledge changes and the standards and competencies expected of professionals working in an NHS organization in the 21st Century.

Summary and conclusion

This chapter has outlined how health, midwifery and higher educational policies have been the driving force behind the subsequent planning and implementation of this study. Healthcare policies shaping the maternity services have clearly identified that women value highly informed choice and an involvement in the decisions they make about their midwifery care. However, there is evidence that the current shortage of midwives, their changing roles and increased responsibilities influence the extent to which women receive the care recommended in maternity services policies.

Recommendations made from Changing Childbirth, First Class Delivery the NSF and the NMCs standards and proficiencies for practice have been integrated into pre- and post-registration curricula to support maternity care. Changes occurring as a result of the process of globalisation and higher education policy have influenced the teaching and learning strategies which impact on clinical competence in midwifery practice, specifically perineal repair. Higher educational
policy has made a substantial contribution to the promotion of continuing professional development and lifelong learning within the workplace in this project. Policy, integrated into midwifery educational curricula has enabled students and midwives to become part of a highly skilled workforce which is required for future maternity services and the benefit of a continually changing society. Chapter three will now discuss the historical background and context of the research.
Introduction

The aim of this chapter is to discuss the factors which influenced the historical development of the new educational programme in perineal repair for midwives. Teaching and learning strategies, such as problem and enquiry-based learning (PBL & EBL), self-directed learning (SDL) and critical reflection, were introduced into the 'Fitness for Practice' pre-registration curriculum (UKCC 1999) in 2001. These were considered radical at the time as the focus was on student-centred learning in contrast to the traditional teacher-centred approach. This style of learning inevitably created new challenges for teachers facilitating learning in institutes of higher education and practitioners mentoring both pre-and post-registration students. The approach to the students' learning needed to adapt to the globalisation process acknowledging how different forms of knowledge are constructed and valued.

This chapter is divided into two parts. Part one discusses the historical background to the study and is divided into five sections: the process of globalisation and the changing nature of knowledge; the perceived theory-practice gap; radical changes in teaching and learning; support in the learning organisation towards midwives' continuing professional development (CPD) and competency; and the organisation as an effective learning organisation. Part two discusses the historical context of the study and is divided into three sections: the development of a collaborative perineal repair working group (PRWG); perineal repair work-based module; and in-service perineal repair workshops.
Historical background to the research

**The effects of globalisation and the changing nature of knowledge on curricula**

This section identifies some of the effects of the globalisation process on the different forms of knowledge and midwifery education. Changes to the midwifery curriculum have not occurred in isolation. The demands made upon the health service from 'users', the effects of globalization and the 'learning society' have necessitated radical changes in the teaching and learning strategies facilitated in Diploma and Degree programmes to prepare the future midwife for a role which requires both technical competence and an understanding of scientific rationality. Didactic teaching strategies employed within the confines of the classroom have been replaced with an emphasis placed on student-centred learning. The changing nature of knowledge from a single truth to multiple realities has had an impact on the context of learning in both the educational institution and the workplace. 'Grand narratives' (Lyotard 1984) have played a significant role in workplace learning but the relativity of knowledge has to be considered carefully in light of changing practices and the extended roles and responsibilities expected of practitioners. Habermas (1974) urged that we need to be mindful of the different types of knowledge that we facilitate. Practitioners need to be encouraged to question critically, scientific technical knowledge in the light of different forms of knowledge, particularly practical craft knowledge, valuing both positivist and interpretative paradigms. Critical reflection and analysis of practice contends Habermas, enables emancipatory learning.

The effects of globalization have resulted in a shifting emphasis from workers and outcome to performance related criteria. Lyotard (1984) and Boud and Garrick (1999) recognised the importance of pragmatic knowledge for performativity. Thus by integrating practice-based learning more fully into the curriculum, students' understanding of propositional, professional and experiential knowledge can be enhanced. This belief supports the view that knowledge has different purposes. In postmodernity, knowledge is no longer closely linked to legitimizing 'grand narratives', but is valued for its 'performativity' (Lyotard 1984 :34) enabling the
practitioner to become fit for practice, purpose and award. However, it is how
different forms of knowledge are facilitated and bought together in clinical practice
which is often a complex process. The next section will discuss some of the issues
surrounding the theory-practice gap in relation to changes resulting from the

globalisation process.

**Explaining the theory-practice gap in midwifery education.**

The theory-practice gap has been described by Upton (1999:7) as an imbalance
between what is taught in the classroom and what is practised in the clinical
environment. One of the perceived responsibilities for this gap in part came about as
a result of the demands placed on teachers and midwives which were consistent
with educational policy and organisational changes during the 1990s. Firstly, the
relocating of schools of midwifery education from NHS organisations into institutes of
higher education since 1996 has played a significant role in widening the theory-
practice gap. The traditional role of the clinical teacher in the 1970s and 1980s
supported students' experiential learning by integrating theory with the 'apprentice'
style of learning, modelled on the role of the experienced midwife. The merging of a
number of midwifery schools into one single institute of higher education resulted in
the devolvement of the role of the clinical teacher. This change occurred in part as a
result of the teachers' changing responsibilities and geographic locations, preventing
them from visiting NHS sites on a regular basis for teaching.

Secondly, the perceived theory-practice gap has been influenced by the globalization
process. From my perspective as a teacher, I can see two main problems inherent in
the alleged theory-practice gap. The first of these is the rapidity with which
knowledge is continually changing, together with the developing roles and specialist
skills which midwives are increasingly required to fulfil. With an emphasis placed on
evidence-based practice, many students and midwives are unable to keep pace with
this change. Theory taught initially in the classroom may not be representative of
experience occurring in the real world of practice. Is this not a theory-theory gap? Is
the theory taught in the classroom, different from the theory used as a basis for
clinical practice? Are there not two differing theoretical perspectives of midwifery
taught by the teacher and practice mentor? The theory-practice gap may also be attributed to how new theory in the workplace is facilitated by mentors and practitioners as they become aware of changing work conditions. Dale (1994:521) claims that the alleged theory-practice gap stems largely from the difficulty in educationalists and practitioners matching propositional theory facilitated in the classroom, and the theory derived through professional practice. It would appear that there is a hierarchical relationship between educationalists and practitioners when it comes to facilitating theory, and between theory and practice. Perhaps it is the theories of pure academics that dictate how practitioners should be implementing their practice and not an integration of propositional and professional practical theory which should be driving practice. An over emphasis on research-based practice in the classroom could in fact be considered along the same linear model as technical rationality. Unfortunately, the scientific paradigm does not always sit neatly within midwifery practice. While there is a demand within professional education to underpin all propositional knowledge with the best available evidence, the 'gold standard' of evidence remains the randomized controlled trail (RCT). Increasingly there is a demand to underpin practice with levels of evidence which legitimize which type of research we should be integrating into practice. Clearly, the interpretative paradigm features low on the list of legitimized theory, yet it is this area of enquiry which midwives and nurses are employing on a day-to-day basis in their work. Is this not one of the fundamental differences between theory and practice? This hierarchical relationship is described by Schon (1983:21) as technical rationality, "the positivist epistemology of practice". He claims that it is this technical theory that has resulted in the practitioners' "crisis in confidence in professional knowledge". It is in the clinical setting that there is a growing mistrust by practitioners of scientific evidence brought into the practice setting, due to its irrelevance in day-to-day clinical practice, unrepresentative of the real world of work. Thus, practitioners are questioning the very nature of scientific enquiry and how it fits in with the complexities of clinical practice. It is this "crisis in confidence" that Schon refers to as the theory-practice gap.

As a result of the dominant discourse around research and evidence-based practice it is perhaps here that practical tacit knowledge and experience are being lost.
Perhaps the reason that practitioners are reluctant to fully embrace the scientific paradigm is because the lived experiences and meaning women ascribe to their experiences of childbearing are not given the same importance within the interpretative paradigm. This is based on the belief that not all midwifery problems can be reduced to a reductionist's scientific approach. The theory obtained from experimental research relating to clinical experience can not capture the 'know-how' of varied and complex clinical situations. How can we help to solve this crisis in future learning? Before we can do this we need to reflect on the changes within education that have also contributed to the theory-practice gap.

Traditionally, curricula have made clear distinctions between the theory taught in the university and that which is taught alongside practical experience in the workplace. This assumes that the responsibility lies with the teacher who facilitates the knowledge and the mentor who facilitates the practical learning, as in the traditional apprentice style of vocational education. Prior to the amalgamation of midwifery schools into higher institutes of education, teachers took on the dual role of classroom and clinical teaching. Theory taught in the classroom was integrated with clinical practice. Theory provided the basis for understanding the reality of midwifery care and purposeful activity. This integration enabled students to describe, explain, predict and control reality in the practical situation through their knowledge and understanding from propositional knowledge. This knowledge was deemed to be underpinned with the most up-to-date scientific/technical knowledge, 'brought in' by the 'expert' clinical teacher. The integration of knowledge started to diminish as changes in the teacher's role emerged which implies that the theory taught in the classroom is different from the theory upon which practice is based. The gap therefore may not between theory and practice, but within the theoretical framework of the curriculum or programme itself, ie. a theory-theory gap (Dale 1994:522). Here we see two theoretical perspectives of midwifery being used by teachers on the one hand and practitioners/mentors on the other. Both of these perspectives are relevant but different and need to be integrated with experiential learning.

Theory-based knowledge, practical and personal experience, are three forms of knowledge which constitute integrated practical knowledge (Jarvis 2002:124 & Higgs
Integrated knowledge therefore needs to be bought together in the clinical setting to enable practitioners and students to develop an understanding of social reality in midwifery practice. Heron (1981) argued that pre-registration curricula only enabled students to gain factual knowledge, maintaining that experiential knowledge was not being developed. He suggested that factual theory and practice theory, both of which are relevant but different, need to come together through the experience of practice, forming the third theoretical perspective: experiential knowledge. This latter knowledge is considered fundamental to the student's understanding of midwifery activity and reality. Heron believed that it is the lack of experiential knowledge that is creating the theory-practice gap. The gap therefore may not be between theory and practice, but between the view taken by teachers and practitioners/mentors. This would indicate that we are only facilitating learning in two perspectives. It is in the third perspective – experiential learning, that we need to address. Thus any new form of teaching and learning must facilitate the analytical and reflexive process for both students and mentors in the practice setting. This will enable practitioners to bring together the application of propositional and practice theory within the context of experience. It would seem that the answers lay not so much in promoting the use of theory in practice but more how the three types of knowledge can be fully integrated in the workplace. Collaboration between educationalists and clinical practice facilitators and practice educators has been a move which we anticipate will bridge the theory-practice gap.

The question we also need to address is whether the theory-practice gap is necessary and whether it can ever be closed? While many negatively view the gap as an imbalance between theory and practice, Upton (1999) draws upon Rafferty (1992) et al who claim that the gap is necessary for positive change and growth to take place. If we consider why the gap exists in the first place and the emphasis on evidence-based practice will we be able to keep abreast with the changing nature of knowledge within a postmodern society? It is perhaps necessary then to acknowledge that there may always be a gap due to the multiple realities within society and midwifery practice. It is for this reason that the three forms of knowledge are facilitated effectively and acknowledged as legitimate forms of knowledge using innovative learning strategies.
Radical teaching and learning strategies impacting on the role of the mentor

This section provides an overview of the teaching and learning strategies which have underpinned the educational philosophy in the pre-registration 2001 Fitness for Practice (FFP) and post-registration Framework for Lifelong Learning curricula implemented at the University of Surrey in 2003. My aim is not to discuss in detail the teaching and learning strategies per se but to highlight how these strategies impact on the mentor's role in supporting pre- and post-registration students.

EBL, PBL, critical reflection and experiential learning have been considered to be the foundation and stimulus for current learning (Dewey 1938, Kolb 1984, Gibbs 1998). Practice experience now constitutes 50% of the pre-registration midwifery programme, whereby practical knowledge is valued equally, alongside theory taught in the classroom. Practice and theory are fully integrated through single modular units of learning which are specific to areas of practice and competency-based learning outcomes which have been mapped alongside Nursing and Midwifery competencies/proficiencies (NMC 2004). The curriculum embraces an androgogical philosophy towards teaching and learning, drawing on the learner's professional and personal experience. Enquiry, self-directed learning and problem solving is considered by Knowles as central to andragogy (Knowles 1975). An enquiry-based approach to learning places the emphasis on the student taking responsibility for learning through group interaction and individual experience in contrast to the traditional teacher centred approach. An evaluation of an EBL approach to learning in the FFP curriculum (Brown 2004) has highlighted that students perceived greater levels of confidence and competence than perceived by their mentors. The move to professional competency-based learning outcomes (UKCC 1999, NMC 2002) has enabled students to use reflection in the teaching and learning process whereby inadequacies in learning are acknowledged and new knowledge is constructed through further critical reflection in and on practice. Learner's assessment is linked to the teaching and learning strategies and a competency-based approach links professional competence with academic achievement. The post-registration framework has been developed similarly to enable practitioners to develop enquiry and PBL alongside critical reflection in and on practice experiences. For many
practitioners this is in direct contrast to the didactic teacher-led approach many will have experienced in certificate programmes leading up to the 1980s. It is for this reason that many experienced practitioners feel inadequate mentoring students entering midwifery at diploma and degree levels because of the radical changes such as critical, reflexive and problem solving approaches to learning.

Radical, andragogical approaches to teaching and learning appear to be transformative, and emancipative for many learners (Carr & Kemmis 1986). However it has raised issues for both teachers and mentors. Mounting evidence in the literature (Wilson-Barnett 1995, May et al 1997, Duffy 2000), has suggested that mentors are ill-prepared for their role in supporting pre-registration students in clinical practice. More specifically, mentor’s perceived that they received little support from educators. There are four issues here, which I believe are fundamental to facilitating teaching and learning within the workplace in both pre- and post registration education for the success of this project. Firstly, if mentors are to encourage students to be critical and reflexive in their learning, they require up-to-date mentoring skills. A practice focused curriculum places a tremendous responsibility on mentoring midwives for pre- and post-registration students' learning and assessment. This added responsibility, in addition to practice priorities and current workload, must be considered by key stakeholders in order to ensure a high quality of interaction and facilitative learning occurs for pre- and post-registration students.

Secondly, if work-based modules and in-service training programmes such as the ones proposed in this project are to be effective, mentors and teachers need to be equipped with the appropriate facilitative skills at pre- and post registration levels. In achieving these aims, it is only then that students can gain the knowledge, skills and attitudes essential for confident, competent and autonomous practitioners at the point of registration, and throughout lifelong learning. Quality preparation means quality mentors and quality learning for all students. Mentorship must focus on the new roles expected of practitioners within practice with access to mentorship preparation programmes.
Thirdly, mentor's now face even more challenging responsibilities and are accountable to the NMC, for signing off students at the end of a programme or specialist practice module (NMC 2006). Thus to support students, mentors need dedicated time to develop confidence and competence in their own midwifery skills and in their teaching and mentoring roles. Smith and Smith (2003) have identified that current teaching and assessing in practice has not been fully effective, particularly for practitioners undertaking continuing professional education. This has occurred due to significant differences in the complexities of the learning outcomes between pre- and post-registration level programmes/modules.

Finally, practitioners undertaking continuing professional education (CPE) are expected to exercise higher levels of judgement, discretion and decision-making skills than students on pre-registration programmes. It is here that there are two levels of preparation needed to meet the educational demands of pre- and post-registration programmes. These concerns are significant as 50% of professional awards are facilitated, and assessed in clinical practice. With the increase in work-based learning this will put further pressure on mentors to meet all learning needs. Mentors can increase their educational skills, argue Smith and Smith (2003), by facilitating progressively complex students' learning through an 'incremental' approach built around the Preparation of Mentors and Teachers Framework (DH, ENB 2001). Their model describes a process of educational progression that equips mentors to meet the increasing demands which occur as professionals move from pre- to post-registration programmes. This provides the opportunity to build on educational expertise in facilitating learning. The role of mentor in signing off both pre and post registration students as competent practitioners brings us to the question as to how midwives are enabled to maintain their competency following initial registration. This applies specifically to achieving and maintaining competency in perineal repair through mandatory training and professional self-regulation.

**Supporting continuing professional development and competency.**

Section four now discusses the provision and support for continuing professional education (CPE) and the maintenance of competency in perineal repair through
mandatory training and professional regulation in a rapidly changing healthcare climate.

Midwives are required by statute to keep abreast with current changes in clinical practice by maintaining and developing their clinical competency for new roles and responsibilities. My first line of argument here is whether educational opportunities are readily available and accessible to midwives in post-registration education. A question fundamental to competency, is whether the current Nursing and Midwifery Councils' (NMC) regulatory framework in post-registration education, is sufficiently robust in ensuring that midwives develop and maintain competency in their midwifery skills. The change in status from student to accountable and autonomous practitioner requires continued educational support. Newly qualified midwives' practice skills rest on competencies associated with their initial registration. Midwives who undertake perineal repair require education and support in developing and maintaining their competency in this skill through continuing professional development. While opportunities are provided through initial training for perineal repair this instruction has not been formally available in previous post-registration curricula. If midwives are to undertake extended roles and specialist skills then continued competency requires regulation to ensure they are 'fit for practice and purpose' to mentor and supervise pre- and post registration students in perineal repair. How can we and the public be assured of the midwives' competency? Should midwives undertake mandatory or voluntary CPE to keep abreast with changes within educational practice? It is these questions that I will seek to address here.

Midwives have a continued responsibility and are formally obliged through statutory regulation to meet healthcare needs and maintain their clinical competence in their knowledge, skills and attitudes towards care delivery (UKCC 1998, 2001 & NMC 2002). This means enhancing present skills and up-dating existing skills. The present recommendations for midwives demonstrating professional competence are outlined in the UKCC Post-Registration Education and Practice document (1999:3). The recommendations provide a rudimentary basis for self-regulation and the demonstration of professional competence in vital skills such as perineal repair. It would seem that all that is required to remain on the professional register, is that the
professional completes a notification of practice, as a self-verification statement. This implies that the individual has fulfilled the minimum of five study days, has maintained their professional portfolio and is clinically competent within all areas of practice as specified. With an automatic registration, this process falls short of the government's strategy *Continuing Professional Development: Quality in the New NHS* (DoH 1999) providing little reassurance to the public that midwives have maintained and developed standards through additional learning activities.

It is proposed that a formalised programme of learning in perineal repair through a work-based module or in-service education programme, is one step towards enabling midwives achieving competence in this specialised skill as opposed to the traditional see one do one and your on your own approach. The Supervisor of Midwives (SoM) has a responsibility, through the midwives' annual periodic review, to ensure that midwives rotating to the delivery suite are competent in this skill. Unless there is a dedicated manager or supervisor of midwives to review midwifery practice it is arguable whether self-regulation is a reliable and valid means of ensuring midwives are safe and competent for continued practice. How can regulatory frameworks be assured of professional competency? Should CPE be mandatory or voluntary? Two models of CPD have been described by Madden and Mitchell (1993), namely the 'sanction model' and the 'benefits model'. The former suggests that if practitioners fail to maintain their CPE, sanctions may be applied. These sanctions have been subsequently enforced by the NMC (2003) in their new regulatory framework. In reality, this system is unlikely to be effective due to inadequate monitoring processes. The latter suggests that practitioners are financially rewarded for voluntarily maintaining and enhancing their competence through the Agenda for Change (2004) and the Knowledge and Skills Framework (2004). This system has been designed to enable all disciplines across the NHS to attend CPE sessions which is underpinned by a competence framework featuring as a key part of the Trusts' appraisal system (DH 2001:14). It is my belief that valuing good practice and development should be rewarded and incentives such as these are required to encourage professional development.
Mandatory continuing education (MCE) for professionals could be considered to violate adult learning principles, [those of a humanistic 'student' centred approach] and that by definition; professionals are autonomous, self managed and responsible for their own mastery of knowledge and skills (Kerka 1994). If one is a professional, then surely this encompasses personal responsibility for that role and commitment to practice. Unfortunately, not all practitioners take professional responsibility for maintaining their competency. Professionals themselves should be accountable for effective performance, not participation. Kerka further implies that there is a lack of evidence that it improves practice all that is mandated is attendance and a certificate. This can not be said to be evidence of changed attitudes, motivation or increased clinical competence.

MCE might be supported for the following reasons: within an organisation that encourages staff rotation and advocates transferable skills, midwives must be competent in all delivery suite procedures, providing continuity of care for all women. Anecdotally, practitioners who need updating the most are often the ones who fail to attend CPE. This is where the responsibility of the supervisor of midwives lies. In contrast, MCE provides equal access to a range of opportunities for practitioners. Mandates are considered essential to protect the public from incompetent or out-of-date practitioners (NMC Code of Professional Conduct 2002). Surely professionals submit to its norms, whereby registration implies consent to be governed by the rules of its profession? With increased technology and advances in accessible evidence, women are demanding accountability and protection. Mandates will not fulfil their objectives if all that is gained is a certificate of attendance at a study session. Certificates on their own do not provide evidence to support an improved level of competency. It would seem incongruous that while student midwives now undertake a very rigorous process of assessment of competency, this same process has not been carried out in post-registration education, specifically in perineal repair. Opportunities for midwives to access a new educational programme with the assessment of competency in perineal repair will place the responsibility with the individual midwife, as an autonomous practitioner. Offering a supported work-based module is one means of assisting midwives in this process.
Facilitating a supportive learning organisation

For effective work-based learning, the success of the new educational programme and the development of self-aware, critical and reflective midwives require support by the organisation. Organisational learning is defined by Gerrard (2003:1) as:

"An organisation that learns and encourages learning among its people. It promotes exchange of information between employees hence creating a more knowledgeable workforce".

This definition implies that the workplace is a flexible organisation where people will accept and adapt to new ideas and changes through a shared vision. This is an idealistic definition of what the organisation claims to be, rather than how supportive learning takes place in reality. Senge (1990:3) states that an organisation is one:

'...where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together'.

This definition relies on a positive learning culture within the organisation which perhaps neglects the realities of best working practices. With the focus on learning in the workplace in the 21st Century, questions have arisen as to whether organisations can learn. Belasco (1998) contends that learning organisations do not exist because they inherently lack human learning characteristics such as a brain and nerve cells. Rather it is individuals and the collection of learners within the organisation that learn. Ortenblad (2005) argues that organisations are living entities, the sum of the organisation's learners and therefore the organisation as a whole is capable of learning. Jarvis (2006:153) contends that it is the individual learner who changes the organisation as a result of their experience within it and their awareness of the need for change. Learning therefore within the organisation is complex and while it is acknowledged that practitioners learn individually, they also act as agents for the organisation whereby knowledge is stored outside individuals in policies, routines,
praxis and dialogues. In this way knowledge is embedded, encultured and encoded within the organisation as a collective. Thus the organisation and its practitioners learn through a process, which can be evidenced through their behaviour and action in clinical practice.

Supportive learning therefore, depends on the learning culture established within the institution, and the values that individuals hold towards learning. Therefore, the support afforded by managers and clinical supervisors who are in positions of power to affect change, lead and implement new initiatives, is paramount. However, there is often a conflict of interests. Managers invariably undertake dual roles and responsibilities as supervisors and managers. These areas of conflict encompass funding issues and maintaining safe staffing levels. These problems must not be underestimated as they pose very real issues in clinical practice. Jarvis (2001:134) refers to Dovey and Coopey who argue that in practice there will be varying degrees of constraint on personal empowerment when encroaching on managerial territory. Questions will be asked regarding the issues surrounding funding etc. These issues are clearly not addressed, and receive little attention in the literature on organisational learning.

Interested stakeholders are increasingly aware that if practitioners pursue their educational goals they are able to integrate transferable skills and perform more competently in constantly changing environments. Supporting CPE requires that all levels of professionals working within the NHS organisation need to accept that change is a necessary requirement in a postmodern society. There does however need to be a balance between change and stability, the old and new systems. Fundamentally, successful learning within the organisation can only occur through active collaboration of all of its members. Meeting the needs of all interested parties or stakeholders and adapting flexible programmes of learning argues Clarke (1997) can only occur if we are able to provide information, improve access to, and make available, relevant, flexible educational programmes that meet the needs of all individuals. This will seek to encourage self-direction in learning, and improve the way in which all the needs of other stakeholders are met.
Chapter Three  
Historical Background and Context of the Research

Placing the research in context with contemporary midwifery practice.

Part two of the chapter now looks to the historical context of the research and the development of the educational programme. There are three sections: the Perineal Repair Working Group (PRWG); the Principles and Practice of Perineal Repair for the Midwife post-registration module; in-service perineal repair workshops.

The development of the perineal repair working group (PRWG) – phase 1

The first cycle of action research is discussed in relationship to the first phase of the study and the development and collaborative action of the PRWG. The initiation and development of this working group was an important starting point in answering the main research question from a practical and organisational perspective. The question asked: Will a work-based module and in-service education programme in perineal repair for midwives increase their perceived level of competency undertaking this skill? The effectiveness of the work-based module (WBM) and in-service education programme (ISEP) on the midwives' perceived level of competency was in part influenced by the educational strategies adopted, the complexities of the organisation and the practicalities of workplace learning. Effectiveness was also influenced by the midwives' motivation and the change process facilitated within the organisation.

A framework for the developing partnership of this working group was initiated in December 2001. The first step in the development of the working group was to acknowledge the complex nature of midwifery practice within a hierarchical structure in the NHS organisation. Secondly, we needed to understand the inevitable resistances to change. Discourse around the problems associated with midwives' training in perineal assessment and repair, and the increasing confusion surrounding the effects of non-repair resulted in positive attitudes towards change and enabled group members to shape an understanding of their own practices.

The rationale for a collaborative working group was to: plan and implement organisation-wide change; solve the problems identified by midwives and students;
facilitate innovative thinking; facilitate a successful learning organisation in each Trust. The continuing purpose and success of the working group relied upon four key elements: good communication between group members and midwives in practice; collaborative decisions related to newly developed practice documentation; innovative in-service training, and a post-registration work-based module ideally suited to assist midwives develop new skills and increase their competency and confidence in perineal assessment and repair. A key objective for initiating the PRWG was to involve clinical staff in the research process seeking volunteers for the working group. Members were required to have a specialist interest in post-registration education and the development of implementing perineal repair for midwives within their Trust and to be committed to take the study forward. Thus the process of setting up this collaborative working group would provide an example of research driven by the midwives' own practice, based upon practitioners' communication and collaboration with working group members. Ten representative midwives joined the working group. Members constituted senior delivery ward specialists/managers and practice development midwives from the five intervention NHS Trusts. Two of us worked in midwifery education.

Our terms of reference were to:

- ascertain the expressed needs and experiences of all midwives and students, regarding perineal repair employed in the six study NHS Trusts through a pre-intervention survey.
- design a perineal trauma assessment proforma which would be implemented within the delivery suite
- develop areas and levels of competency for midwives undertaking perineal repair
- develop a perineal repair handbook for midwives
- develop 'Evidence for Best Practice – a guide' for midwives
- develop and implement an accredited work-based module and in-service workshops in perineal repair for midwives
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- develop and introduce an Objective Structured Clinical Examination (OSCE) for the assessment of midwives' competency undertaking perineal repair

Key objectives of the PRWG included:

- planning the commencement of the module and in-service training programme following the return of pre-intervention questionnaires.
- stimulate interest amongst midwives by advertising the post-registration module and in-service workshops
- planning and implementing an up-date study day for OSCE instructors/assessors
- explore funding for the educational programme
- an evaluation of the effectiveness of the educational programme through the action research cycle.

Activities of the PRWG

The PRWG met monthly during the first part of the action research cycle which constituted the identification of the problems associated with undertaking perineal repair amongst practitioners and the strategies used to solve them. During the planning phase of the research, collaborative working within the group involved discussion and development of the documentation required for the work-based module and in-service training programme. The module was validated through the University of Surrey. Monthly in-service perineal repair workshops were approved by Heads of Midwifery. Successful implementation of a work-based module and in-service education programme relied on a process of positive change. To create positive change, collaboration of practitioners and working group members was required. Collaboration has been described by Spence (2002:4) as:

"A complex phenomenon…it's effects are commonly desired, not only to encourage individuals to work together but also to improve patient [client] care".

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This definition has been expanded by Kraus (in Spence 2002:4) who describes collaboration as:

"a co-operative venture based on shared power and authority within a non-hierarchical relationship."

Building on this definition further, I have included the word strategic in the collaborative effort because this encompasses a means of getting significant work done when faced with the complexity, diversity and uncertainty within an organisation involving five intervention Trusts. This strategic effort enables different groups of people to work together on issues of mutual concern, interest and strategic importance. The collaborative membership of the working group and the positive development in partnerships has been a powerful medium for developing the initiatives which were implemented in clinical practice during subsequent phases.

The specialised background of each group member has enabled us to draw on a wealth of knowledge and skills about the practical, managerial and educational issues surrounding the planning phase of this study. An atmosphere of trust, sharing and support quickly developed within the group and members felt that they were able to develop both professionally and personally throughout the process. Approximately 85 - 100% attendance from group members was achieved despite heavy workloads. Nichols et al (1997:37) has identified that providing a focus for collaboration and future implementation of initiatives requires sustained commitment and motivation from both the researcher and practitioners, who take on the demands of clinical leadership. This leadership however, does not imply leadership in the sense of positional power, but rather it is about empowering midwives to account for and improve their own practice through collaborative support.

The PRWG has been an 'action' research group which has proved powerful not only for me as researcher but also for the group. Group participation can actively change individual ideologies about their competencies as a result of the collaborative working and democratic decision making through practical discourse. This ideology can then be taken forward to change and transform organisational practices through
further communication and democratic decision making. Drawing on Habermas' (1974) critical social science the PRWG developed similarly to an organisation of action, in that it appeals to retrospective interpretations of social 'practice' which requires democratic conditions for decision making about social/practical reality. The supportive nature of collaborative practical discourse has enabled group members to decide what course of action could assist them to facilitate change, thus creating new social realities. Even within a working group, institutional or organisational influences may dominate or constrain an individual's freedom of decision making. Introducing new practices and guidelines inevitably creates some disharmony due to the historical hierarchy in which they were initially developed through specific groups. Now that NHS organisations are expected to comply with clinical governance, risk management and the recommendations from the National Institute for Clinical Excellence (NICE), senior managers are realising the importance of organisational change in the best interest of both their staff and women.

Participatory and collaborative action within the working group has also demonstrated how authentic democratic involvement creates a process of enlightenment, and organisational action. By engaging members of the working group in the educational action research process, individuals can extend and transform their self-understanding by theorising their own practice. This process of engagement in self-critical analysis was facilitated through further discourse with midwives and students. Action research encouraged practitioners to research their own practice and actively engage in educational change. This approach to action research is in contrast to the outsider researcher, whereby authoritative theories through scientific processes are imposed upon practitioners. Such a singular positivist philosophical approach goes against the humanistic elements of critical self-reflection and the development of an individual's own theories based on their own practice. Engaging practitioners and myself as insider midwifery researcher in this working group, was an important step in developing a positive working relationship in the change process. Successful change in the midwives' perceived ability to increase their competency in perineal repair can be difficult to achieve however. This may be due to the need to balance autonomy and involvement while sustaining the organisations' force or goals.
The organisations' culture within each intervention Trust was given much thought by members of the working group. Not all cultures suit all purposes or people. A collaborative culture for implementing a perineal repair programme cannot be taken for granted. It was for this reason that we needed to promote an integrative culture that would encourage shared values, interests and beliefs, which would be change orientated and reflective. Northcott (1998) stresses how a very controlling culture is unlikely to encourage practitioners to see the need for, or to value the skill of perineal repair. Resistance to change were anticipated by members of the working group. Bedian (1980) contends that resistance is due to: parochial self interest; misunderstanding and a lack of trust; contradictory assessment and low tolerance of change. As change agents we need to acknowledge that positive change will only occur when we have an understanding of the real problems practitioners face in practice. Dissatisfaction with the status quo, desirability of the proposed change and its practicality added together, need to be seen as creating greater benefits than the 'cost' of change. These include time spent in learning, and adapting new skills and roles. Midwives need to perceive that this change is in their interest. Only then can collective change within the organisation benefit midwives, students and the childbearing populace.

Discursive action resulted in the strategies taken forward by the PRWG to facilitate positive attitudes towards changes in practice. Drawing on the Foucauldian concept of discursive formations (Foucault 1972) the working group formed a 'cultural field' within education. A perineal trauma assessment proforma and new 'guidelines for best practice' were developed to facilitate a change in the midwives' behaviour by increasing competency in perineal repair. These changes within the group have occurred through a discourse in which members were able to develop their own beliefs. Social 'fields' in educational terms have for a period of time, provided a discursive formation which has helped us to make sense of and see practice in a new light. Discursive windows or explanations have helped shape our understanding of ourselves, and the ability to distinguish best practice from poor practice, the truth from the false and the right from the wrong. Members have been able to act on social interaction and rationality to make sense of their own world. Overall the
PRWG has been a powerful forum for the development a work-based module and in-service education programme.

**Development of a work-based module - The Principles and Practice of Perineal Repair for the midwife**

This section discusses the newly developed module and supporting learning strategies. There are three sub-sections: the module framework; action learning; self-directed learning. Experiential learning is discussed in depth alongside workplace learning and the development of competency in chapter four.

**Module framework**

The present structure of the post-registration programme in midwifery is such that the BSc (Honours) degree sits within the University of Surreys' Credit and Transfer scheme. The awards for diploma and degree have compulsory and optional modules. This structure has been designed to enable applicants to access a flexible programme of learning to accommodate the changing face of practice. The modules within the programme are available as stand-alone modules. These can be accessed according to individual need, whilst also ensuring the maintenance of the academic integrity of the awards. 'The Principles and Practice of Perineal Repair for the Midwife' is an optional 10 credit degree module. The implementation of an accredited work-based module and an alternative in-service educational programme in perineal repair, enables midwives the opportunity to continue their professional development through an individually planned practice experience whilst having the opportunity to gain accreditation appropriate to their academic status. The module provides an in depth study of the wider issues around perineal management and care.

The introduction of the WBM comes within the scope of incremental change. This change is compatible with the organisation's existing culture, practice and educational structure. Providing a WBM enables midwives to access credit rated modules which meet their own work needs, career aspirations and personal interests. Work-based learning is the focus of the module enabling midwives to
develop their professional knowledge through their everyday practice on the delivery suite with specified OSCE supervisors. The greatest potential for this style of learning is that it provides midwives with individually focused and relevant means of pursuing ongoing professional development within their specific area of work such in the delivery suite.

Designated time out for self-directed study, reflection and facilitated action learning sets (ALS) will constitute the remaining component of the module. The module also embraces a radical feminist and poststructural philosophy whereby feminist theories are explored and related to women's lived experience of perineal trauma and subsequent morbidity. This enables midwives to draw on prior experiential learning.

Protected work-based learning hours will be negotiated and planned with the midwives' managers. This avoids misunderstandings about time that will be allocated to focus the midwives' learning. The concept of module is linked to the idea of a flexible curriculum, and is a relatively autonomous portion of the curriculum. In the context of this study and the university framework, Nursing and Midwifery Council (NMC) competency-based learning outcomes are uniquely mapped to the module. Theoretical and practical assessments of clinical competency have been specifically streamlined to enable midwives to achieve their learning outcomes, in the cognitive, psychomotor and affective domains. These will be discussed in chapter four.

The module lends itself to midwives working in and rotating to the delivery suite or working in the community where perineal repair skills are required. The module therefore has been developed for specific educational purposes such as to facilitate specific learning surrounding gender sensitive perineal care, sexuality, the assessment of perineal trauma and specific psychomotor skills required for repair in light of current evidence and healthcare demand. Thus the activity provides a specific service within the NHS organisation. The module enables midwives to 'top up' and expand existing knowledge and psychomotor skills or provide an opportunity for inexperienced midwives to develop new competencies.
The advantages and expected effectiveness of a specialised module is that it can be facilitated by expert facilitators and trainers from education and practice. Cornford (1997:240) claims that to date, few empirical, longitudinal studies have been undertaken to assess the learning effectiveness in modular vocational education, particularly in the workplace. More specifically there has been little acknowledgement of modular competency-based learning outcomes which embrace cognitive, behavioural and affective domains suggested in Bruner's spiral curriculum (Cornford 1997:247). The module handbook can be accessed in appendix B. The following two sub-sections discuss the learning strategies facilitated during the module.

**Action learning**

Action learning sets (ALS) constituted a major theoretical component of the module in the university. Action learning according to Raelin (1997:22) is based on the pedagogical concept that people learn most effectively when working together on real-time problems occurring in their own work setting. Bringing delivery suite midwives together in the module enabled them to discuss issues while problem solving and exploring personal experiences related to perineal trauma. Revans' (1979) conceptualisation of action learning resulted from the independent contribution of programmed instruction formulated and presented by the action set or group (designated P). Collaborative action results in spontaneous questioning by the group (designated Q) resulting in knowledge and skills gained by opposite questioning, investigation and questioning. The learning equation results in Learning, \( L = P + Q \). McGill and Beaty (2001:11) encapsulate the concept of action learning further in their description by viewing it as a process of reflection and action, which aims towards improving the effectiveness of action. They state:

"**Action learning is a continuous process of learning and reflection, supported by colleagues, with an intention of getting things done. Through action learning individuals learn with and from each other by working on real problems and reflecting on their own experiences.**"
Action learning stress McGill and Beaty (2001:21), involves a cyclical notion of learning whereby action, reflection, generalising and planning are all necessary for the action learning process. Particular emphasis is placed on reflection, believing that this is the essential link between past action and more effective future action. Reflection, they claim, is a necessary precursor to effective action and learning derived through experience and can be enhanced through deliberate attention to this relationship. It is this strategy within the action learning set which played a key role in learning for post-registration midwives. Eight to twelve midwives can be facilitated in the learning process in an ALS. Four key activities in the process were: experiential learning, creative problem solving, the acquisition of relevant knowledge and co-learner group support (Bird 2002: 2). Each activity is necessary and needs to effectively work together for the action process to become "holistically synergistic".

The ALS also seeks to provide a balance of emotional support and intellectual challenge by developing comradeship and continued insightful questioning. This forum enabled midwives individually to act and learn effectively about the problem being tackled, learn about themselves and about the process of learning to learn. Pedler (1997) argues that what makes the action learning set process meaningful is that knowledge is socially constructed. This is particularly meaningful when there is a mix of midwives’ experiences from novice to expert.

**Self-directed learning**

An essential component of the ALS in this module is self-directed learning (SDL). This liberal approach to learning stresses the individualism and autonomy of the adult learner and focuses on self-determination, self-actualisation and transformative learning. SDL has become an inevitable strategy towards acquiring rapidly changing knowledge. Jarvis et al (2001:78) refer to Houle’s categories of learners’ ‘orientations’ to study: goal orientated activity; and learning orientated activity. While many learners are indeed motivated to learn using these categories, they need some form of guidance in how to do this, and need to have a clear direction in how they are going to meet those goals in their learning. Knowles (1975:18) elaborates further on learning and defines SDL as:
“In its broadest meaning, ‘self-directed learning’ describes a process in which individuals take the initiative, with or without help from others, in diagnosing their learning needs, formulating new goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes.”

Knowles argues (1975:14) that learners that are self-directed, take the initiative for their own learning, and acquire more knowledge in a more meaningful way than those who are passively waiting to be taught. It is likely then that midwives, who have accessed this module, are motivated and will be proactive. Self-direction is also more in tune with maturity and the need to take responsibility for learning. For many midwives embarking in post-registration education, self-direction is a new concept and while it is not new in educational terms we must be mindful of the anxiety, frustration and perhaps failure individuals may face with this mode of learning. In the context of bringing SDL to the ALS this will perhaps address some of the criticism presented about SDL and the social context of learning by Stephen Brookfield. If we agree that learning occurs in social contexts, then how does SDL enable the midwife to make sense of the world of work and engage themselves in personal change? Jarvis et al (2001:83-84) cite Brookfield’s understanding of self-direction. He contends that SDL does not consider the social context in which learning takes place. In essence he contends that meaningful SDL and autonomy can only take place when the individual has reflected critically about their social world. Thus, with critical reflection taking place contextually and within the contingent aspects of the reality of work can an exploration of alternative perspectives and meanings be sought? Drawing together the ideals of SDL and meeting the needs of midwives new to this strategy, the introduction of learning agreements, reflection and problem solving in the ALS brings together the ideals which Brookfield proposed for purposeful self-directed learning.

During the module, skills ‘hands on’ workshops were facilitated, and the sessions were determined according to the midwives’ identified needs from the pre-intervention questionnaires and focus group interviews. We will now look to the skills
workshop which is integrated into the module, and can be accessed in individual Trusts as a stand-alone workshop.

**The in-service perineal repair workshop**

There are three sub-sections: the framework of the workshop; facilitating psychomotor skills; and the integration of the affective domain in module and workshops for sensitive perineal management. Midwives not wishing to access the award bearing module were able to access a perineal repair workshop in their own Trust. Workshops were facilitated monthly by myself in the five intervention Trusts.

**The framework of the workshop**

The workshop is described by Resinger (1986) as the most frequent means of in-service education, but it is just one of a number of strategies that can be employed to disseminate information and introduce a new practice. Currently, competent midwives instruct and supervise perineal repair at the bedside in the delivery suite according to request. This however does not embrace the cognitive processes adequately, which are needed to underpin the skill. There is no one best approach to disseminating information and facilitating new skills, but a combination of approaches needs to be incorporated into the learning situation to introduce effective change. The interactive nature of the workshop is considered to be an important element for taking action and implementing change (Tanner & Hale 2002 :48). The practical skills workshop aims towards facilitating new knowledge, psychomotor skills and attitudes; components of competency. The primary objectives are: to put the learning and psychomotor skills into context; facilitate core theoretical concepts; facilitate 'hands on' psychomotor skills such as handling equipment and tying knots; facilitate supervised practice in a 'safe' learning environment; and problem solve and make clinical decisions based on scenarios. If the skills workshops are to be effective in raising the midwives' perceived level of competency, then integrating knowledge, skills and attitudes are an essential component of the teaching and learning strategies employed.
Midwives of all skills abilities were invited to the workshops which were to be incorporated into their statutory annual ‘up-date’ study days. The workshop was designed to be flexible enough for midwives to construct new knowledge, psychomotor skills and attitudes towards undertaking perineal trauma assessment and repair. The two hour workshop acknowledges accreditation of prior experiential learning and was easily accessible to midwives working in the delivery suite. Theory and practice were fully integrated during the workshop. As well as the development of dexterity in handling suturing equipment and tying knots, the affective domain in decision making was highlighted whereby midwives were encouraged to value women’s feelings and emotions during the decision making process.

Due to time restriction and limited theoretical discussion in the workshops, midwives were provided with a Perineal Repair Handbook for self directed enquiry and study. The workshops accommodated six to eight midwives for one-to one instruction. Following experience in the delivery suite, midwives were offered the opportunity to undertake an Objective Structured Clinical Examination (OSCE) for their competency in perineal repair by a competent instructing midwife who had attended the preparatory instructor’s up-date study day and undertaken an OSCE.

**Facilitating psychomotor skills**

Bench perineal mannequins were available for instruction undertaking the repair procedure. The provision of realistic models in a non-clinical environment is essential for the recognition of the anatomical structures, trauma assessment, instruction and the opportunity for midwives to practice effectively in a safe environment on a model. High fidelity simulation through experiential learning is considered to be an effective means of facilitating complex skills which can not readily practised in the healthcare setting (Maran 2003). Psychomotor learning is defined by Kerr (1982: 17) as:

“A relatively permanent change in the performance of a motor skill resulting from practice or past experience".
Romiszowski (1993:84) further adds:

"It may involve the acquisition of skills or of knowledge or (most often) of both".

The goal of Romiszowski's theory is to foster the development of physical skills for all situations. This is particularly relevant in the acquisition of such a complex skill such as perineal repair due to the individuality and varying nature and complexity of the trauma. Romiszowski (1984) classifies skills into cognitive, psychomotor, reactive skills; dealing with self control, and interactive skills; dealing with others. He argues that within these domains there is a continuum of skills. These commence with fully automated "reflexive" actions, making up sensory motor skills, attitudes and habits which follow algorithms, to the more complex types of skilled activity. This activity is based on a high level of cognition which includes critical thinking, planning and heuristic decision-making. The level is dependent on the midwives' level of expertise. First level skills are referred to by Romiszowski (1984:10) as "reproductive skills". These require application of standard situations. Experiential or expository skills may be applied. More appropriate in the context of this study is the second level "productive skills", where problem solving, planning and decision making is required in often unpredictable situations where trauma is complex often requiring collaboration with a colleague for a second opinion.

Psychomotor skills facilitated in the workshops were based on Romiszowski's (1999) framework. These included:

- Acquiring knowledge of what skills should be undertaken, the purpose, sequence and how the skill will be performed
- Demonstrating the actions in a step-by-step manner
- Developing proficiency through control from eyes to kinaesthetic control through muscular coordination – practice of the skill
- Automatization of the skill – practice leading to automatic response to multiple skills
- Generalisation of the skill – to a greater range of application situations
Building on these stages, Reigeluth (1983) proposed an elaboration theory organised in an increasing order of complexity for optimal learning. He founded seven major strategy components which commence with an elaborative sequence through to learner control, the first component being the most critical where simple to complex sequences are followed with the first instruction epitomising the ideas and skills that follow. This means starting midwives out with basic interrupted sutures on skin pads, and then moving to the three dimensional repair on the mannequin depending on the expertise of the midwife. Reigeluth argues that this elaboration approach results in the formation of more concrete or stable cognitive structures, resulting in more effective retention and transfer of skills, with increased learner motivation through the creation of meaningful learning contexts.

The application of skills for perineal repair is complex, and requires an understanding of the categories of the psychomotor skill itself if the learning is to be effective and competency subsequently mastered. It is arguable whether a short two hour workshop will be singly instrumental in enabling novice midwives acquire enough competency to undertake perineal repair independently. However, as stated at the outset, the workshop is only one strategy in the learning process. The workshop is only a starting point for inexperienced midwives and an up-date for more competent midwives. Midwives were subsequently encouraged to record their observations and one-to-one instruction and supervision at the bedside in the log book provided in their perineal repair handbook.

Applying skills learnt in a workshop may be problematic for some midwives and need to be put into action promptly. Marsland (2001) refers to the dexterity deficit, and the difficulty relating fixed anatomy in 'bench' models to real life situations. It is essential at this point that the skills developed in the workshop are immediately transferable to the clinical situation, facilitated by an expert instructor. Because there were limited skilled instructors who were not always available within each delivery suite additional educational support was provided for instructing midwives. Midwives were invited to attend an instructor's up-date followed by an objective structured clinical examination.
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(OSCE) in competency to enable them to provide instruction, supervision and assessment consistently in their respective Trusts.

**Integrating the affective domain into module and workshop for sensitive perineal management**

A secondary subsidiary research question asked: *In midwifery practice that is highly sensitive to gender sensitive issues, to what extent do midwives and students consider women’s short and long term problems associated with perineal trauma and care?* The feminist and poststructuralist approach to the module and workshop stated earlier in the chapter were integrated into the affective domain to facilitate positive attitudes towards women's perineal trauma management. Bloom's (Martin 2003) categories of learning behaviour categorised into: cognitive; affective and psychomotor domains, have paid considerable attention to the individual's intellectual abilities which are both observable and unobservable skills. However, attention to the affective domain has often been neglected in the learning and assessment process. This is an important attribute to consider in this study because it seeks to explore how midwives address their emotions and learning experiences about the woman's physical and emotional experience of their trauma. Midwives need to be aware how they respond to these phenomena by valuing their own and women's feelings, views and decisions towards repair.

**Summary and conclusion**

This chapter has provided an historical background to the research in identifying the process of globalisation and its effects on the way in which knowledge has changed and constructed by practitioners. The move into higher education institutions has in part created the so called theory practice-gap. Facilitating practical knowledge in the workplace may bridge this gap if we collaboratively facilitate critical enquiry and reflection in and on practice integrating practical knowledge. Clinicians and educationalists need to recognise that changing roles and practices require knowledge that is integrated and built upon the concrete realities of practice. Any
abstractions of reality are inappropriate because little meaning can be attributed without placing experience and competence within the social and cultural context within which it occurs.

In supporting mentors, skills are required for mentoring two types of student: students undertaking pre- and post-registration education. An eclectic model of mentoring values the midwives experience in an apprentice style of learning, together with meeting academic competency-based learning outcomes, embracing critical reflection on experiential learning. This approach to mentorship acknowledges a reciprocal learning relationship between learner and mentor which is fundamental to work-based learning and the individual's clinical practice and acquisition of practical knowledge.

I have emphasised the responsibility of all midwives in maintaining their clinical competency in practice to fulfil their professional roles. Problems inherent in monitoring competency were highlighted. I have emphasised that the organisation can be learning organisation through individual members, working collectively and sharing their expertise to facilitate positive changes in practice. Managers and supervisors of midwives as leaders are placed in strategic positions of power to facilitate a learning environment that should provide flexible and appropriate work-based learning based on need.

This chapter has provided the historical development and context to the research itself. It has identified the importance of collaborative partnership in the process of affecting positive change in practice through a PRWG. It has emphasised the value of the ALS in enabling midwives to build on their experience through critical reflection, self-directed learning and the articulation of their own thinking. The learning environment enables context-and content-dependent knowledge to be collaboratively constructed through social negotiation incorporating both cognitive and social constructivist theory. Learning through a multiplicity of concepts enables midwives to view the world from a number of new perspectives unique to their working practices.
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The integration of the cognitive, psychomotor and affective domains in the module and skills workshop encourage meaningful learning by understanding the choices and decisions that need to be made in a variety of complex situations before embarking on the physical skill of repair. The emphasis on comprehension and decision making is important for midwives where in the real world of the delivery suite, situations can be unpredictable and challenging. This is where new knowledge and skills can be constructed across traditional boundaries and paradigms.

Now that the research has been placed in the historical context in which it has developed, I now look to how the study was effectively carried out. Chapters four and five will focus specifically on the theoretical and philosophical framework which underpins the study by answering the research questions from the literature and subsequently the research itself.
CHAPTER FOUR

THEORETICAL FRAMEWORK - 1
COMPETENCY AND CONFIDENCE IN PERINEAL REPAIR

Introduction

In chapter three the historical background and context of the research was presented. Underlying the main research question posed in chapter 1:15 are four dominant discourses which have significant implications for midwives achieving competence and confidence in perineal repair through workplace learning. These are: the changing nature and status of knowledge in a globalised society, focusing on competence and performativity; the changing nature of work with the view that knowledge is a powerful and significant resource in workplace learning, central to performativity, efficiency and effectiveness within the NHS; factors influencing individual practices and decision making such as clinical governance and organizational power structures within NHS institutions; and the dominant discourse surrounding childbirth and the marginalisation of gender sensitive care. These discourses are reflected in my research questions and are discussed in turn in this and subsequent chapters. This chapter answers the main research question from the literature. It also provides a philosophical and theoretical framework which underpins this thesis and aims to provide an epistemology of practice within midwifery education. Chapter five will address the subsidiary questions.

This chapter is divided into three parts. Part one provides an epistemological argument around the definition and conceptualisation of competence, competency and performance. Part two defines workplace learning and identifies its strengths and weaknesses in context with the midwives' development of confidence and competency in perineal repair. In the final part it is argued that the midwives' perceived self-efficacy and self-confidence is historically and inherently embedded in the culture of midwifery in the NHS.
Understanding competence and competency

This part of the chapter is divided into two sections: the effects of globalisation necessitating a highly skilled workforce; and the definition and conceptualisation of competency. To support the main research question a closer analysis and clarification of the definitions and conceptualization of competency within an educational philosophy is required. This initial analysis is important because of the types of knowledge and skills midwives draw upon and construct during their professional practice.

The effects of globalisation requiring a highly skilled workforce

The debate over the demand for higher level competencies and skills required by all members of the workforce has resulted from the emergence of the knowledge economy. This has largely been attributed to globalisation and the advances in information and communication technology (ICT). The aim of government policies has been to assist economic growth by up-skilling workers in order to develop a more efficient and effective workforce. The pressures exerted by an economic sub-structure increase pressures on all layers of society. Jarvis (2008:34) describes the dynamic global forces which influence and impact on national institutions, individual practices and lifelong learning. Opposing and modifying forces play a powerful role at international, national, regional and local levels. Human capital theory has been a dominant discourse within workplace learning, referring to productive capabilities and the investment in human capital. However the skills required for work, and those acquired from work, have bought about discourses around what is meant by the terms 'skills' and 'competence'. The next section will look at the definition and conceptualisation of competency.

Competency in clinical practice

Chambers (1998), and Watson (2002) all contend that there has been a wide range of different concepts and a plethora of opinions identified within the terms. It is to the clarity of the terms that we first turn in the opening argument of this section. This is important in order to provide a working definition within this thesis and to develop a valid and reliable means of assessing competency in perineal repair thus informing theory development and communication in midwifery education.

Definitions of competence have become synonymous with performance and performativity; the doing, rather than the ability to do, thus confusion has arisen between the two terms. The Concise Oxford dictionary (1969) defines competence as an ‘ability’, and competent as ‘having the required ability; knowledge or authority; effective, adequate’. This implies a behavioural conceptualisation of competence. Competency on the other hand, implies a holistic conceptualisation of competence. Walkin (1991:6) defines competency as:

‘One having the knowledge, skills and attitudes required to perform a given task or act’.

Herein lays the conflict. Confusion, explains Short (1984:201), has been related to competence which has been perceived as a descriptive concept concerned with what people can do, rather than what they know. This view is in contrast to a normative concept and its reference to being a ‘thing’ or an ‘activity’ rather than attributes of quality or state of being. One of the underlying problems in the clarity of the definition of competence results from the change in adult educational philosophy. This change is characterised by the progression to a ‘romantic’ curriculum, which embraces an empowering and liberating educational philosophy. Thus, definitions of competence in adult professional education need to accurately mirror the rapid, cultural, social and technological changes that are required by practitioners in the present political climate. This educational philosophy has been integrated into the teaching, learning and assessment strategies within the WBM and in-service perineal repair workshops. Rychen & Salganik (2003:28), define competency by embracing the key competencies required for competent practice as:
Chapter Four Theoretical Framework 1 – Competency and Confidence

"The ability to successfully meet complex demands in a particular context".

The model of competence adopted in the OECD project DeSeCo (Definition and Selection of Competencies: Theoretical and Conceptual) outlines a holistic and interpretative approach. Key competencies comprise: the ability to relate well to others and interact in socially heterogeneous groups; the ability to act autonomously in personal and professional life in different contexts, and the ability to use tools of communication, symbols and texts interactively. These competencies are integrated and relate to specific demands, psycho-social prerequisites and, most importantly, context, which are all essential components of competent performance or effective action in the supercomplexity of workplace practices. Key competencies are situated in an overarching frame of reference which sits within a broad vision of society. Reflexivity, plays a key role in enabling individuals achieve specific competencies necessary for a successful career and members of a well functioning society. This effective functioning is dependent on higher levels of mental complexity, such as the ability to reflect critically within the diversity of individual practices in many contexts.

Rychen & Salganik have been careful, not to reduce competence to its cognitive dimension. Therefore competence and skill are not synonymous in their conceptualisation. This definition moves away from performativity as a single entity, and instead encompasses knowledge, cognitive skills, practical skills, attitudes, emotions, values, ethics, emotions and motivation. Thus to place competence and competency in context with the implementation of the WBM and ISE programme, my working definition of competence is:

'The ability for midwives to use and integrate knowledge, skills attitudes, values and beliefs within the context in which they find themselves and in situations with which they are required to practice safely and effectively without the need for direct supervision'.

This definition embraces safety in professional practice which is reflected in the learning outcomes and assessment process for the WBM and ISE programme, and are in keeping with an interpretive paradigm. This approach examines and values the meaning of midwives' experiences by acknowledging personal growth and
development in the workplace as a consequence of experiential learning. Unlike a behaviourist approach, the concepts of competence are integrated and continually reformulated through action and dialogue in practice. Now that a definition has been provided, it is necessary to analyse the concept of competence itself because this will assist in the process of enabling midwives and students achieve competent practice.

Early interpretations of competence have stressed the primacy of performance, insisting that competence refers to what people can do rather than what they know. This view however, does not necessarily imply that competent performance is independent of knowledge and understanding. It was assumed that if a person demonstrated competency through performance they had automatically acquired the knowledge, understanding and skills to perform (Hyland 1993:60). The links between performance and 'know how' were first conceptualised by Aristotle. He distinguished between theoretical and practical reasoning. Theoretical reasoning (theoria) he claimed, represented knowledge that is certain while practical reasoning or wisdom (phronesis) represented the contingent world of action or praxis. He contended that a further type of contingent praxis is that which is concerned with production - skill or craft knowledge (techne) - which deals with the creation of things (poiesis). Aristotle argued that the creation of things produces an end product of the activity; through practical reasoning or wisdom and is undertaken for its own sake. This could be interpreted as an early version of what Hager and Beckett (2000:301) refers to as 'knowing what to do in practice'. In our conceptualization of competency, the distinction for this study between knowledge and skills is important.

The distinction between knowledge and skills has been further characterised as one between: 'knowing how' and 'knowing that'; being able. Again the confusion lies in the definition of a skill. Is this just the action; the psychomotor activity, when knowledge has become automatized? Or is it also a conceptual skill of recognizing, identifying, explaining, articulating or demonstrating when such knowledge is understood? These concepts have perhaps confused the understanding of Ryle’s (1949) 'knowing how' and 'knowing that'. They have become synonymous with the terms procedural knowledge and conceptual knowledge. Ryle introduced this
distinction, not as an end in itself but as a means of arguing his rejection of the early Aristotelian and later Cartesian dualism. Jarvis (2006: 36-42) accepts that there is some form of dualism, because the human body is physical and mental and the person is both body and mind. Cartesianism argued that the mind is entirely responsible for thought, controlling the body mindlessly and turning thoughts into actions. This point of view supposes that individuals are intelligent if they have an intelligent mind; bodily actions are not viewed as exhibiting intelligence, but through the works of the mind. Thus, performance of a skill the 'knowing how' can be deemed intelligent only when the individual understands and performs the skill (Star 2000:82).

Ryle's mind and body concept was in opposition to Descartes'. He favoured the uniting of the mind and body through the idea of 'intelligent action', occurring when activities or actions have 'mind-ful' qualities. Ryle contended that when evaluating or appraising competent performance; the 'knowing how' and 'knowing that' are two entities which should be viewed as a whole, not in their separate mental and physical aspects. Ryle attacks the two-step process in which propositional knowledge needs to preceed practical knowing. This concept is important in assessing the competency of midwives as they assess trauma and undertake perineal repair in practice. Arguably, practitioners will not be prepared to carry out complex skills such as perineal repair until they have an understanding of the structures, degree of trauma and principles of specific repair techniques. This integration of knowledge and skills only comes through experiential learning. Knowledge and understanding must precede the skill in this context. Practitioners subsequently carry out the skill knowing the 'why' and 'that is how'. The major objection to Ryle's thinking is that it presupposes that for any 'bit of practice' there must be some inward, cognitive grasping of the activity. Ryle insisted that all intelligent performances are activities that involve both consideration and execution. Performing an action intelligently means thinking about an action before it is carried out. This is certainly true of perineal repair. This theory has however been criticised and often rejected due to its apparent simplicity of 'knowing how' perhaps due to his continued belief in intrumental rationality and knowledge as an end product as opposed to the learning process (Jarvis 2002:125). This integrated concept is perhaps better understood as
we consider how Polanyi introduced tacit knowledge as his means of explaining 'know how'. Polanyi's (1967) view on 'know how' stems from his belief that all knowledge is either tacit or rooted in tacit knowledge. Tacit knowledge, that which is 'taken for granted' and is adaptable, functions as background knowledge which assists the individual in accomplishing a particular or focal task. Our knowledge is not private but social and blends with the experience of those around us. His description of focal; knowledge of the object or phenomenon in focus and tacit knowledge is helpful here in understanding how competence is theorized but is often difficult to conceptualise and thus assess. Polanyi argued that the process of knowing, acts as fragmentary clues, sensomotoric or derived from memory. These are categorised as theories, methods, feelings, values and skills which can be used when needed. Polanyi's emphasis is on articulated knowledge, the use of language to describe what is known but acknowledges that this is only the tip of the iceberg, because as he contends 'we can know more than we can tell'. However there is a weakness in this philosophy. This theory ignores Gestalt psychology and important areas of professional work, such as safety and professional standards, where analytical deliberation is crucial. More importantly, it ignores the fallibility of human judgement. While the acknowledgement of tacit knowledge is recognised in the assessment process, this dimension is undervalued by practitioners due to the lack of written evidence to support decision making and the practitioners concern over threats of litigation. It is for this reason that practitioners are conditioned into the scientific paradigm for evidence-based practice, relying on known theories to justify their decisions in practice. Arguably, not all psychomotor skills, such as perineal repair may have this tacit dimension. While midwives construct their knowledge and understanding of trauma through experiential learning, technical and propositional knowledge 'that', is knowledge and understanding which is required by midwives prior to repair in order to conceptualize the complexity of anatomical structures. This prior theory is necessary to enable midwives to make rational decisions based on their judgements as to 'how to' unite perineal muscles effectively for repair. While the 'identification' of anatomical structures can be learnt in practice, the underlying anatomical theory needs to be sought from texts, so that the knowledge can be tested out in clinical practice. Assessing competence in perineal repair in practice therefore needs to embrace the integrated concepts discussed. Having theorised
about thinking and doing, we now come to the question – how will workplace learning support competent practice in perineal repair?

Workplace and work-based learning

There are five sections in this part of the chapter: workplace and work-based learning; defining workplace learning; experience and learning in the workplace; guidance and competency; and weaknesses associated with workplace learning. Underlying the main research question are major theoretical issues, which have a number of implications. Does workplace learning lead to confidence and competency in perineal repair? Does competency increase the midwives ability to undertake perineal repair? Does work-based education reflect changes in knowledge construction, the theory-practice gap, education and learning? These questions are addressed in this and subsequent chapters from both theory and the research.

The workplace has become an important and valid site for learning due to the changing nature of work. Knowledge has been regarded as the primary resource. Illeris (2003) contends that globalisation, late modernity and the knowledge society have shifted the focus from education and teaching to learning and/or competence development. The orientation towards competency and skilled performance in perineal repair has led to workplace learning becoming highly relevant to the construction of new knowledge, playing a significant role in enabling midwives and students gain competence in perineal repair. The orientation towards competency and skilled performance in industry and in healthcare has made workplace learning and the immediacy of practical knowledge for work, highly relevant to market production. No longer is the educational institution considered to be the principle site for ‘valid’ learning to take place. The workplace has not been considered a superior site for learning but different from the educational institution, because workplaces offer experiences and guidance built on individual goals and workplace needs. Workplaces are fast becoming the gateway (or barrier) to learning opportunities, providing continuing professional development through lifelong learning. A current challenge that faces educational institutions is found in discourses which problematise knowledge and what counts as valid knowledge in a highly competitive
globalized society. The role of knowledge per se in postmodernity has not been questioned. What has been debated is the adequacy and utility of both the content and organisation of traditional forms of 'academic knowledge' that have been central to modern educational institutions.

The immediacy of workplace learning has emerged with the changing nature of work and work culture which have been influenced by rapidly changing labour markets. The development of and requirement for 'knowledge workers' within a 'high tech' knowledge society has demanded that employers place learning central to work practices. Consequently, power and importance has been ascribed to the workplace as central to learning, validating practical knowledge and favouring forms of knowledge which are useful to society (Boud & Garrick 1999:3-5). A persistent argument voiced in contemporary discourse around the economy and work-based learning, is that educational institutions have been inadequate in developing the future workforce with the necessary standards and key competencies required in post-industrial workplaces. This is because they have traditionally concentrated on theoretical knowledge. One of the challenges facing educational institutions is the emphasis by industry and the NHS on learning which takes place outside the institution, the focus is on learning from work, not just for work. As a method, workplace learning and work-based curricula integrate the employee's knowledge and university learning. It is a means by which practitioners can articulate their skills, find purpose and clarify their present roles within their working environment. Midwives have been able to access learning in the delivery suite either through an accredited WBM, or following their attendance at a perineal repair workshop. Workplace learning has played a central role in enabling midwives assess perineal trauma, advance their skills in perineal repair, providing them the opportunity for exercising clinical judgment and decision making through problem solving and reflection in and on action. In addition, this process has enabled instructing OSCE midwives to assess colleagues in the acquisition and integration of knowledge, skills values and attitudes in the context of the world of practice (Flanagan 2000:363).
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Theoretical Framework 1 – Competency and Confidence

Defining workplace learning

Workplace learning has been described by Boud and Garrick (1999:5) as that which is:

‘Concerned not only with immediate work competencies but about future competencies, it is about investment in the general capabilities of employees as well as the specific and technical’.

This definition reflects the key competencies defined by Rychen and Salganik (Rychen & Salganik 2004:28) described earlier in this chapter. Boud and Garrick have clearly embraced the changing nature of work in their definition in that key competencies are necessary requisites in the current global economy. Boud et al (1993) relates workplace learning specifically to experience, based on the assumptions that: experience is the foundation and stimulus for learning; the learner actively constructs their own experience; learning is a holistic process; learning is socially constructed and; learning is influenced by the socio-emotional context in which it occurs, thus involving the whole persons intellect, feelings and senses during the learning process. As discussed earlier in chapter three the practitioner engages in learning in their work, benefiting individually as well as collectively as an organisation.

However, work-based learning has also been described as a process and is useful here as we look at the various ways in which work-based and workplace learning have been defined and described. Burton & Jackson (2003: 6) discuss Seagreaves’ work role through three different processes. These are learning for work, learning at work and learning from work. Midwives require the skill of perineal repair for their working role; the skill is learnt at work and from work. Work-based and workplace learning therefore is used simultaneously during this thesis. The question that needs to be asked is: How do we know that workplace learning is effective in the acquisition of competence in perineal repair? It is to the process of knowing, understanding and doing for clinical competence in the workplace that we will now turn.
Experience central to learning

The discourses on 'learning in the work place' (Marsick & Watkins 1990), 'work-based learning' (Boud and Garrick 1999, Seagraves 1996) and 'learning organizations' (Senge 1994) have proposed that the workplace plays a central role in the development of knowledge and skills in post-industrial societies. These discourses clearly support vocational learning outside educational institutions and are central to the practitioners experience and competency. Both Dewey (1916) and Jarvis (2006:4) contend that experience is central to learning. Dewey suggested that the workplace is an excellent site for learning because the learning takes place through a dialectical process of action and reflection. Dewey's central argument was material life activity. He regarded non-reflective experience based on habits, as a dominant form of experience. Dewey's elaborates on the reflective experience in the following way. Reflective experience stems from an inadequacy and the contradictions found in habitual experiences in practice. Reflection, he believed is mediated through intelligence, with new knowledge growing from the inadequacy and contradictions of habitual experiences and different actions. The basis of reflection evolved from the necessity to solve problems faced in habitual ways of action. Thus, hypotheses generated by reflection require testing through experimental activity, through problem solving. This is essential for midwives in the delivery suite where new and unexpected problems arise repeatedly with women and their perineal trauma. These challenges require skills in critical reflection and problem-solving which will be developed through repeated action. These situations require expert judgement and decision making, skills which can only be acquired through experience.

Dewey's logic is that of action. In support of workplace learning he believes that professional knowledge is no longer placed at the periphery of knowledge. Multiple realities, with the practical and discursive are integrated and support a model of workplace learning via judgements. This focuses on the whole lived experiences of workers, and is not just concerned with skills, attitudes and their outcomes. Beckett and Hager (2000:304) express similar views. Workers are caught up in experiences
of working life which are manifest in daily practices which require decisions which are typically judgemental. What makes the workplace such a valid place for learning is the very nature of how individuals attend to their total perceptions of the workplace. These perceptions are built on reason, feelings and values, needs, work colleagues and team allegiances. Practitioners’ perceived competence and competency in perineal repair will inevitably be influenced by these phenomena.

This view of experience contrasts with Kolb’s theorising and is critiqued by Jarvis (2006:8,188). Kolb lacks an appreciation of practical activity and individual experience in activity. He concentrates on abstract conceptualisation and active experimentation which Jarvis has been unable to find in his own research with participants in the learning process, developing a more sophisticated learning cycle demonstrating the highly complex process of learning. Observation of experience is Kolb’s starting point. He believes observation in working practice relies heavily on learners having the abilities to involve themselves fully and in an unbiased way in new experiences. Skills are required to reflect on experiences from a number of perspectives. Logically sound theories need to be built from the individual’s observations and reflections. These theories can then be used to make decisions and solve problems. Beckett and Hager (2000: 302) contend that making decisions and judgements, is an activity which is central to workplace learning. In both these epistemologies, reflection on experience is central to learning. Kolb suggests that through experiential learning theory, a holistic integrated prospective on learning combines with experience, perception, cognition and behaviour. Dewey however, does not discuss reflective thought unless there is a disturbance in the habits and ways of performing activities, and testing out hypotheses in practice. His perspective is humanistic, whereby objective forms of interactions between individuals in the environment come into play. This includes all that takes place within this human interaction in the social environment. This concept is further supported by Pea (1987:639) who recognised that the workplace is an authentic site for learning as it is not only a rich site for learning, but it also provides a purposeful context for the social construction of knowledge.
Dewey’s and Kolb’s theory of experimental learning provides midwives the environment in which to reflect ‘on’ and ‘in’ practice. It enables them to make judgements through problem solving and decision making which go to make up a certain practical wisdom which in turn generates a new epistemology of practice. This is legitimised through workplace education which emerges from: the contingent, rather than through sustained and systematic study; the practical rather than exclusively the theoretical; the process rather than just content; the particular rather than universal and a priori as the context; integrating the affective and social domains rather than exclusively the cognitive domain (Beckett and Hager 2000:301). Knowledge constructed in the workplace therefore occurs during both social interaction and interpretation of meaning based on existing knowledge. Knowledge constructed in this way is more than just practical, but embraces propositional, procedural and dispositional dimensions. This knowledge is always contextual.

The centrality of experience to learning is emphasised further by Jarvis (2006) and is discussed here within the context of workplace learning because it emphasises how practitioners learn through their external world; the workplace, and how this relates to their internal world. During working practice midwives will transform their experiences through their cognitive, emotive and behavioural processes, which become integrated into their existing biographies. Jarvis’ (1998, 2006) description of experience is similar to Dewey’s (1938) inadequacies and contradictions in working practice. However he goes further by explaining how experience leads to meaningful learning originating through a mental state of 'disjuncture' or disharmony. In the external life world of constantly changing practice, disjuncture occurs when the practitioner consciously feels some degree of unease or tension about their working practice and the need to develop their knowledge or skills to meet these changes. For example, the midwife may no longer be in harmony (non-learning situation) with their own level of competency. Problem solving and seeking help brings about a new conscious experience at that point in time, thus the experience can be described as episodic. When meaning is associated with the experience, the individual becomes a changed or transformed person both in thought and action; thinking, feeling and doing. Thus in this instance experience will be central to the practitioner’s development of competency in perineal repair in the workplace.
Chapter Four: Theoretical Framework 1 – Competency and Confidence

Workers learn differently in their work often adopting more than one way of learning depending on the circumstances of their learning experience (Gerber 1998). This includes: making mistakes; self-education on and off the job; practising personal values; integrating theory and practice; problem solving; interacting with colleagues; offering leadership to others; acting as an advocate for colleagues; through formal training; and practising quality assurance.

A triangular model for workplace learning has been described by Illeris (2004) which takes into account three components of workplace learning which embraces the individuals learning processes; the technical-organisational learning environment; and the social-cultural learning environment. Two sides of the triangle work in a dynamic way in that the technical-organisational environment are integrated with work and the technical conditions determine the conditions for learning. The social and cultural dimensions are important for learning possibilities. While the learning environment comprises a framework for learning, it is the interaction of the employee in their learning environment that learning takes place. How then does this new knowledge equate with practice and how is practical workplace learning assisted by mentors and supervisors?

Guidance and competency

The extent to which workplace learning is effective in increasing competence in perineal repair is closely related to whether the workplace provides both indirect and direct guidance. Knowledge required for expertise in perineal repair can be acquired through a combination of involvement and support in assessing trauma and repair with expert midwives. Close guidance by expert midwives in the delivery suite will enhance the development of practical knowledge and competence. Implementing the new perineal trauma proforma further assists midwives in their accountability, skills in judgment and decision making and confidence. Indirect guidance; provided by the setting in the workplace, is considered by Billet (1996) and Gerber (1998) as an important source of knowledge. Positive learning experiences are provided through supportive learning environments, with positive attitudes and values displayed amongst workers. Learning takes place through observing and listening to other
workers. Billet claims that indirect guidance has been consistently shown to aid learners with the conceptualisations and approximations of workplace activities.

The legitimacy of workplace learning and development of competence is further advanced by direct guidance. Thus for midwives to acquire expertise in judging perineal trauma, and the techniques for perineal repair, they need to engage in close guidance and supervision by experts while taking on increasing accountability with perineal repair. To assist this process, supportive measures were provided for midwives in the delivery suite. Midwives who are considered themselves experts in instructing and supervising perineal repair techniques across the five NHS Trusts were provided additional educational support. Up-date study days and individual assessments using an objective structured clinical examination (OSCE) were facilitated. Educational up-date aims to encourage consistency in the techniques and evidence experts use to support the assessment, repair and care of perineal trauma. Engagement with an expert and supported guidance builds on Vygotsky's (1987) zone of proximal development (ZPD) and task accomplishment. This is more likely to be achieved when novice midwives are assisted by another more expert practitioner. Ongoing immersion in workplace activities engages workers in both routine and non-routine problem-solving, it is this involvement which is influential in the development of knowledge which leads to expert performance, and encourages transferable skills.

Both direct and indirect guidance would appear to be the basis for thinking, learning and transferring knowledge in the workplace. A key to successful learning is in observing and listening to experts in practical situations. This activity enables individuals to conceptualise and discover for themselves how to engage in complex skills. It is this expert guidance and supporting experience, which influences the robustness and transferability of an individual's knowledge (Billet 1996:155).

Weaknesses in workplace learning affecting competency

The positive aspects of workplace learning have been discussed. However there are a number of weaknesses due to the complexities of working practices within an NHS organisation. The lack of available expertise can have a negative effect upon the construction of new knowledge and skills for midwives in the delivery suite.
Insufficient expert instruction and supervision in perineal repair was identified from conversations with staff across the five hospital Trusts due to understaffing and inadequate training. This inevitably has a knock-on effect for student midwives. Expert instruction and supervision was increased as the research developed, by increasing the numbers of 'instructing' midwives.

Competence in practice is likely to be impeded within a 'culture' where transference of skills are not encouraged. Tracey et al (1995:239-252) emphasised that skills decay is likely to occur in environments where staff do not support the implementation of newly acquired skills. Staff shortage, lack of importance ascribed to the skill, and the more efficient performance of the task by another worker can result in this problem occurring.

Attitudes, values and practices in the workplace which do not seek to engage midwives in meaningful activity similarly can also lead to poor motivation, unsafe practice and knowledge that are constructed from dominant values and negative aspects of workplace culture. For many midwives undertaking post-registration education, their student role may impinge on other responsibilities in the delivery suite. This can create an increased work load making workplace learning stressful. Gibbs (1992) argues that there are varying challenges faced by practitioners, students and supervisors/assessors within the organisation. Motivation, appropriate experiences, positive attitudes, and supportive learning environments contribute to positive learning. Where there is a 'continuous' learning culture and an environment where social interaction and work relationships are made explicit within the workplace, newly acquired behaviour and skills for experienced and new workers are applied positively in working activities (Dubin 1990:9; Noe & Ford 1992:345-346). These findings have implications for midwifery practice and the need for establishing and maintaining supportive learning work environments. Learning environments in the workplace therefore need close examination in order to avoid learning relapse. These issues present very real concerns to midwives and students developing their competence in perineal repair and currently have been shown to have had an effect on workplace learning and are perhaps some of the key limitations to workplace learning for practitioners. How can the learning culture and working environment in
NHS organisations, influence the perception of midwives' and students' confidence when undertaking perineal repair? In the final part of this chapter it will be argued that midwives' and students' self-confidence and competence undertaking perineal repair is to a large extent dependent on the learning culture and environment within the organisation.

The culture of midwifery in the NHS and its effects on confidence and competence

There are six sections in this final part of the chapter: midwifery culture in the NHS and the development of confidence and competence; feedback leading to confidence and competency; self-efficacy and confidence; the learning environment and competent practice; communities of practice leading to confidence and competence.

Perhaps one of the most influential factors associated with the learning culture within midwifery in the NHS, originates from the culture of midwifery itself which is historically bound. During the 18th century, midwives could be confident in their own craft knowledge and skills. These skills were traditional and handed down through generations. It could be argued that changes in midwives' confidence began to occur with the medicalisation of childbirth and the ensuing male dominance (Guiver 2004:28). This change was compounded by the predominance of scientific and technical rationality placed alongside dominant male and specifically obstetric knowledge, marginalising midwifery knowledge as folklore. This practice is reflected in the healthcare system which is hierarchical in nature and based on the medical model of care (Stapleton 1998). Cartesian dualism represents Oakley's (2000 in Guiver 2004:28) belief that the mind is viewed separately from the body, and any knowledge different to this concept is considered unreliable. As midwifery converges with obstetrics, the childbirth process is not consistent with this mind-body dichotomy, and any knowledge based on this theory has led to suppression of knowledge held by midwives and women. This reflects the ways in which the lives of women and midwives have been shaped by dominant male ideologies. The medicalisation of childbirth has only reiterated the gendering of institutions and the centralisation of obstetric care for maximum efficiency. It has reflected male cultured
values, thus creating a hierarchy of institutional expertise further, leaving midwives as an oppressed group both professionally and as women (Kirkham 1999:733). Midwifery culture in the NHS organisation has influenced the midwives' perception of their own confidence in their knowledge and skills and is often reflected in the support they provide both to women and receive themselves from senior managers. Kirkham's (2000:465) study of midwives' support needs identified that they had a resigned acceptance, a low sense of their own worth and an overwhelming sense of helplessness in practice. Significantly, there was a clear lack of support from the present hierarchical and organisational structure within their working environment. This experience argued Kirkam (2000:465), has led to a culture of powerlessness which has only resulted in equipping midwives to disempower women. What they wanted was the confidence to promote a sharing of power with women. Kirkham noted that midwives experienced a 'silencing' of their voices as practitioners. This is perhaps more evident in hospital practice despite the emerging role of consultant midwives. Listening and support were identified as specific requirements of managers and senior colleagues. Midwives requested similar support to that which they sought to provide for the women in their care in order to increase their coping, confidence and competence (Kirkham 2002:466). I would argue further that if midwives are to empower and provide women with sensitive care, then they too are required to be heard, supported and empowered themselves.

**Confidence and competency**

Does confidence lead to competency? Confidence is defined as:

"Having a strong belief, firm trust, or sure expectation; feeling certain, fully assured, self reliant, sure of ones self; having no fear of failure".


Confidence is clearly an attribute which will determine competence. Levels of confidence vary between practitioners in different situations and circumstances. Stewart's (2000:903) study of self-evaluation, distinguishes between the terms as perceived by medical students. 'Competent' was represented by what medical
students knew about their ability to undertake a skill and was based on their previous experience of the task. ‘Confident’ on the other hand, described a judgment which influenced whether medical students were either willing or not to undertake an activity. However, confidence was not necessarily based on known levels of competence and tasks. Confidence, argued Stewart et al (2000), is closely linked to an individual’s self-assessment of competence. A positive expression of confidence demonstrated that medical students appeared to relate to the expression of competence. Negative expressions of confidence were more likely to be related to the students’ anxiety and not their perceived incompetence. When asked specifically about their feelings of competence medical students described themselves as competent with tasks performed on a daily basis. Other forms of competence were expressed such as ‘happy’, ‘relaxed’ ‘scared’ often using the terms confidence and competence interchangeably. In order to achieve competent practice, medical students emphasized that they needed varying levels of help, advice and support from both peers and practitioners. However, Stewart contended that using self-assessment of competence can be complicated and by its very nature remains subjective and based on the individuals own values and beliefs. Experienced midwives may believe that their expertise results in better outcomes, yet substandard or out of date practice may continue with increasing confidence. The connection between confidence and competence is complex and therefore requires further analysis.

Experience has been shown to reduce levels of anxiety and increase independent practice. This results from moving away from being governed by explicit rules, which are perceived as difficult to comply with in real life situations, to developing rules based on experiences and professional knowledge. This supports Dreyfus and Dreyfus’ (1986) skill acquisition and five stages of novice, rule-based practice to expert intuitive practitioner. This is perhaps why midwives in the first instance are reluctant to undertake perineal repair. They lack the experience in observing and identifying the varying levels of trauma needing repair. This is increasingly evident with the reduction of routine episiotomies. Confidence therefore, can be improved through experience as midwives move through from novice to expert. An assumption is often made by managers that midwives are competent and confident to carry out
emergency procedures. Persad et al (1997:706) determined to disclose how competence and confidence equated when carrying out delivery suite procedures such as perineal repair. 1727 midwives were asked to assess their own competence in eight skills; perineal repair was one of these. 50% of midwives felt very competent to carry out perineal repair. 35% felt competent whereas 14.7% felt hesitant or unwilling to carry out the procedure. This study could not clearly identify whether this lack in competence reflected problems in practice or a lack of practitioner confidence in their own ability to perform. What was identified and made explicit was that adequate training alone was not enough. Midwives need to be provided with follow up support to carry out skills confidently. It is important therefore not to overestimate the competence of practitioners who may not be comfortable with the roles expected of them. How then can we instil confidence in midwives?

Feedback leading to confidence and competency

To engender a climate of support in the delivery suite and the opportunity for feedback, midwives in this study were assigned 'expert' OSCE supervisors undertaking the module and following in-service perineal repair workshops.

Positive feedback and the 'feedback' sandwich have been suggested by Glover (2000:247) to be the most useful attribute for students' learning. Glover argues that feedback enhances students' performance, thus making them feel confident and competent in their role, particularly where support through feedback is immediate. Glover describes feedback as 'a return flow of ideas and opinions as a job is being done by the student'. Both midwives and students learning the skill of repair, require feedback on their clinical practice to improve their clinical performance confidently and competently. If feedback is to be effective and useful to the practitioner, Glover argues it should be undertaken immediately following the event (event feedback), and provided before the details of the event are forgotten by the student and mentor/supervisor. Greenwood & n'hawinifreyda (1995:184) reiterate this view by arguing that feedback enhances student learning and confidence when it provides further information to correct or modify action of more appropriate subroutines. This is perhaps similar to the process of reflection on action where new information
enables practitioners and students to move to deeper levels of understanding and learning.

A second characteristic of feedback which influences levels of confidence argues Glover, is that the information should not create work overload, the amount needs to be useful and appropriate to practitioner needs. Thirdly, feedback needs to be sensitive and focused on competent practice. Negative feedback must be honest and provided in a sensitive manner and clarified with the practitioner. This process is incorporated into the feedback sandwich. Key factors which lead to competent practice are: support in self-evaluation; adequate time spent with mentors assisting and explaining procedures; being pushed to learn; the use of positive and negative feedback for improved practice; and encouragement through positive and private feedback. Negative feedback alone leads to apprehension (Glover 2000:248). Feedback provided by mentors in Glover’s study clearly increased students’ levels of confidence and made them more self aware. Self-confidence also provided a feeling of self-esteem. Feedback was also a means of measuring skills and knowledge, thus encouraging and enhancing learning. One student stated in Glover’s study “To be complemented [praised] on what you can do, helps to give you confidence and ask questions and to learn”. The most significant person in the facilitation of confidence and the acquisition of competence was the clinical teacher/mentor. Thus continuous feedback for both midwives and students can enhance competence by providing important information about the quality and level of their performance.

**Self-efficacy and confidence**

Self-efficacy and confidence can lead to competence in perineal repair if midwives are provided opportunities by senior delivery suite managers in a climate of learning. The way in which an individual perceives their self-efficacy and how others assist in this attribute can be complex. Self-efficacy is described by Bandura (1997:91) as:

“People’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performance”. 
Chapter Four  Theoretical Framework 1 – Competency and Confidence

This concept helps us to understand more clearly how self-efficacy differentiates how midwives and students feel about their practice and their expectations of personal efficiency. Ootim (2000: 34) contends that self-efficacy and self-confidence are based on four major sources of information: performance accomplishment, vicarious experience, verbal persuasion and psychological states. These four areas he argues facilitate confidence and competent practice.

Supervision and feedback in the delivery suite in reality may be problematic. Mentors who are not confident in their own skills or up-dated in current repair techniques, reduce the students' learning experience. Many midwives consider that teaching perineal repair during the students' pre-registration programme is inappropriate due to the statutory requirements already required of them. The lack of available time to carry out good supervision and feedback has also been identified by Sellars (2004:65) as one of the main barriers to the implementation of newly acquired skills. Heavy workloads, busy schedules, staff shortages and a lack of support from managers were the main pressures on their time.

The learning environment and competent practice

How can the learning environment in the delivery suite lead to confidence and competent practice? While perceived confidence can be enhanced in midwives and students through improved learning and feedback, can organizations be made into improved learning environments? This endeavour can be challenging due to the historically bound culture of hierarchy, medicalisation and the technology of childbirth. Baldwin and Tracey (1995: 240) contend that supervisory support and the organizational climate were key variables influencing the transfer process of newly acquired skills in practitioners. Thus, confidence in implementing perineal repair can be clearly influenced by practitioners' perceptions of the salient characteristics of the organization's culture and climate towards learning. The organization's climate towards learning is constructed by the interaction of the organizational setting; the delivery suite and the perceptual processes of the organization's members. Midwives' and students' competence undertaking perineal repair are likely to be inhibited as a result of predominant organizational characteristics such as rigid
policies, pressure to achieve through reward systems such as the Agenda for Change (1999) and managerial behaviours. Thus practitioners' values and beliefs are inherently influenced and subsequently shared by the organization's characteristics and culture.

**Communities of practice leading to confidence and competence**

In order to facilitate positive change in the learning culture, this study examines 'communities of practice' within each of the delivery suites across the five NHS Trusts. Communities of practice have become an important feature within organizational development and learning and are another means of enabling practitioners to feel that they can collaboratively reflect, share and value each others expertise. This sharing consequently creates a sense of confidence and competence in new skills. Lave and Wenger (1991:98) proposed that their model of situated learning involves a process of engagement in 'communities of practice'. They argue that communities of practice are made up in almost all areas of life and it is within these groups that interactions with each other and the world occur, creating relationships during the process. However, Lave and Wenger have been criticised by Illeris (2003) for neglecting to incorporate the individual in the learning process, likening their concept to social and constructivist approaches which almost deny or exclude the individual dimension of learning. Communities of practice were encouraged and developed by myself and members of the PRWG in the delivery suite, through supportive dialogue because I feel constructivist learning is another important dimension in the learning process. During this dialogue midwives were encouraged to join and share together their aspirations, anxieties and experiences of perineal trauma and repair within a supportive and social learning climate. This climate helped to develop trust and positive learning relationships.

Power relationships exercised amongst some autocratic senior midwives in the delivery suite existed and inhibited opportunities for communities of practice to develop. Blocking access to opportunities for midwives and student midwives needing experience in perineal repair was evident. One of the reasons for this is that senior midwives fear loosing their own status and identity. From an existentialist
perspective, midwives may have little choice and freedom in their practice under these conditions. It is this very culture of hierarchy and 'ownership' within midwifery which needs to change if midwives and students are to develop confidence and competence in perineal trauma management.

Summary and conclusion

In summary, a working definition of competency was provided which encapsulated the ethos of Rychen and Salganik’s (2004) OECD key competencies. It was argued that the integration of ‘knowing how’ and ‘knowing that’ by Ryle and Scheffler provide a clearer understanding of Polayni’s theorising of intuition and the tacit dimension. Clarification of the concept of competency has been important for the valid and reliable assessment of the midwives’ competency in perineal repair. The workplace as a valid site for learning and competence development has been shown to be an important place for midwives to acquire new knowledge through experiential learning, problem solving and critical reflection identified by Dewey’s and Jarvis’s theorising of experience and Kolb’s observation during the learning process. There is clear evidence that midwives’ and students’ perceived confidence is affected by the culture of midwifery, the organization and its members. Stewart’s study identified that confidence and experience does relate to competence. In addition, the perceived level of support provided by experts has shown to improve levels of confidence and competence. Similarly, support provided by supervisors and mentors through feedback and the feedback sandwich has shown to develop the practitioner’s self-confidence. Encouraging communities of practice within busy delivery suites may be challenging. However, facilitated effectively, they contribute to the development of confidence and competence through situated learning. This can only be achieved with the full participation of all its members within a supportive learning organisation.

Chapter five will now look to the subsidiary research questions and discuss the factors which have been shown to influence practitioners’ decision making process and sensitivity towards women-centred perineal care.
AN ANALYSIS OF THE FACTORS WHICH INFLUENCE CLINICAL DECISION MAKING AND GENDER SENSITIVE CARE IN MIDWIFERY PRACTICE

Introduction

The effectiveness of a new work-based module (WBM) and in-service education (ISE) programme for midwives cannot be evaluated in isolation from the multiple factors which influence decision making in clinical practice. This chapter therefore has two aims. Firstly, to explore the complex factors which have been found to influence the practitioners' clinical judgment and decision making in clinical practice. Secondly, to give women and midwives 'voice' by reframing the culture of midwifery around empowerment, highlighting the issues which are central to gender sensitive perineal care.

The chapter is divided into three parts and answers the three subsidiary questions from the literature posed in chapter 1:15-16. Part one discusses the extent to which policies, clinical guidelines, experience and organizational culture influence the midwives' clinical decision making process when assessing and managing perineal trauma and repair. Part two identifies the extent to which power within a hierarchical organisation is exercised and influences midwifery practice. In the final part, I relate how the history and culture of midwifery discussed in chapter four, influences gender sensitive perineal care.

To what extent do clinical guidelines, government policies and individual practices influence midwives decision making when managing perineal trauma and repair?

The midwives' clinical judgment and decision making process are influenced by a number of factors. These include: level of clinical expertise; presence of clinical guidelines; personal values and beliefs which are inextricably influenced by the wider
organisation and immediate workplace. The first subsidiary question posed as the title to this section cannot be answered comprehensively unless there is an analysis of what governs clinical practice. The midwives' decision making process can be affected by their perceived confidence, expertise and autonomy. This part of the chapter is divided into six sections and discusses the factors influencing clinical decision making in the management of perineal trauma and repair. These are: guidelines, policies and protocols; clinical judgement; experience; knowledge; educational strategies; the working environment.

**Clinical guidelines, policies and protocols**

It is debatable as to the extent to which national or Trust guidelines, national policies, Trust protocols or available evidence influence the midwives' decision making process in perineal trauma management. At the commencement of this study there was no robust evidence to guide midwives in their management of second degree tears so that the midwives' decision not to repair non-bleeding tears was based purely on the midwives' own experience, anecdotal evidence from small non-randomized empirical studies and women's choice. Although the Royal College of Obstetricians and Gynaecologist's (RCOG) Green Top Guidelines No.23 (2002, 2004) (www.rcoa.com) relating to suturing materials and methods were incorporated into the 'Evidence for Best Practice Guidelines' formulated and reviewed by the PRWG, midwives have not been provided clear guidance on which to base their perineal trauma management. Further to this, confusion often arises for midwives in the differentiation between guidelines, policies and protocols. The PRWG adopted Sackett et al's (1997:112) definition of clinical guidelines as:

> 'User friendly statements that bring together the best external evidence and knowledge necessary for decision-making about a specific health care problem'.

Trust guidelines formulated by the PRWG for this study incorporated the best available evidence in order to reduce inappropriate variations in practice and to promote the delivery of high quality evidence-based care. Guidelines are distinguishable from protocols in that they outline the type of perineal trauma to be
repaired, the principles of assessment and repair and embraced the newly
developed perineal trauma assessment proforma. They reflected a broad statement
of good practice to guide midwives during the decision making process. They
therefore offer midwives flexibility, autonomy and acknowledgement of their
expertise enabling them to use their clinical freedom to particularize the guidelines to
the woman's expressed needs and values. Grimshaw and Russell (1993) concede
that explicit guidelines compiled and owned by practitioners themselves adapted to
local needs and actively facilitated, improve uptake and practice when introduced in
the context of rigorous evaluation. However, guidelines have generally been
perceived by midwives to be prescriptive, emphasising consensus. Berg (1997) has
challenged this position arguing that guidelines contribute to the illusion of a single
answer; assuming that there is only one truth and one optimal solution to every
health care situation. Perhaps this is why many practitioners have viewed guidelines
with scepticism, confident they can make the right decisions based upon their
intuition or professional judgment.

Policies need to be distinguishable from clinical guidelines in that they establish
definitive parameters for a treatment or plan of care, which is more often than not,
set indirectly by Government or at organisational level (Curtis 2004). Protocols on
the other hand are usually developed from national guidelines and provide more
operational information. The general perception of protocols by many midwives is
that they are directive and rigid, preventing autonomy when making judgments and
decisions with women in their care, laying claim that "this is the best way to practice"
(Curtis 2004:7). Encouraging midwives to use new guidelines may be problematic
because historically, perineal repair has not been guideline-or-judgment driven, it
has been policy driven through medically driven practices. This thinking therefore
requires a culture change. What is clearly different about the guidelines produced by
the PRWG is that they have clear guiding principles for action, enabling midwives to
make judgments and joint decisions with women about their perineal care. This in
turn can put the power back with midwives and women. Guidelines therefore can be
empowering for midwives by enabling women to make informed choices, based on
evidence that has been critically evaluated.
Clinical judgement and decision making.

Clinical guidelines are only one of many tools which influences decision making. As midwives take on new roles and hold greater autonomy in their practice, accountability in decision making is the cornerstone of a self-regulated professional body through the Scope of Professional Practice (NMC 2004). As there has been a lack of robust evidence in repair versus non-repair, midwives have used their judgement rather than the limited evidence to direct practice. Clinical judgement, based on knowledge and experience are fundamental to decision making in this instance. Many experienced midwives have expressed that clinical guidelines alone do not significantly influence their practice, it is their professional judgement and expertise which drives their decisions as to how and whether they undertake perineal repair with specific women. It is here that moderate realism as a relatively recent philosophy of practical nursing [midwifery] judgement provides some support to our argument.

Moderate realism, as a common sense philosophy, is based on the reflection of common-sense knowledge and reasoning in light of the evidence available to practitioners (Frazer 2004:34). Common-sense knowledge aids judgements made by midwives, arising from knowledge formulated from past experiences, opinions, probable and absolute truths. Three key canons of moderate realism which determine practice are based on meeting professional needs rather than wants. Despite experience and background, an objective view of reality is most likely to be true for midwives because it is compared with their subjective reality which common sense tells them is true. Finally, judgements are made by midwives based on personal views against reality, using their natural powers of conception and reason, thus basing decisions on available reason and evidence. This concept of professional judgement fits well here as realism is an approach which is based on the acceptance of reality as it really is. This reality can be acted upon accordingly within the context of individual women, the parameters of the organisational system and the realities of the life world in the delivery suite as they exist. Further to this, midwives are likely to implement skilled judgement in perineal assessment and repair based on their own values, knowledge and experience, and not necessarily
just on the quality of research evidence. Thus decision making is based on both analytical and intuitive processes. Whilst values and experience are not immune from challenge, they cannot be resolved purely from scientific evidence.

**Expertise, experience and decision making**

Expertise is defined as a person who has extensive skill or knowledge in a particular field; one whose specialist knowledge or skill causes them to be an authority or a specialist (Shorter Oxford English Dictionary 1973:706). Expert comes from the Latin word *experiri* which means to ‘test’ and its usage was described in 1612 as something achieved by being tried or proved by experience. Higgs and Titchen et al (2001:8) describe how expertise is developed through a solid foundation of theoretical knowledge and a thorough understanding of the different forms of knowledge used in professional practice. **How** the practitioner uses their knowledge and understanding contributes to the development of expertise Benner et al (1996) consider practical reasoning in expert clinical judgement while Walker (in Higgs and Titchen (2001:23) contends that practitioners become experts as a consequence of their years of experience in a specific knowledge domain together with their strong intention to achieve mastery in that domain. In addition they have acquired extensive declarative and procedural knowledge and are capable of automising specific skills for self-regulation. Expertise, however like experience is developed through social and cultural interaction with other practitioners but is initiated by higher mental processes such as problem-solving and reasoning through collaboration and cooperative activity in different contexts. Vygotsky (1987) refers to this process of scaffolding as zones of proximal development. Experts use this process when facilitating their expertise to less able practitioners. This occurs through a state of intersubjectivity when negotiating a skill or task. The more capable of the two provide cognitive scaffolding and structuring enabling the less capable practitioner to become more competent in the skill or activity. In this way the less able practitioner moves along a continuum of assisted or guided practice to self-regulation and self-directed learning. Experience then is the core of expertise and develops from living and doing (Jarvis 2006:115).
As a working concept for this study and the level's descriptors adopted in the pre- and post questionnaires, I have adapted Dreyfus and Dreyfus' (1980 cited in Benner 1984:12) skills acquisition model which describes five stages of proficiency. These are: novice; advanced beginner; competent; proficient; and expert. Benner (1984:22) adopted this model in nursing describing each phase moving along the continuum from novice to expert. Novices' experiences are new and the practitioner will need to develop ways of responding to them. Advanced beginners will be able to demonstrate marginally acceptable performance whereas competence develops after two or three years of experience. Proficiency develops when the practitioner is able to perceive whole experiences based on previous experiences. Expertise develops intuitively through experience. However, Jarvis (2006:115) argues that practitioners may have years of experience in a specific field but can act ritualistically, going through the motions of the action, taking things for granted and not learning anything from the experience.

Expert or highly competent practitioners also rely on the heuristics of explanatory sufficiency. In this instance expert practitioners generate an explanation for a particular problem, such as the extent of perineal trauma. Patel (1994:138) suggests that guideline utilization at the point of patient care is characterized by the way in which experts and non-experts interpret information and use it when making decisions. To-date, midwives have judged the degree of trauma that can be safely left un-repaired based on previous experiences of well healed perinea. This they do regularly until they are satisfied that the explanation fits their assumptions. Thus, practitioners may generate only satisfactory accurate explanations not maximally accurate explanations. Explanations are a function of the level of expertise of practitioners, and will vary as a function of expertise. This therefore introduces variability in guideline interpretation and decision making. Patel argues that the difference in explanatory sufficiency is supported by the evidence, which guides the practitioner with constructed representations from symbolic material. This varies as a function of the practitioners' expertise, and the purpose and nature of the evidence, and the way in which it is interpreted. In this instance, purposeful and robust evidence-based guidelines act as a support mechanism to clinical decision making. Expert heuristics are important for midwives as they base their decisions on their
experience of healed un-repaired trauma and take into account the individuality and informed choices of women in their care. Experience and experiential knowledge is important in this study because it embraces the midwives' knowledge of the woman and her trauma, the use of judgement rules to assess alternative actions when making a choice between two alternatives and enables them to reflect on past experiences to build their competency and expertise through clinical reasoning.

**Guidelines, knowledge and decision making**

The extent to which clinical guidelines are used to guide decision making, is further influenced by the midwives' self-perceived level of knowledge. Manias (2000:1467) reports how power relations between different grades of nurses, and written guidelines are used to assist in clinical decision making. Manias argue that policies and guidelines provide inexperienced practitioners the legitimacy of their knowledge using evidence to support their decision making in the clinical area. On the other hand, experts valued their professional authority and autonomy over guidelines. For more expert practitioners, previous experience, and background information informed their knowledge and judgement when making decisions. Novice practitioners were able to use written guidelines to assert a certain degree of power, demonstrating resistance to out-dated techniques and practices Manias (2000:1468). Confidence to challenge more senior colleagues was supported by the substantive written evidence in the guidelines used to justify the claims made for their chosen decisions. However, a culture of silence existed when nurses actively concealed their own repertoire of knowledge and expertise unless this was supported with formal documentation (Street 1992). Harrison et al (2002: 299) argued that nurses and midwives are more willing to use guidelines to enhance their status and occupational autonomy, in relation to the medical dominance of doctors. Practitioners were also more likely to develop and implement guidelines to establish professional territory or ownership of skills. This is particularly pertinent in this study as midwives expand their professional boundaries.
Educational strategies and decision making

Another influence on decision making in practice is whether evidence-based educational programmes such as the work-based module and in-service perineal repair workshops proposed in this study are effective in changing behaviour. Stevenson et al (2004:207) reported on the attitudes of physiotherapists' towards the best means of disseminating evidence to influence their clinical practice. Physiotherapist's reported the two most important methods of informing their practice were: 'courses' and 'in-service training'. Trust training programmes were the most influential, demonstrating changes in attitudes towards the concept and implementation of evidence-based practice, following the intervention training package. Colleagues and experience provided moderate rank scores with reading journals and attending conferences of least importance. Physiotherapists also found that the working environment played a significant role in the decision making process.

The working environment and decision making

The working environment has a much greater influence on individual practices than is openly disclosed by practitioners generally. Closed and Open Systems theory is a means of explaining the influences of the greater working environment in the organisation and in the delivery suite on individual behaviour. Aveyard (1997:142) uses this theory to explain how decisions are restricted in a closed system. He argues that a closed system, is self contained and restricted to just the patient-practitioner consultation. An assumption is made when using just evidence to support decision making that there is only one way of carrying out a procedure, and that is the scientific way. An open system on the other hand is more complex, but acknowledges that clinical practice is influenced by a wide variety of interactions with other practitioners in the environment. What makes this more complex is that every action has an equal and opposite reaction, affecting the wider system in which the consultation with the client takes place. Increasing complexity ensues when outside influences such as supervision, guidance, support and feedback are unavailable to midwives as a result of high work load, staff shortage, time constraints,
inexperienced supervisors or midwife-midwife relationships. These situations can ultimately affect clinical judgement and decision making and are major contributors in restricting practitioners' autonomy (Hancock 2004:189). It is these conditions which are often neglected by managers in the organisation and may be difficult to remedy unless attention and priority is given to staffing issues and support for midwives undertaking the module and in-service education programme.

**Power and control in the workplace**

The demand for evidence-based practice, policies and clinical guidelines do not exist in isolation. Practice operates within a complex network of power relations within a bureaucratic NHS organisation, often creating tensions between midwives and the women they care for. The second part of this chapter looks to the second subsidiary question and asks:

*To what extent does power and control in the workplace influence midwifery practice?*

In answering this question the empowering and disempowering effects of individual and organisational power within the organisation and delivery suite are discussed under three sections: clinical governance; the exercise of power in the workplace; knowledge as power.

**Clinical Governance**

This section commences by contextualizing midwifery practice within a clinical governance (CG) framework and evidence-based practice agenda. Both are a powerful dominant discourse within midwifery practice today. Clinical governance has been defined as:

'A framework through which organisations are accountable for continually improving the quality of their services, safeguarding high standards by creating an environment in which excellence in clinical care will flourish'
A First Class Service: Quality in the New NHS (DoH 1008:33)

To strive for an excellent service for women, pre- and post-registration education programmes have moved towards practitioner autonomy by continually encouraging students and midwives to integrate the best available evidence into providing evidence based informed choices for women. Tensions have arisen amongst practitioners as this ideal has been built on the mounting financial pressures on the NHS, resulting in an emphasis on cost efficiency and effectiveness (Muir Gray 1997). Best evidence has focused on evidence-based healthcare. Not only has there been concern with how clinicians practised, but also what they practised. Historically, the evolution of clinical practice was considered to be uncoordinated and driven by individual practitioners. When this concept was no longer acceptable for managers and fund holders in the NHS in the early 1990s, evidence-based healthcare was strategically organised through the National Research and Development (R&D) strategy (DoH 1991). This strategy has had far reaching consequences for both midwives' and women's autonomy in clinical practice.

While the delivery of care has undoubtedly improved through robust qualitative and quantitative evidence there has been a further loss of control for childbearing women and midwives, due to the proliferation of evidence-based policies, protocols and guidelines which feed into the CG agenda. CG has been implemented by professionals with mixed feelings, but represents the Government's aims to establish "A First Class Service" (DoH 1998) in midwifery care. Many midwives perceive CG to be a controlling mechanism for clinical practice because from the outside it is a construct associating two hitherto unrelated terms, 'clinical' meaning 'of or for the treatment of patients', and 'governance' referring to the act of governing, ruling with authority, manner, action, power and control (Ostler 1969). However, CG considered from this perspective is best understood as the executive control of clinical and administrative practices within NHS Trusts which is carried out through the organisation and has a controlling influence in that it is based on setting, delivering and monitoring standards in healthcare which is further controlled by national standards set through National Service Frameworks (NSFs) and the National Institute for Clinical Excellence (NICE). The extent to which CG affects midwifery
judgement and decision making during the assessment and management of perineal trauma is dependent on how power is exerted, interpreted and used through these processes. Local clinical guidelines for perineal repair were subsequently developed through the CG framework as part of the Trust's risk management strategies, incorporating the ethos of clinical excellence. So how does CG as a framework in the organisation reflect power and influence midwives clinical decision making?

The exercise of power in the workplace

Clinical governance is an excellent example of how midwives are influenced by this powerful framework. This view is supported by drawing on Foucault's (1980) analysis of power which provides valuable insights into how power is exercised through organisations which is either averted or resisted. Foucault claims that power does not aim to refine compliance in the individual, but focuses the individual on the possibilities for the exercise of power in organisations to be resisted, making way for new forms of organisations to emerge. This concept could be perceived as being a positive force for practitioners having its roots in radical change and structuralism. This view is in contrast to the functionalist/behaviourist perspective where power is possessed. Central to Foucault’s analysis is the means by which power is exerted. He believed that power is exercised rather than possessed. Power is exercised through institutions which then codify human experiences (Kearins 2003:10). Institutions exercise social norms amongst its practitioners, evidenced through means of exclusion and inclusion resulting in social control. In this analysis, power is considered to be exercised by structures or systems rather than individuals. From this perspective, social and political practices are conceptualized as a result of forces over which individuals have no control. In this way power is built into the social system in such a way that its overt exercise is almost independent of midwifery practice. Some midwives may be so accustomed to adhering to the 'system' that they participate, maintain and are often oppressed by that power structure, thus restricting their own autonomy in clinical decision making particularly under a medical model of midwifery care.
There is often conflict with the exercising of power within an NHS organization. On the one hand there are the ideologies and values inherent in midwives' own beliefs, while on the other hand, power and politics may dominate work practices. This has been observed and experienced first hand in the delivery suite when senior midwives control the practices of junior midwives, believing that their way of doing things is the right and only way; the traditional way. Unless junior midwives are armed with the evidence to support their own decisions, they will continue to be dominated by the hierarchical system, feeling oppressed and disempowered to make clinical decisions with women about their perineal care.

Power is also exercised by individuals and provides a behaviourist/functionalist perspective. This type of power has commonly been equated with authority, influence and decision making, and according to Kearins (2004:3) has contributed to a primitive discourse on power. Within this discourse power is possessed and used to dominate. This type of power can also be used positively to assist the organisation in delegating responsibilities and supporting midwives taking on new roles. Alternatively, some midwives may perceive that they are disempowered in the decision making process due to lack of self-confidence and self-esteem. The authoritative role of senior midwives in determining an appropriate skill mix in circumstances of staff shortages is a positive means of exercising power and might be beneficial to women and the organization.

The influence of power structures on individual practices is also dependent on shared values which are promoted and subscribed to by midwives. Institutions depend on these values and are what Etzioni (1961) describes as 'normative systems' and argues that these values are consciously generated and maintained, through signs and symbols: visual, verbal, behavioural and conceptual. Commitment to the organization's ideology brings with it, persuasive and suggestive power. Midwives inadvertently learn to internalize their own and organizational values. These values then become their own, influencing and guiding their behaviours naturally. Problems often present when members refuse to comply and deviate from these standards. Consequently, systems of control may be exerted by other members of the organization within the hierarchy through midwifery supervision. In
this sense the 'panopticon' is related to surveillance, an analogy Foucault (Danaher 2000:53) drew from Bentham's model considering this as disciplinary forces at work. This authoritative gaze can be compared to the role of the supervisor of midwives or manager who monitors 'best practice'. This authoritative 'gaze' may be considered necessary to protect the public from incompetent practice.

**Knowledge as power**

One of the most influential factors affecting midwives' clinical decisions in perineal repair is their self-perceived level of knowledge. (Kearins 2004) contends that "secrecy or the limitation of access to information is used strategically by power holders to enhance and maintain their capacity for power in the organization". Power used in this way argues Pfeffer (1981) serves functionalist imperatives. The power-knowledge concept is central to Foucault's analysis of positive power and is evident as we consider the educational institution as a positive means of empowering pre- and post-registration midwifery students. Such students are expected to demonstrate intellectual independence, critical thinking and analytical rigour. This concept of liberal progressive education results in two things. On the one hand students are encouraged to adopt processes of critical reflection, armed with critical skills leading them to emancipation and autonomy through a search for truth. On the other hand they are subject to techniques of power in the practice setting to such an extent that they inadvertently become normalized within the system Kearins (2004:7). This process is most apparent as student midwives become normalized through the knowledge subculture within the organization. Students generate their knowledge by observing and working with their mentors, simultaneously learning the organisations' culture and rituals. Hence students are vulnerable to the pastoral power of the institution, with its complex combination of coercion and freedom to learn which may be oppressive to pre-registration students and more so for midwives who are experienced practitioners undertaking post-registration education. However, Barrow (1999:2) refers to Prawat who describes self-directed, transformed and enlightened students as having the ability to gain greater control of their thinking, avoiding uncritical acceptance and passivity. At the same time this transformation can lead to freedom from constraint and oppression and the ability to exercise rights and
freedoms, thus developing their own 'voice' which enable midwives ascribe their own power. Foucault (1997:27) argued that power is inextricably bound up with knowledge, both knowledge and power being socially constructed. Foucault's construction of the concept of power/knowledge can be used as a device for studying the social and scientific practices that underlie and condition the formation of midwives beliefs and clinical decisions related to perineal repair and care.

The final part of this chapter now looks to how midwifery and organisational culture has influenced the midwives' perceived ability to provide gender sensitive perineal care and will provide a background to the extent midwives and women are given voice in midwifery practice.

Is midwifery practice sensitive to gender issues? Do midwives and students take these issues into account when managing perineal trauma and repair?

The extent to which midwives and students perceive and understand the concerns of women and their perineal trauma is to some extent dependent on their own personal beliefs and values. Midwifery values have been shaped historically by male and medical dominance and the culture of midwifery within the NHS organisation. The title to this part of the chapter reflects the third research question. In chapter four I argued that the culture of midwifery has affected midwives' self-confidence and competence and has reflected the oppressive nature of medical dominance. In order for women to feel empowered about the choices and decisions they make about their perineal trauma management, midwives themselves need to perceive that they are empowered. This section builds on these concepts and argues that managerial and supervisory support within midwifery is essential for midwives to feel empowered enabling them to listen to and give women voice, acknowledging the sensitive physical and psychological issues associated with both short and long term problems associated with perineal trauma. There are five sections: issues of gender in midwifery; giving women 'voice'; gender issues in perineal repair; supporting sensitive care in midwifery education; sensitive care underpinned by radical feminism, critical social theory and poststructuralism.
Issues of gender in midwifery

To place gender sensitivity in context, it is relevant here to reflect on the oppressive nature of women and midwifery discussed in chapter four. Some midwives, like the women they care for also perceive that they themselves are oppressed. Wittmann-Price (2004:440) suggests that nurses [and similarly midwives] are part of an oppressed group, demonstrating similar values and characteristics. An alliance is made with the oppressor for a fear of freedom, lack of self-esteem and emotional dependence. These values have been subsequently reflected in the nurse-client relationship. I would suggest that these characteristics are much the same for many midwives and have occurred as a result of the institutionalization of childbearing women and midwives as their carers. Close parallels can be drawn here between the experiences of midwives, who are predominantly women and childbearing women themselves. Midwives are encouraged to facilitate informed choice and control for women through sharing and trusting relationships. However, they often lack professional experience themselves by exercising little choice and control in their own decisions as a result of an oppressive organisational and midwifery culture. The compliance and conformity expected of midwives within present organisational power structures only compounds the problem of empowerment. As Wittmann-Price (2004:438) argues ‘oppressed nurses [midwives] deliver oppressed care’. This compromises the physical, emotional and social wellbeing of women which highlights the importance of a reciprocal relationship between midwives and women. Midwives themselves need to feel empowered and autonomous in their practice in order to empower women about making their own informed choices and decisions about their perineal management. For this ideal to become a reality a fundamental culture change in developing professional relationships needs to be addressed. This study attempted to address some of these issues by encouraging midwives and students to become self-reflective, appraising their practices, not just relying on tradition or authority but by developing self-awareness while considering alternative actions gained through their personal knowledge and experiences.
Giving midwives and women ‘voice’

With the evolving role of consultant midwives and midwives taking on a fully autonomous role in normal care, the speaking out or de-silencing for women and midwives is part of the emancipatory process which Glass (1998:67) believes must begin with an understanding and realisation of what causes oppression for women and professionals. The process of reclaiming of voices enables women and midwives to become aware of changes within themselves bringing empowerment for both. Midwives themselves often feel unable to speak out with and for women, particularly if they perceive that they have been under the influence of dominant models of medical care (Kirkham 1999). Midwives are women’s advocates and need to give voice to those in their care enabling them to break free from medical dominance. It is imperative therefore that midwives are provided the opportunity to raise their own consciousness concerning the assumptions and generalizations embedded in their clinical practice. One means of exposing gender sensitive issues is to investigate the views, experiences and attitudes of midwives during the module and workshop by understanding the issues from the women’s perspective.

This study highlights the unique position midwives and students hold in speaking out and ‘giving voice’ about their experiences of how women encounter their perineal trauma management. It provides a new discourse in midwifery and feminist literature central to the women’s and midwives’ experience forwarding new theories and perspectives. It highlights differences in gender theory and aims to improve the quality of understanding around the construction of gender sensitive knowledge. This discourse moves away from the midwives’ beliefs and experiences based on a dominant discourse of policies and protocols rather than listening and sharing with women in the decision making process. New discourses will be represented through an empirical investigation of midwives’ voiced experiences and new ways of knowing. This serves to expand the scope of midwifery education and practice in providing new texts about how midwives negotiate and manage perineal trauma in partnership with women, bridging the gap between modern and postmodern thinking in theory and practice. New discourses will result in a new world views for women and midwives and will have implications for future maternity care and healthcare.
policy. It does not intend to dominate current biomedical discourses but builds on Foucault’s (1972) ‘archaeology’ of knowledge. Here the truth can be claimed historically as it relates to future midwifery practice and educational curricula shaped and created by expert midwifery knowledge and dialogue through social and political contexts, privileging the voices of midwives, reflecting the reality of their work. The implications from this are that new midwifery texts can be written for midwives by midwives from a postmodern, radical feminist and poststructural perspective recognising both gender equality and differences. In this respect the diverse range of new knowledge can enable practitioners to think differently thus influencing the power relationships in midwifery practice which have been discursively constructed.

**Gender issues in perineal care**

In chapter one, the physical and psychological trauma women experience as a result of perineal trauma was identified. However, an area of neglect in the literature has been the degree to which the competence and sensitivity of the practitioner has been questioned undertaking perineal repair. Women's views have been repeatedly neglected and undervalued by both doctors and midwives. 'Torture and punishment' are emotive words expressed by some women in the context of their experience of perineal suturing following delivery. In the quest for objectivity, the subjectivity of women's perceptions and experiences has been marginalised by quantitative research designs. Salmon (1999:220) argues that this has subsequently rendered much of women's subjective experiences invisible, and perceived as an unreliable source of legitimate knowledge. The perceived superiority of medical knowledge over that of childbearing women's experience and expert personal knowledge has only continued to dominate midwifery care, which is largely dependent on the experience and professional knowledge of midwives.

Feminist and descriptive research using unstructured interviews has enabled women, the experts, to express their problems and difficulties associated with perineal trauma. This exposure is particularly relevant in this study. Midwives need to develop a heightened awareness of women's experiences and learn from them for effective competent practice. Women's views surrounding childbirth have been
reported widely in feminist sociology identifying the lack of integration of body, mind
emotions and self in favour of the dominant biomedical model based on the
Cartesian model of mind/body dualism (Houvouras (2004:3). However, from a
feminist midwifery perspective, Salmon (1999) has identified three main themes for
consideration in midwifery practice: women's experiences of interpersonal
relationships during suturing; their experiences of social support and their
interpersonal relationships whilst healing; and the feelings associated with coming to
terms with perineal trauma. Interpersonal relationships women encountered were
those of the relationship of the doctor who sutured them. Many women perceived
that they were being 'patched up' and not being cared for. These findings are similar
to Moyzakitis' (2004:10) findings. A lack of information and explanation from
professionals related to interventions and events resulting in women's limited
understanding, decision making ability, choice and opportunity to be involved in their
care. Similar findings were reported by Sinivaara et al (2004:40), whereby women
stated that midwives withheld or provided hurried information, making decisions on
their behalf. Social support and interpersonal relationships during healing were also
important aspects for midwives to consider beyond the care provided in the delivery
suite. Three women in Sinivaara et al's study were concerned regarding the
cosmetic appearance of their perineum, an area dismissed by healthcare
professionals. Significantly, women themselves questioned the degree of skill
displayed by practitioners who had sutured them. The feelings associated with
women coming to terms with their perineal pain also highlight the emotions that their
experiences portrayed such as anger, deep emotional and physical hurt. The fact
that their experience was not taken seriously and the failure to be heard, influenced
women's negative perception of their interchanges. A very strong element of the
accounts of these women was the lack of acknowledgment and understanding of
their feelings by both doctors and midwives which left them feeling that they had to
accept that being a woman was part of their fate. In addition, women who
experienced a loss of psychological self also experienced a loss of control over
excretory functions affecting sexuality. Altered body images through perineal
scarring has been associated with negative body presentation and are sexual factors
many health care professionals feel uncomfortable discussing with women as a
result of uncertainties of sexuality in their own lives (Carter and Green 2007).
Women in Moyzakitis’s (2004:10) study further emphasized the powerlessness they experienced as a result of misuse of power by professionals, the institutionalised context of childbirth and the need to comply and conform to specific procedures. What women want, argues Moyzakitis is for women to be given a choice and involved in the decision process before being routinely repaired. Women expressed that within a disempowering environment they felt alienated from the ‘self’ with the trauma of birth. These findings are consistent with the feelings expressed by many midwives themselves. It is as a result of some of these narratives that midwives have been enabled to develop greater awareness and sensitivity to perineal trauma management through the WBM and ISE workshops.

**Supporting gender sensitive care in midwifery education**

Sensitivity has been referred to by Adams (1997) as the quality or condition of being sensitive, closely aligned to one’s perception and feeling. Similarly, feeling is associated with compassion, concern, empathy, sympathy and understanding, sensibility and feeling with emotion, self-esteem, sensitivities and susceptibilities. The concise Oxford dictionary (Pearsall 1999) also describes sensitive as quick to detect, respond to, be affected by slight changes, signals or influences; quickly and delicately appreciating the feelings of others. Gamble et al (2003) assert that the personality traits displayed by some nurses may be associated with maturity, age and experience. This could equally be the case with midwives. Women therefore expect sensitive care because of the very nature of midwifery and the qualities they expect midwives to exhibit. Sensitivity can be learned and developed if healthcare professionals acknowledge the effects insensitive has on peoples feelings and needs (May 1992). Importantly, van Hooft (1990) urges nurses [and midwives] to broaden their knowledge in interpersonal skills and the development of self-awareness. Thus sensitivity and insensitivity can be described as an attitude and action with both positive and negative outcomes experienced by women discussed in chapter one.

Gender sensitive issues have been addressed in pre- and post-registration midwifery curricula by embracing and integrating the principles of critical social theory, radical feminism and poststructuralism. Gender sensitive theories applied in midwifery
practice need to be specific to the midwives' role. These theories have a high level of specificity which enables midwives to explain and understand the nature of the care they provide for the women in their care. Contextually, gender sensitive theories are similar to situation specific theories in that they demonstrate the importance of contexts of women's health and illness experiences. Im & Melais (2001:312) states:

'Without incorporating gender issues embedded in women's experiences, theories of women's health are incomplete'.

Im & Melais (2001) argued that this theory can be used in practice to describe, explain and interpret women's multiple experiences thus providing a direction for midwifery care and empowerment for women. Midwives' awareness and understanding of feminist philosophy will also enable them to focus on the equality of women, with women's experiences being equally valid to those of men. The principle beliefs of feminism in midwifery curricula include honouring and promoting the value of women, breaking down the injustices based on gender, and discovering aspects of female experiences that will empower them. Midwifery research and practice developed from feminist research, has sought to develop new paradigms of social criticism, which does not rely on traditional positivist philosophy. A single universal truth and objectivity in a male dominated scientific establishment is contrasted to the view that nature and phenomenon must be studied in context. The qualitative approach in feminist research uses context as an important factor in studying phenomena, whereby the experiences of women sustaining perineal trauma are validated and vital pieces of previously missing information are included in the results. Thus, using semi-structured questions in pre- and post-intervention questionnaires and focus group interviews, midwives' and students' attitudes and views of women's perineal trauma management and sexuality can be explored.

**Sensitive care underpinned by Radical Feminism, Critical Social Theory and Poststructuralism**

Radical feminism is a contemporary feminist approach towards a 'world view that values women and confronts systematic injustices based upon gender' (Klima
2001:286). Exploring midwives' experiences of women's care through dialogue during the intervention WBM and ISE programme will enable midwives to reflect critically on their existing knowledge and practice. Radical feminism supports this research by having at its central core the analysis and examination of the experiences of women historically, the present and the future, within a framework designed and developed from the woman's standpoint. Klima (2001:286) raises a pertinent point when she questions "how can we begin to conceptualize science from a non-masculine perspective, when most of written civilization, language and conceptual frameworks have been generated by men". Ginsberg (1989 in Klima 2001:286) contends a 'gynocentric' science already exists but it is discredited, as the only available 'lens' filters out that which does not fit with patriarchal thought or "androcentric" views.

Incorporating the principles of radical feminism into the practice and philosophy of midwifery in this research, envisions the world of childbearing women and midwifery practice through a new lens, enabling midwives to meet the physical and psychosocial needs of women previously hidden behind women's and midwives oppression. This perspective aims to provide specific epistemologies and methodologies which address social, biological and political phenomena that women experience during childbirth.

Critical social theory provides a further framework within feminism for exploring women as a socially and politically constructed category. Habermas (1986) claims that critical social theory seeks to understand, analyse and scrutinize the structures of society that maintain the status quo, Wittman-Price (2004:440) argues that the purpose of critical social theory is to expose oppressive forces. Both feminism and critical social theory aim to change society and thus practice, in ways that are liberating and just. Critical social theory builds on the critical views and experiences voiced by women who emphasize the manifestations of the discourses and power relations which have been socially and politically produced. Critical social theory as a philosophical thread, embraces a belief in self-conscious criticism of midwives in practice, and identifies areas of practice which need to be carefully analyzed and evaluated. New theories of gender care will support women in making their
experiences more public knowledge than before, adopting an integrated quantitative/qualitative approach. McCall (1996:31) suggested that feminist methodology assumes that women and nurses [midwives] have “experiences and knowledge to share” and simultaneously the process allows women and midwives to uncover oppression through non-hierarchical relationships. Unless midwives can ‘deconstruct’ the lived experiences of women’s perineal trauma “there is no women’s voice, no women’s story. Instead there will be a multitude of voices that sometimes speak together, but often need to be spoken separately” (Barber and Allen 1992:19). While deconstruction as a critical social philosophy is seen to value the differences at the centre of this perspective, Glass (1998) questions whether it is possible for all women to be transformed and become empowered, considering the limits of critical social science and feminist theory on its own. Glass believes that there is a need to deconstruct and value differences for all women and all midwives. Thus the importance of combining both modern and postmodern theories to explain women’s and midwives’ experiences must be a fundamental consideration within midwifery education, practice and research.

The philosophic content of midwifery practice is investigated in this study by adopting three feminist models (Klima 2001:289) which are used as descriptors only in the pre- and post intervention questionnaire. Radical, conservative and liberal feminist midwifery are described here as follows: radical midwifery is described as practice devoid of oppressive systems and relationships where midwives are able to function freely to their full capabilities, responsive to the needs of women and their families without regard to the constraints of outside interference; a middle ground or liberal midwifery is an integrated approach where radical feminist philosophy and the philosophy of the midwifery profession focus on the relationship between midwife and woman. The relationship serves to empower women. In this respect the experiences, stories and lives of women are central to the healthcare encounter; a conservative model reflects paternalism whereby midwives are often constrained by a biomedical model of care, regulatory frameworks and oppressive relationships, creating obstacles to holistic midwifery care. The challenge for midwives is to integrate the liberal approach into the current ‘conservative’ paternalist pattern of women’s healthcare. Either way, the change and focus towards individual
relationships between midwives and women provides a reciprocal sharing of power. Sharing and demystifying information regarding perineal repair options, will allow women to become full partners in the decision making process. This can only be accomplished if midwives begin with women's beliefs and experiences of childbirth. This radical/liberal feminist midwifery approach has wider implications for childbearing women. Not only does an understanding of women's trauma associated with perineal injury 'give voice' to women but it also encourages a change in the larger social structure. It will strive for reproductive freedom; ensuring women have a voice and choice in their childbearing experience. More significantly, it will help to alter the balance of power for women.

Feminist poststructuralist theory also supports this research as it is a means of understanding and valuing the phenomenon of clinical decision making for midwives with women about the options for perineal repair. Andrist (1997:271) argues that when women become empowered and have access to information they are able to participate in the decision making process. This concept of participation is central to a feminist model of healthcare practice. Poststructuralism provides a means of understanding midwives' interpretations of their experiences. It assists in exposing realities and helps change to occur in hierarchical social networks and practices that uses power to silence and marginalise discursive discourses. The most significant theoretical perspectives within poststructuralism are: language, subjectivity and power (Arslanian-Engoren 2002:513). 'Giving voice' is the central focus of feminist poststructuralism (Scott 1994:358). Language has been described as the common factor in the analysis of social organisations, meanings, power and individual consciousness. It is how we make sense of our world, and one of the most dominant forces shaping our experiences (Foucault 2000::31 Doering 1997:24). By enabling women to explain and formalize their ideas and feelings to midwives, they can communicate their traumatic childbearing experiences. Weedon (1997) contends that socially specific meanings are constituted within language itself. Words have no specific meanings, only historical and contextual meanings, and it is discourses that have become dominant over time that have provided a valid source of women's knowledge (Scott 1994:359).
The implications of embracing postmodernist perspectives such as critical social theory and poststructuralism in this study is that theory and practice may be fully integrated in a meaningful way. Midwives will be enabled to practice their skills and make informed decisions drawing on multiple sources of knowledge, belief systems and traditional values in a relative way alongside what continues to be dominant modernist ideals, based on the continued uncritical acceptance of a single truth through scientific biomedical superiority. This study aims to encourage the characteristics of the postmodern midwife (Davis-Floyd et al. 2001) who is articulate and can speak out for women in the profession, can engage in critical enquiry, knowing the strengths and limitations of biomedicine, a practitioner who is politically astute and conscious of their cultural background. Engaging midwives in a critical appraisal of their midwifery care during the facilitated workshops asserts a radical feminist approach akin to critical theory with emancipatory intention. The midwives’ dialogue with women should aim towards the acknowledgment of the uniqueness, subjectiveness and centrality of their experiences whereby decisions should be considered and reviewed in light of local power relations and the parameters imposed on midwifery practice by the organisations biomedical system. Consequently, deconstructing women’s experiences through critical analysis are valued, preserving midwifery in the interests of women, and emancipation and autonomy in the interest of midwives as practitioners.

Summary and conclusion

It is clear that there are multiple factors influencing midwives in their decision making process. Guidelines provide a supportive mechanism for expert practitioners and a guide for novices when making judgments and clinical decisions. However the implementation of guidelines is more likely to occur when practitioners themselves are involved in the development process. The exercise of clinical judgment is also based on experience, intuition and sharing the women’s experiences of perineal trauma. This is an important factor in the decision making process embracing the realities of clinical practice. Organisational culture and structures of power within the institution make a considerable contribution to how midwives make judgments and decisions. Power
exercised through the organisation can work positively to emancipate midwives in clinical practice or negatively by oppressing them through a historically bound culture of midwifery and hierarchy of power structures. Knowledge/power is considered by Foucault to be the driving force for the emancipation of practitioners.

Perceived midwifery autonomy is a necessary characteristic for the empowerment of women in their choices and decisions in perineal repair. Identification of gender sensitive experiences and attitudes of carers are fundamental if midwives are to provide gender sensitive care. Radical feminism was proposed as a means of providing an epistemology for midwives to incorporate into their practice by examining the experiences of women and creating a 'world view' that values women's experiences. Critical social theory was used to denounce oppression and promote positive change for both women and midwives through empowerment, emancipation and autonomy. Poststructuralism within midwifery education was identified as a philosophy which seeks to provide a means of deconstructing and reconstructing midwives' and women's experience of perineal trauma, which will expose new and multiple realities. Integrating epistemological and ontological views of modern and postmodern thinking helps to construct new theories about the enlightenment process and empowerment for childbearing women and midwives.

Chapters one to five have provided a foundation to the research itself and discussed the educational and philosophical theories underpinning the study. Chapter six describes the research approach and methodological considerations.
CHAPTER SIX

RESEARCH APPROACH AND METHODOLOGICAL CONSIDERATIONS

Introduction

The main aim of this study is to evaluate whether a work-based module and in-service education programme in perineal repair is effective in raising the midwives’ and students’ perceived level of confidence and competency in this skill in clinical practice. The secondary aim of the study is to evaluate whether the educational programme provided for midwives is effective in enabling student midwives greater participation and threshold competency in perineal at the point of registration. Midwives’ and students’ competency can not be analysed and evaluated in isolation from the wider context of institutional hierarchy, organisational learning and culture. The breath and depth of the investigation for this study is therefore reflected in the methodologies adopted.

This chapter is divided into two parts. Part one provides the rationale and methodological considerations for the appropriate research approach and design undertaken for the study. Part two describes the four phases of the study.

Rationale and research methodologies

There are eight sections to this part. These are: the ontological and epistemological approach to the research methodologies; triangulation; Action research; Evaluation research; research design; working and null hypotheses; identification of variables; the research questions.

**Ontological and epistemological orientation towards the research methodologies**

Evaluating the effectiveness of an educational programme on raising midwives’ and students’ perceived level of competency undertaking perineal repair is complex and multi-faceted. It was necessary therefore to study the nature of
midwives' and students' confidence, competency and experience within contemporary midwifery practice across six NHS Trusts. My aim therefore was to place midwives and students central to the study within the context of their own working practice. The objective: to understand practitioners' motives and decisions as people and professionals and to interpret meaningfully their attitudes and beliefs inductively, thus exposing and introducing new multiple realities for me as an educator and for midwifery education locally and nationally. The methodology therefore has reflected and accommodated the multiple factors and realities which influence the midwives' and students' experience within midwifery practice. The research was undertaken within an NHS culture of bureaucracy, hierarchy, various models of midwifery and medical care and conformity. Thus my working relationship with midwives and students and my own stance, influenced the paradigms through which I approached this research, leading to a pragmatic practice epistemology.

A practice epistemology required an approach to the research which viewed reality for midwives and students as subjective and socially constructed. Thus, social phenomena and multiple realities were best exposed through the interpretative and critical social science paradigms. The interpretative approach was adopted to understand the social world from the viewpoint of midwives and students within it. It incorporated detailed descriptions of practitioners' cognitive and symbolic actions and the meanings associated with their perceived levels of confidence and competency. These were notably influenced by the organisation's learning culture together with the history and culture of midwifery (O'Brien 2004:6).

Knowledge generated from practice is different to the objective reality of positivism. However, the positivist paradigm also provided valuable insights for this study. The data generated through quantitative methods provided a quantifiable baseline measurement of the level of perceived confidence and competency on which to measure the effectiveness of an educational programme. This provided the best approximation of truth related to perceived competency with some degree of transferability of findings determined through causality.
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Research Approach and Methodology

**Triangulation and Integration of Methodologies**

The situating of competency in perineal repair within the complex structures of an NHS organisation could not be viewed in isolation. Triangulation is an epistemological approach which provides a broader and richer source of information about phenomena when two or more methods are combined. This reveals the various dimensions of a phenomenon thus enriching and providing a greater understanding of the multifaceted and complex nature of the social world (Moran-Ellis 2006). A mixed methods approach has a further advantage of increasing the accuracy of the research findings and their level of confidence. If new theories are to be generated surrounding workplace learning and competency in perineal repair, then a research methodology must incorporate not just the empirical-analytical model of research, development and dissemination, but also consider the constructivist model of action research. With an emphasis on workplace action learning, De Jong (1996 in Poel :2001:55) suggests that:

"... a theory which makes allowances for the dynamic quality of work life might be more appropriate for studying processes of continuing on-the-job training and learning in the modern workplace. Such a new theory would describe how the regulation of work-related processes and regulation of work quality improvement can be integrated on a permanent basis".

With this forethought in mind a multi-methodological approach to studying midwives and students in practice was built on classical positivism by applying various action strategies which enables practitioners to apply their own theories-in-action. According to Husen (1997:19) this "*interpretivist, humanistic, consensual, subjective and collegial*" approach provides the opportunity for reinterpretation and reshaping before and during action. Patton (1988:119) argued that 'different methods are appropriate for different situations'. He suggested that 'wherever possible mixed methods should be used' to explain phenomena from different perspectives. Implicit in this argument is an analytical approach to the different data which has been generated in this study with both deductive and inductive reasoning assisting me in discovering complementary and inevitable consequences of health service practices. Within this study's
framework, there was a balance between logical positivism, adopting the quasi-experimental design to answer the main research question from a quantitative and evaluative perspective. Adopting this approach was important where effectiveness of a new educational programme and specific measurements on outcomes are required to meet the information needs of a number of stakeholders. Curriculum evaluation is required by the educational institution for the future planning of new modules. Service managers require feedback as to the effectiveness of a work-based module and in-service workshops. Stakeholders require this not just establishing the practitioners' level of competency and their fitness for practice, but also for future training resource planning. An interpretative and critical social science paradigm was also adopted using action research and case study to answer the research questions qualitatively by exploring and explaining contextually, how midwives interpret, understand and experience their clinical practice. Understanding the meanings and actions related to the midwives' ability to implement perineal repair, sought to provide a rich data source.

Midwifery practice cannot omit a humanistic approach to women centred care. Drawing on Schutz' (1962 cited in Hughes 1990:139) theory of interpretive phenomenology an objective reality, developed through midwives' and students' subjective interpretation can be exposed by enabling them to externalise and objectify their working practices described through their working experiences. The focus in phenomenology is interpreting and understanding the meaning behind the experience of the midwives and students experiencing it so that phenomena can be communicated to the outside world (Todres & Holloway 2004). Theories taken from a positivist, interpretive and critical social were of equal value and have sought to answer the subsidiary research questions deductively and inductively from different perspectives. In this way complex social phenomena can be studied and reported.

*Action research*

Epistemologically, practice is more than just an interpretation of practice, but embraces a paradigm of praxis. Praxis was central to the chosen methodology of
action research (AR). Here praxis is a means by which I and midwives could act in response to the conditions and problems encountered by them when establishing confidence and competence in perineal repair. Three action research cycles, proposed by Lewin and described by Grundy (1982:23) were used as the framework to fulfil the three main requirements for action research (AR). These were investigation, intervention and evaluation. These incorporated three key principles: collaboration, change and reflection. AR as an approach seeks to bridge the theory-research-practice gap by directly addressing the problem of getting the available evidence into practice through reflective dialogue in the WBM and in-service workshops. It aimed towards improving professional practice and standards of women centred care. Action research subsequently became part of the midwives' everyday work in the delivery suite and community setting through the study and was the philosophy underpinned by critical social science. It set out to engage midwives and students who were rooted in their day-to-day practice, through democratic rather than hierarchical change and emancipatory action. Thus AR progressed through the technical/experimental, practical and emancipatory typologies. It was considered experimental in that it comprised a comparative survey. The AR approach was utilized to encourage practitioners to employ evidence-based practice, and to apply deductively known theory to practice. It was envisaged that this approach would facilitate the application of new theory and psychomotor skills, for increased self confidence and competency in perineal repair. Traditionally, an over-dependence on positivist approaches towards generating knowledge has distanced research from practice (Wallis 1998:6). Therefore, adopting intrapersonal approaches that consider the nature of experience of self (midwives and students) and others (childbearing women) draw on poststructural and feminist theories into the educational programme valuing midwifery knowledge.

AR incorporates the theory of change and is adaptive to change during the process of programme implementation. This promoted collaborative activity with and for midwives and students, rather than researching on them. The strength of AR lay in the generation of solutions to practical problems and assisted in empowering practitioners - getting midwives and students to engage with
Chapter Six  

Research Approach and Methodology

research and subsequent development with attendance at the WBM or ISE programme (Meyer 2002, Titchen 1993). Issues and problems related to competency and confidence in perineal repair necessitating immediate action was addressed through dialogue with all levels of practitioners in the five experimental Trusts.

My role as action researcher

My role as educationalist and quasi-insider-outsider action researcher enabled me to work collaboratively with members of the perineal repair working group (PRWG), midwives and students in the five intervention Trusts. I was able to assess, address and action organisational and academic issues related to the new perineal repair educational programme. The quasi-outsider researcher role enabled me to bring about practical behavioural changes in clinical practice amongst midwives and students through the facilitation and participation in the workshops and module focusing on quality women-centred care and advancement of knowledge. My role as insider-researcher was restricted and did not enable me to facilitate and action perineal repair in the delivery suite at the bedside in comparison to the two delivery suite midwives in the comparison Trust. These midwives were able to offer on-the-job training and support having a personal knowledge of the midwives' level of expertise, targeting key members of staff who required up-dating and training. In this respect clinicians are more likely to have a greater influence on behaviour change amongst a greater number of midwives as evidenced in Kettle et al (2002) and Metcalfe et al's (2006) studies. My outside-researcher role however did enable me to act as confidant enabling midwives and students to share organisational difficulties with me. My multiple roles as Director of Studies and insider-researcher therefore often created practical and ethical dilemmas. However the differing roles also enabled me to act impartially when addressing specific issues from an educational perspective, embracing informed and committed action as an integral part of the action research process. Throughout the four phases of the study I undertook the role as change agent and practitioner-educator for workshops and module enhancing my credibility as action researcher. I considered I was in a privileged position of
trust in often complex volatile situations. These roles were challenging both professionally and in my personal journey undertaking the research.

**Evaluation research**

Quality, efficiency and effectiveness have become overriding themes in higher education and all programmes of pre-and post-registration midwifery education and practice (DoH 1999). These themes have increasingly become a requirement in health service research and policy making by ensuring practice and decision making is more rational and evidence-based. Increasingly, systematic review processes are conducted to provide reliable and rigorous evaluations of the effectiveness of different treatments and educational strategies. Stakeholders have a particular interest in cost-effectiveness and the appropriate deployment of scarce resources within education and clinical practice. Providing evidence of practitioners' achievement of competent perineal repair is fundamental for demonstrating quality. Evaluative data therefore are invaluable to purchasing stakeholders who are required to provide a process of monitoring and evaluation for quality assurance to the external stakeholders (HEQC & NHSE 1996).

The strength of evaluative research in this study is that it follows the quasi-experimental case study design adopted for making comparisons between the experimental and comparison groups. Measurement has been a necessary component of evaluation because it provides evidence of the worth of the educational programme for future decision making in education and practice. Importantly, evaluation in this study has assessed the worth and value of the educational programme in terms of the outcome; competency in perineal repair. This encapsulates Patton's (1988:15) consideration of evaluation in that:

> 'The practice of evaluation involves the systematic collection of information about the activities, characteristics and outcomes of programmes... for use by specific people to reduce uncertainties, improve effectiveness, and make decisions with regard to what those programmes... are doing and affecting'.
The evaluation process has been integrated with the AR cycle and theory of change whereby changes have been made as and when appropriate. Action evaluation has focused on monitoring progress throughout the intervention phase of the study and assessing success as an ongoing process. It has embraced formative evaluation as this has been a developmental process. Collaborative action evaluation has been successful throughout in enhancing the design, effectiveness and outcomes of the WBM and ISE workshops and differentiates action evaluation from traditional summative or impact evaluation (Rothman 1999). Kirkpatrick’s (1999:44) four level evaluation embraced the structural relationship between training and the workplace by assessing and measuring outcomes during: pre-intervention; intervention workshops and module; following the workshops and module; post-intervention in practice.

**Research Design**

A quasi-experimental pre-intervention-post-intervention case study design combining a non-equivalent comparison group was adopted to answer the main and subsidiary research questions from a quantitative perspective. The aims of this were to draw valid inferences from the data in terms of some generalisation or transferability of new knowledge, association and causality. Quasi-experimental designs strive to approximate in a ‘field situation’ (the delivery suite or home setting) a true experimental design. This is a valuable approach to the development and analysis of studies in field settings (Robson 1993:46). The design used non-random, self-selected midwives to access a post-registration work-based module or in-service perineal repair workshop in the five Trusts in South East England. This allowed for the intervention module and workshops to be applied to a naturally occurring group within each Trust and acknowledged the individual educational and practice needs of midwives and students in their maternity unit. Figure 6:1 depicts the research design.
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Research Approach and Methodology

Figure 6.1 The research design

A QUASI-EXPERIMENTAL STUDY TO EVALUATE A WORK-BASED MODULE AND IN-SERVICE EDUCATION PROGRAMME IN PERINEAL REPAIR FOR MIDWIVES AND STUDENTS.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Date</th>
<th>Activity</th>
<th>Rationale</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 2001-2003</td>
<td>Preliminary investigation in six NHS maternity Trusts PRWG Pilot questionnaire</td>
<td>To determine needs of midwives and students in practice Reliability of instruments</td>
<td>$n = 30$ MW</td>
</tr>
</tbody>
</table>

| Phase 2 | Sept 2003     | Baseline data Pre-intervention survey Focus Group Interviews Participant observation | To inform development of intervention phase and provide baseline data for evaluation. | $n = 738$ Mw in six trusts $n = 37$ St/m in five trusts 8 Focus Groups $n = 6-9$ Mw 2 Focus Groups $n = 6-9$ St/m |

| Phase 3 | April 2004-December 2004 | Intervention phase WBM and IST programme Participant observation | Action phase to facilitate WBM and IST | $n = 160$ self-selected MW for intervention group $n = 21$ in comparison group |

| Phase 4 | Jan 2005–April 2005 | Evaluation Post- intervention survey Focus group interviews | To determine measurable and qualitative outcome of study | All MW in six trusts and senior St/mw in five trusts 8 Focus Groups $n = 6-9$ Mw 2 Focus Groups $n = 6-9$ St/m |

|         | April 2005 - January 2006 | Data analysis Results Conclusions Implications Recommendations for clinical practice | Disseminate findings to all midwives and students in six Trusts 2006 |           |
The quasi-experimental design is different from a 'true' scientific experiment, although it does share the same consideration of validity and reliability through the data collection methods. Generalizations for future populations of midwives and students practising in South East England may be problematic due to the lack of equivalence between experimental and comparison groups. This lack of equivalence was a recognised weakness of this design. Generalisation of findings from the results of qualitative data has been questioned by Miles & Huberman (2000) amongst others, maintaining that it may not be applicable to wider populations. Both suggested that 'transferability' of findings is preferred when meticulous detail in describing the methodological aspects of the study is provided. Thus the findings may be transferable to maternity units and educational institutions in England.

An alternative research design such as the Cluster Randomised Trial (CRT) for evaluating interventions in complex organisations has been suggested by the Medical Research Council (MRC 2000, Craig 2008) as an alternative design to overcome problems associated with interacting components within the experimental and control groups, numbers and variability of outcomes. CRTs focus on the group or Trust (cluster) as the unit of analysis with inferences intended to apply at an individual level. The advantage of CRT is that it minimises or removes contamination amongst participants randomised to the intervention. Random clustering however does not permit the intervention to be introduced simultaneously to all members of staff, disadvantaging midwives and students requiring instruction in perineal repair at the bedside and on-the-job training in tandem with their pre-and post-registration programmes. Withholding much needed instruction when required may be considered unethical. In addition, randomising units at an organisational level and engaging all practitioners successfully in a study reduces choice for practitioners in their professional development. CTR was beyond the scope of this study for a single researcher due to costs in time and resources. This design is ideally suited to large national research projects such as the RCM PEARLs Perineal Repair study (RCM 2006). Similarly, the Stepped Wedge Trial (SWT) design (Brown & Lilford 2006) was considered inappropriate as the intervention would need to be rolled-out sequentially either in clusters or individually over specific time periods randomly.
Due to the prolonged stages, practical and logistical constraints this design would have been onerous for a single researcher. The quasi-experimental design selected for this project was underpinned by a strong theoretical framework to support the study intervention, change process and identification through the evaluation of the programme specific implementation problems.

In addition, qualitative data generated from open ended questions, focus group interviews and participant observation provides an interpretation of the meanings midwives attributed to their behaviour. This assists in explaining in depth, the multiple phenomena associated with how confidence, competency and decision making in perineal repair are both achieved and inhibited.

Programme evaluation theory (Rogers et al 2000:47) assisted in identifying the theory of change underlying the intervention. The merits of programme theory evaluation in quasi-experimental designs are compatible with theory-based approaches and are indeed necessary to address the problems associated with evaluating complex practices. Enriched approaches build on the strengths of both quasi-experimentation and theory-based evaluation (Weitzman et al 2002: 373). This strategy was supported throughout the implementation period and an integrated approach offers two points of comparison by which underlying theoretical assumptions can be tested. Firstly, the theory of change allows comparison of programme effectiveness and perceived levels of competency before and following the intervention programme. Secondly the comparison group design allows participants experiences to be compared with the experimental intervention group.

**Combined case study design**

The exploratory case study design adopted for this study is referred to as the collection of detailed, relatively unstructured information from a range of sources about a particular group of midwives and students within their NHS institution. This is consistent with Yin’s (1994:13) definition:
... ‘an empirical enquiry which investigates a contemporary phenomenon [competency] within its real-life context when the boundaries between phenomenon and context are not clearly evident’.

This definition is further elaborated by Yin who emphasizes that a case study will typically embrace many more variables of interest than data points. Combining the case study and quasi-experimental design, enabled me to explore a group of midwives and students in the context of their practice setting within an organization, of which there is little or no control over working practices. An integrated quasi-experimental multiple case study design combines the rigorous analysis of qualitative data generated through action research and case study into the quantitative analysis of the quasi-experimental design (Yin 1989, Lincoln and Guba 1985:375). Thick descriptions and the interpretation of meanings associated with demographic and descriptive data such as cultural norms, values, attitudes and motives within the institution of midwives and students were generated.

Case study sites (Trusts)

Six case study sites (Trusts) comprised five NHS midwifery/consultant led midwifery units in S.E. England across a wide geographical area providing care for low and high risk pregnancies. The numbers of births across the six sites ranged between 2350-3982 with an average of 3513 births. 2822 women across the study sites had normal deliveries and were attended by midwives. Five intervention sites were selected purposively and conveniently due to the commissioning of pre- and post-registration midwives undertaking midwifery programmes at the University of Surrey. Further to this, my role as Director of Studies in post-registration midwifery education and knowledge of the organisation across the five sites provided the opportunity to acquire an overview of the educational and practice requirements of both midwives and students. One comparison Trust in S.E England was selected for convenience of location providing similar midwifery/consultant led care. This site also integrated a midwives birthing centre. 738 midwives on the pay role employed in the six study sites were eligible for recruitment to the study. Numbers of midwives employed in
each Trust ranged from 84 to 163 with a mean of 123. Between 4 and 7 student midwives were allocated to each of the intervention sites for their practice placement as part of their midwifery programme. There were no students in the comparison Trust due to internal politics. Due to the limited response rate from the experimental and comparison Trusts each site was studied independently in order to identify similarities and differences and then combined for analysis as a multiple case study. The case study relied on multiple sources of evidence from midwives and students in six and five NHS Trusts respectively with the data converging through triangulation.

These approaches are complementary and have embraced the complex issues of practice in the form of local organisational policies and structures and professional theory alongside the data generated from the objective measurement of perceived competency. This holistic perspective therefore allows for a fuller exploration of a number of phenomena such as confidence, decision making, power and gender sensitive care.

**The research questions**

Following an initial review of the literature and developing a conceptual framework, one main and four subsidiary research questions were developed and posed in chapter 1:17-18 to be answered deductively from the literature. These are framed again for the research as follows:

1. **Will a work-based module and in-service education programme in perineal repair be effective in increasing their perceived level of competency undertaking this skill in clinical practice?**

Due to the multiple factors influencing perceived competency the following subsidiary questions are posed:

2. **To what extent do clinical guidelines, government policies and individual practices influence midwives' decision making when managing perineal trauma and repair?**
Further to this:

3. To what extent does power and control in the workplace influence the midwives’ implementation of perineal repair in clinical practice?

In order to explore the midwives’ attitudes and views towards sensitive perineal care the fourth question asks:

4. In midwifery practice that is highly sensitive to gender sensitive issues, to what extent do midwives and students consider women’s short and long term problems associated with perineal trauma and care?

Final year pre-registration students undertaking their midwifery programme at the University of Surrey were investigated to evaluate their participation in perineal repair. The final question asks:

5. Will an educational programme in perineal repair for midwives facilitate greater student participation in undertaking this skill in clinical practice?

**Working hypothesis for the main research question**

A non-directional two tailed hypothesis states: Facilitating an accredited work-based module and in-service education programme in perineal for midwives, may or may not increase their perceived level of competency undertaking this skill.

**Null hypothesis**

There will be no significant difference in the midwives’ perceived level of competency undertaking perineal repair following an educational intervention.
Chapter Six

Research Approach and Methodology

Identification of variables

The independent variable (IV) to be measured from the main research question from the effects of a work-based module and in-service perineal repair workshop is the increase in the midwives perceived level of competency and confidence. The dependent variables are the work-based module and in-service workshops.

The independent variables to be measured in the second question are the extent policies, guidelines and individual practices influence the dependent variable decision making in perineal assessment and repair. The influence of power and control will be investigated qualitatively, by discovering interpretively how power in the workplace influences decision making. Due to the limited numbers of student midwives participating in the study the fourth subsidiary research question will be answered qualitatively.

Phases of the study

Part two of the chapter now outlines the four phases of the study under the following four sections: the development of the PRWG; initial investigation of the midwives’ and students’ experience undertaking perineal repair; intervention educational programme; the evaluation of the educational programme.

Phase 1- Development of the perineal repair working group (PRWG), design and pilot of questionnaire.

A perineal repair working group (PRWG) was initiated in December 2001. A preliminary investigation was undertaken to investigate the current availability and implementation of perineal repair workshops for midwives in five experimental Trusts and one comparison Trust. A pilot questionnaire was designed and distributed to midwives in an independent Trust.
Phase 2 – An investigation into the experience of midwives and students undertaking perineal repair in clinical practice

Distribution of a pre-intervention questionnaire to all midwives working in five intervention Trusts and one comparison Trust in September 2003. This was undertaken to inform the development of an action intervention educational programme and to provide a baseline measurement of the midwives' perceived level of confidence and competency in perineal repair. Six focus group interviews were undertaken concurrently in six Trusts to explore the attitudes and views of midwives' relating to their competency and decision making in perineal repair and the factors influencing their practice. Distribution of pre-intervention questionnaires were similarly distributed to final year student midwives in the five intervention Trusts. Similarly, two focus group interviews were undertaken to explore the views and experiences of final year diploma and degree pre-registration student midwives accessing perineal repair experience with their mentors.

Phase 3 – Intervention educational programme and continuous evaluation

A work-based module and in-service perineal repair workshop was facilitated across five intervention Trusts between April 2004 and January 2005. The intervention group comprised self-selected midwives from five Trusts. The comparison group comprised midwives accessing an independent workshop unrelated to the study intervention based on Trust demand. The decision to study an independent comparison Trust was to avoid the 'halo effect' from the midwives attending the educational programme in the experimental Trusts.

Phase 4 – An evaluation of the effectiveness of a work-based module and in-service education programme on the midwives' and student' perceived level of competency undertaking perineal repair

Post-intervention questionnaires were distributed to all midwives in the six NHS Trusts between January and April 2005. The time interval allowed for the opportunity and development of experience and expertise in perineal repair. All
student midwives in the final year of their midwifery programme in the intervention Trusts also received a post-intervention questionnaire. Six and two focus groups interviews were facilitated for midwives and students respectively to evaluate the effectiveness of the educational programme on their perceived level of competency.

Summary and conclusion

This chapter has discussed the rationale for an integrated methodological framework for answering one main and four subsidiary research questions for this study. Educational, feminist and critical social theory was used to support the research within the context of complex midwifery practice where power, hierarchy and working practices act as powerful variables when assessing the effectiveness of an educational programme.

Chapter seven will now discuss the methods of data collection which are consistent with a mixed methodological approach.
CHAPTER SEVEN

METHODS OF DATA COLLECTION

Introduction

In chapter six the methodological approach to the study was discussed. Chapter seven now describes the study sample and the three methods of data collection which are consistent with the positivist, interpretative and critical social theory paradigms. An inductive strategy was used to gather data from each paradigm through pre-and post-intervention surveys, focus group interviews and participant observation. Triangulation, using the mixed-methods approach, discussed in chapter six, has the advantage of producing 'thick descriptions' of the phenomena of interest, namely confidence, experience, support, decision making and sensitive care as it relates to the midwives' and students' perceived competency across three paradigms. The overlapping of different facets of the phenomena that have emerged and the expanded data that were generated, has added scope and breadth to the study answering the research questions from multiple perspectives aiding cross validation and providing a rich source of data on which to build existing theory.

The chapter is divided into three parts. Part one describes the multi-methods approach used for data collection from participating midwives and students. Part two describes the piloting of questionnaires, focus group interviews, participant observation and field notes. In the third part, descriptive and inferential statistics, power calculations, reliability, validity and ethical issues are discussed.

Methods of data collection

This part is divided into six sections. These are: the study sample and exclusion criteria; pre-and post-intervention questionnaires; distribution of questionnaires; response rate; midwives pre-and post-intervention questionnaire; student midwives' pre- and post-intervention questionnaire.
Study sample and exclusion criteria

A representative purposive and convenience sample of all midwives employed in six NHS consultant/midwifery led units in South East England were recruited to participate in the study. Recruitment took place through in-house management meetings, notices, and word of mouth in each Trust.

A purposive and convenience sample of all student midwives in the final year of their midwifery programme practising in five maternity units in South East England were similarly recruited to participate in the study. Approval for students in the sixth Trust was not granted due to internal politics. The study sample aimed to represent as near as possible the total population of midwives and students in South East England, sharing similar heterogeneity. This study does not represent midwives working in the private sector. Midwives employed full time in the Special Care Baby Unit/Intensive Care Neonatal Unit were excluded from this study as they were not practising midwifery.

Survey – Pre-and post-intervention semi-structured questionnaires.

The survey generated data drawing on the positivist, interpretive and critical social theory paradigms and sought to answer the main and four research questions from different perspectives. The 'Developing a Curriculum' (DACUM) model of competency-based vocational education, an already validated instrument, provided a valid and reliable support for the scope of professional practice (Hermon and Kenyon 1987). Figure 7.1 demonstrates the performance rating scale and description of achievement developed by DACUM identifying the levels of competence as they relate to Benner's (1984) novice to expert. Level 4 competency/proficiency was considered by the PRWG as the minimum level required for independent practise which included acceptable promptness, understanding and appropriate application. Midwives were asked to rate their perceived level of competency (level 0-6) using this model in the pre- and post intervention questionnaire (appendix D:8).
# LEVELS OF COMPETENCY/PROFICIENCY FOR PERINEAL REPAIR

**STANDARD STATEMENT**

The midwife will be competent to undertake the repair of the perineum, an injury sustained by either a second degree tear or episiotomy.

<table>
<thead>
<tr>
<th>LEVEL OF ACHIEVEMENT</th>
<th>LEVEL (DACUM) (Herman and Kenyon 1987)</th>
<th>LEVEL (Benner 1984)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot perform this activity satisfactorily to participate within the clinical environment.</td>
<td>0</td>
<td>Novice</td>
</tr>
<tr>
<td>Can perform this activity, but not without constant supervision, assistance and/or guidance.</td>
<td>1</td>
<td>Advanced beginner</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily, but requires some supervision and assistance and/or minimal guidance.</td>
<td>2</td>
<td>Competent</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily, when instructed to do so, without further supervision, assistance and/or guidance.</td>
<td>3</td>
<td>Proficient</td>
</tr>
<tr>
<td>Can, independently, perform this activity, satisfactorily with more than acceptable speed, quality and with initiative and adaptability to specific problems as and when they arise.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Can perform this activity satisfactorily with more than acceptable speed and quality and with initiative and adaptability and can lead/instruct/assess other practitioners in performing this activity.</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

The distribution of pre-and post-intervention questionnaires provided a comparison of mean scores of perceived level of competency before and after the intervention programme and between experimental and comparison groups, thus linking association and some causality between levels of perceived competency and educational programme. Open and closed questions were included. Closed questions were used to generate objective, factual, and measurable data.

The exploration of the main and subsidiary questions through open-ended free response questions aimed at exploring the meanings and feelings behind midwives' and students' views and attitudes which generated rich qualitative data demonstrating the complexity inherent in competency, confidence and decision making and the factors in clinical practice which influenced these phenomena. Identical concepts used in questionnaires were used when constructing the focus group interview inventory and participant observation schedule.

A self-completion questionnaire was developed and piloted in a different Trust from the study.

**Distribution of pre-intervention questionnaires**

738 semi-structured pre-intervention questionnaires (appendix D) were distributed to all midwives employed in six NHS midwifery/consultant maternity units in South East England in September 2003, through the internal mailing system. The questionnaire was accompanied by an introductory letter (appendix E), an information sheet explaining the study (appendix F), a consent form (appendix G) and a SAE for return of questionnaires to me at the University of Surrey.

Distribution of the questionnaire occurred during phase two of the study to investigate the current experience of midwives and students undertaking perineal repair in clinical practice and to provide baseline data. A £50.00 Marks and Spencer voucher was offered and distributed to one midwife through a prize draw as an incentive to return questionnaires. Similar pre-intervention questionnaires (appendix H) with accompanying letter (appendix I), information sheet (J),
consent form K) were distributed to 37 student midwives undertaking the final year of their BSc and Diploma in Higher education midwifery programme at the University of Surrey and returned to me by hand. A £25.00 Marks and Spencer gift voucher was offered similarly and distributed to one student midwife.

**Response rate - pre-intervention questionnaires across six NHS Trusts.**

Phase two (pre-intervention), resulted in a response rate of 145 (23%) returned midwives' questionnaires from the experimental Trusts and 22 (19%) from the comparison Trust. Similarly, 37 questionnaires were distributed to third year student midwives with a response of 15 (40.5%). The overall low response from midwives was disappointing and may have be attributed to the work required in the Trusts for the Clinical Negligence Scheme for Trusts (CNST) assessment visits and the midwives' general low morale and uncertainty associated with pay banding and Agenda for Change (DoH 2003) which was being carried out simultaneously. However, it has been recognized that response rates from postal questionnaires can be as low as 10-20% (Edwards & Roberts et al 2002). Thus the sample on which the survey results are based may not be truly representative of the study population. This may introduce bias, compromising the validity of the study and the transferability of findings based on interested parties. These issues were taken into consideration.

The pre- and post-intervention questionnaires were identical, but their purposes differed. The pre-intervention questionnaire investigated the midwives' and students' perceived level of competency: knowledge, skills, attitudes and behaviours related to perineal trauma assessment and repair prior to the educational intervention. The post-intervention questionnaire sought to evaluate the effectiveness of the educational programme similarly post-intervention. Students' questionnaires sought similar data to evaluate whether an educational programme provided for midwives increased their perceived level of threshold competency and greater participation undertaking perineal repair at the point of registration.
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Midwives' pre-intervention and post-intervention questionnaire

The 59 items in the midwives' questionnaire (appendix D) were divided into nine sections. These included:

1. Pattern and hours of work
2. Influence of guidelines and policies related to perineal repair
3. Perineal repair instruction
4. Perception of confidence and competence undertaking perineal repair
5. Views on women's choices and decision making in practice
6. The midwives role as mentor to students undertaking perineal repair
7. Professional and academic background
8. Support in continuing professional development
9. Information which contributed to the development of the WBM and ISE programme.

The questionnaire was designed from professional experience, known literature and overseen by my research supervisor. Constructs in the questionnaire explored:

- Perceived level of competence and confidence for midwives and students undertaking perineal repair.
- Numbers of midwives undertaking perineal repair.
- Extent to which guidelines, policies and individual practices affect clinical decision making in perineal repair.
- Extent to which current research evidence influenced decision making.
- Extent to which current in-service education in perineal repair was effective in instilling confidence and competence undertaking perineal repair
- Extent to which continuing professional development was supported by managers
- Extent of views and feelings related to women centred perineal management and care
- Frequency of which student midwives were instructed and supervised in perineal assessment and repair
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- Frequency of which students were encouraged to undertake perineal repair in the Trust
- Demographic details related to length of midwifery service, pattern of work, educational and professional achievement, CPD.
- Contribution from midwives themselves as to what they considered to be the most effective educational programme for perineal repair.

Where possible variables using a Likert scale ranging from: *not at all to a large extent* were used in the questionnaire to measure attitudes and opinions which provided a measure of intensity, extremity and direction (De Vaus 2002:109, Cluett & Bluff 2000:64) eg: *not confident to very confident* when asked about confidence undertaking perineal repair. The Likert scale aimed to generate continuous data.

**Student midwives' pre- and post intervention questionnaire**

There were 32 items in the student midwives' pre- and post-intervention questionnaire (see appendix H). These were divided into five sections which included the following constructs:

1. The midwifery programme and practice allocation
2. Theoretical and practical instruction in perineal repair
3. Experience of instruction and supervision in clinical practice from mentors
4. Views on the role of the midwife undertaking perineal repair
5. Helpful information for facilitating further education for the student and continuing professional development for the midwife in perineal repair.

The questionnaire was similarly developed from professional experience and explored:

- Extent of usefulness of theoretical and practical instruction in perineal repair
- Extent of usefulness of instruction and supervision in perineal repair in practice setting
- Frequency of attendance at in-service education in perineal repair

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• Frequency encouraged to undertake instruction and supervision in perineal repair
• Implementation of perineal repair under supervision in practice
• Level of perceived competency in perineal repair
• Extent of confidence undertaking perineal repair
• Extent to which policies and guidelines affected their perceived mentor’s clinical decision
• Extent of views and feelings towards the role of the midwife undertaking perineal repair

Piloting and qualitative data collection methods

This part comprises six sections: piloting the questionnaire; midwives’ focus group interviews; piloting the focus group interview; student’s focus group; participant observation; and field notes.

Piloting the questionnaire – measuring instrument

A pilot questionnaire was completed with the help of 30 midwives in a separate midwifery/consultant led maternity unit in South East England. The response rate was 16 (69%). An accompanying letter and evaluation form was included for a response of the questionnaire format, length and comprehensibility. Respondents did not consider the 59 items too onerous due to the relevance of the questions and area for free responses. Any ambiguities were corrected.

The pre-intervention questionnaire for midwives and students was piloted for reliability and validity. Internal consistency was checked to ensure all the items in the questionnaire measured the same underlying attribute. Cronbach’s coefficient alpha was used to check for the average correlation among all the items that constituted the scale. Normal values ranged between 0-1 with 1 representing greater reliability. Nunnally (1978 in Pallant 2001) recommends a minimum level of .7. Where fewer items are used in a section (less that 10) to constitute the scale, it is acceptable to report the mean inter-item correlation for the items. The optimum values ranged from .2 to .4. For the pilot questionnaire the Cronbach’s coefficient ranged between .3 and .6 and the inter-item reliability ranged between
.2 to .4. By removing and reconfiguring some of the items the final Cronbach’s coefficient alpha ranged between 6.3 and 7.5 for the inter-item correlation in longer items and between .2 and .5 for shorter items in a section.

**Midwives’ focus group interviews**

Focus group interviews were used as a secondary means of generating qualitative data to cross validate findings in the pre-and post-intervention questionnaires with both midwives and students. Elements of both interviewing and participant observation were combined. Focus groups further assisted to bridge the gap of understanding between what influenced midwives’ and students’ decisions and perceived levels of competency undertaking perineal assessment and repair within their practice. Bridging this gap was achieved by capitalising on group dynamics in a way that surveys could not.

The focus group is defined by Kruger (1998:18) as a:

‘Carefully planned discussion to obtain perceptions in a defined area of interest in a permissive, non-threatening environment’

Patton (1990) emphasises that this is an interview and not a discussion group due to its semi-structured nature. The purpose of the focus group was to obtain information of a qualitative nature from a predetermined and limited number of midwives and students. The aim therefore was to discuss the views, beliefs, opinions and perceptions of group members. The objective was to acquire high quality data in a social context, where midwives or students could consider their own views in the context of the views of others, and where new ideas and perspectives could emerge. Further to this, the interview set the parameters which related specifically to the experiences and opinions of midwives and students in relation to the research questions. A pilot focus group was undertaken for reliability and validity.
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Pilot focus group

The first focus group interview acted as the pilot. This was necessary to avoid poor style, flow of questions, inappropriate interactions and the recognition of any potential problems. The process and outcome of this first group was critically evaluated by myself and research midwife moderator. Notes were consistent with a clear tape recording. Changes were made to ensure that the questions followed in sequence. No problems were identified from this focus group and the data was analysed as part of the research.

A total of eight focus groups were conducted; one in each Trust during phase two and phase four following the return of pre- and post-intervention questionnaires in February to March 2004 and January to April 2005 respectively. Five focus group interviews were facilitated in the experimental Trusts and one in the comparison Trust. Two student focus groups comprising participants from the five experimental Trusts were facilitated similarly at the University of Surrey. A preliminary analysis of the questionnaires enabled me to ensure consistency and content validity of the focus group schedule by tapping into the free response questions.

Recruitment to the focus groups was undertaken by word of mouth and the distribution of flyers to all ward areas in the six Trusts. Midwives of all grades were represented from hospital and community practice. Once self-selected, midwives and students provided their names. A letter (appendix L), and information sheet explaining the study and the purpose of the focus group (appendix M) were distributed together with a consent form (appendix N). Overall each focus group consisted of a minimum of 5 and maximum of 9 participants. A total of 36 midwives and 18 students participated. Some midwives withdrew due to work commitments. Merton et al (1990:137) suggests 6-12 participants for good information generation. Five to nine participants enabled me to undertake an in-depth enquiry into the perceptions of what influenced the midwives' and students' competency and confidence in perineal repair.

The interview schedule was developed around the five research questions (appendix O). These questions were ordered from the more general to specific,
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with questions of greater importance placed early at the top of the schedule and those with lesser significance towards the end. There were five main themes and eight main questions, with further questions used as probes. The main themes were:

1. Effectiveness of perineal instruction on the midwives perceived level of competency undertaking perineal repair
2. The NHS as a supportive learning organisation
3. The influence of policies, guidelines and practices on decision making in perineal repair
4. Instruction and supervision for student midwives undertaking perineal repair
5. Midwives sensitivity associated with women’s perineal trauma.

The focus group interview took place in a private room, free from interruptions near the delivery suite in each Trust. Each focus group lasted approximately 35 minutes. Light refreshments were provided. My self as interviewer and a moderator were introduced to the group and names and areas of practice were shared. Anonymity and confidentiality were assured at the start of the interview. The recommendations of Kreuger (1998:4) were followed and can be evidenced in the format of the interview schedule (appendix O). These included: an introduction; purpose of the focus group; ethical considerations; explanation of the interview procedure; setting of ground rules; rapport building; and progression of questions. Each midwives’ contribution was acknowledged and valued by requesting each spoke in turn. The interview schedule was followed as closely as possible.

An audio tape was used to record the interview while the moderator took notes. This enabled me to concentrate and listen carefully to the midwives’ responses, moving onto the next area once respondents had exhausted the topic under question. Probing questions were used to investigate the topic further as appropriate. Detailed written and recorded dialogue was essential since it formed the basis for data analysis. The role of the moderator was important in ensuring the recording equipment was functioning efficiently, adequate refreshments were
available, and that key points, participant interactions and body language were noted.

Questions were semi-structured and open ended, enabling midwives to answer from a variety of dimensions. Each midwife had the chance to contribute to the discussion by sharing their individual experiences, minimizing the introduction of 'group think' (Morgan 1997). This can occur when members of the group change their individual perspectives generated by new ideas listening to others. It is important for this to be identified when analysing the data. Questions were carefully selected and phrased in such a way as to elicit maximum information. Opinions were created by the group as a whole, enabling midwives to provide information through their disclosures in a 'safe' environment tapping into their attitudes and perceptions through the interaction with their colleagues.

Closure of the group interview took place at the agreed time. A copy of the transcript was later made available for midwives and students to confirm that an authentic interpretation of the interview was undertaken. Midwives were thanked for their participation and the valuable information that was generated. Midwives were provided a token gift of appreciation for their contribution to the study. The moderator and myself met after each focus group to debrief, share immediate thoughts and confirm main findings from the interview.

Six focus group interviews were facilitated in phase 4 of the study with similar numbers of midwives. These focus groups evaluated qualitatively the effectiveness of the WBM and in-service education programme on the midwives' perceived level of competency and the multiple factors influencing the phenomena.

**Student midwives' focus group**

Student midwives were recruited to the focus group interviews similar to the midwives (see appendix P for letter, information sheet - appendix Q and consent form - appendix R). Students in the final year of their three year programme were recruited from the diploma and degree cohorts respectively in March 2004. A maximum of nine students were requested and self-selected through the group's
representative. The two focus groups conducted with student midwives were identical in format to the midwives. The questions were related and focused on their instruction, supervision and opportunity undertaking perineal repair. There were nine students in each focus group interview.

The interview schedule included the following themes:

1. Effectiveness of perineal instruction for midwives in facilitating greater student participation in perineal repair
2. Students’ experience of perineal instruction and supervision in perineal repair
3. The NHS as a supportive learning environment
4. The extent policies, guidelines and practices influenced their mentors undertake perineal repair
5. Students’ sensitivity of women’s perineal trauma.

The structure of the questions was similar to that of the midwives but also tapped into the students’ perception of their mentors practice (see appendix S) for the student’s focus group interview schedule.

A further means of generating data and determining consistency with findings from questionnaires and focus group interviews was through participant observation.

**Participant observation**

Participant observation is an important approach to research into practice because it exposes the issues which concern practitioners. Denzin (1989:158) defines participant observation as a:

'Strategy that simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation and introspection'.

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Data collection through participant observation followed a grounded theory approach using phenomenology which supported the inductive approach to the study, further validating the theories exposed deductively from the literature and practice. Glaser and Strauss (1967) describe participant observation as a method of generating grounded theory from data generated from participants occurring in the natural setting in which the participants are located. As participant observer my objective was to make sense of the midwives' and students' world from my perspective as midwife, teacher and researcher. Participant observation commenced from the initiation of the perineal repair working group (PRWG) in 2001 and occurred during the facilitation of the work-based module and in-service education workshops ending in December 2004.

Observation of behaviour and listening to dialogue were key components in this approach and were both supportive and supplementary to the survey and focus group interviews. It assisted me in corroborating data generated by these methods. An advantage of this approach was that I already had a good understanding of the culture of midwifery and the organisation as a link teacher working with a significant number of midwives through the PRWG and my role supporting continuing professional development in the five Trusts.

Difficulties are often encountered when acquiring informed consent during participant observation despite local research ethical committee (LREC) approval (Moore and Savage 2002:59). There was little control as to who self-selected to attend the in-service workshops when entering the field of observation. Complete participation and observation has been suggested by Hammersley and Atkinson (1995) to equate with covert research and as such may violate the midwives' right to their autonomy and decision as to whether they wished to participate. All midwives received a written information sheet explaining the study and data collection methods at the outset when individual questionnaires were distributed. During the workshops and module, participants verbally consented to my observation and note taking during each session.

Observation was undertaken during forty six perineal repair workshops across five Trusts and with four groups of student midwives in the University of Surrey. During the module and workshops I was able to observe midwives and students
alongside the context of their normal work setting, albeit not in the delivery suite itself. This ‘insider’ knowledge and relationship with many midwives assisted in not altering the flow of social interaction unnaturally as discussed earlier on p: 142. It was important that the majority of the taught sessions in the module were work-based so that midwives were not taken out of their normal working environment. At the end of each taught session in the module I completed my field diary. Notes included impressions of the midwives’ attitudes and behaviour towards the theoretical components of the module particularly those relating to their knowledge of perineal anatomy, women’s issues, and their perception of their ‘new’ role as supervised practitioners undertaking perineal assessment and repair, many as experienced midwives. Importantly how they had developed their confidence and competency over time and the factors that influenced clinical competency.

Focusing on the research questions and facilitating learning simultaneously during the module and workshops meant I needed to use an ‘informal information gathering’ process’ allowing me the freedom to immerse myself with the group, whereby careful observation of the interactions and dialogue could take place. As facilitator, I was able to ask midwives to explain various aspects of their practice consistent with the research questions. This enabled me as the ‘instrument’ to ask questions by probing into their responses while not having the distraction of structured rating scales, inhibiting full group participation. Ideas and values were shared amongst midwives and as a group they demonstrated how they related to each other and made sense of their world under various conditions within the organisation.

My role as ‘insider’ participant observer also took place as chairperson to the PRWG. Individual midwives were able to share their concerns about the uptake of midwives coming forward for their OSCE assessments, their anxieties about supervision in the deliver suite with the shortage of experienced midwives, and their positive attitudes towards the success to-date and the prospective use of the new documentation. More importantly, the positive feedback they had received from staff in the delivery suite about the improvement in midwives’ confidence and competence implementing the new subcuticular suturing technique.
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Observational schedules were completed in narrative format following each workshop and module study day. Schedules are consistent with the interpretive approach and support the positivist paradigm by explaining the meanings of the experiences of the observed through the experiences of the observer (Robson 1992:194). Social constructivist theory was supported by the demonstration of midwives constructing their subjective meanings and experiences supported by their working practices. Midwives never showed an orientation towards discomfort in my 'observation'. The workshops and module were so individually focused on midwives' needs that it was not difficult to observe a natural change in their knowledge, skills, attitudes and values towards perineal repair and care issues. Midwives and students attending the module and workshops were happy to share their experience of perineal repair in what they considered a 'safe' environment, where I was considered an 'outsider' in the context of not actively working in their delivery suite.

Similarly to data generated in the focus group interviews, midwives were keen to share the problems they were encountering in accessing experience and supervision in perineal repair, highlighting the often 'political' issues relating to off duty, skill mix and staff shortage. This was powerful information for me as it enabled me to address some of these issues in a diplomatic way with delivery suite managers and practice development facilitators. This collaborative action-evaluation researching combined well with the information I gathered frequently from the workshops and on informal visits to the delivery suite. Thus the central questions posed in participant observation for exploring competency were how did midwives think they would be enabled to implement perineal repair, how did guidelines, policies and experience affect decision making in perineal repair and what information did they provide to women to make informed choices about their perineal repair. While themes were consistent across the questionnaires, focus groups and participant observations, I was mindful of not restricting my focus too narrowly due to familiarity with the topic and working practices. This was possible due to the close instruction I was providing to midwives on an individual basis which enabled midwives to share their anxieties, expectations and successes as they progressed through both module and workshops, thus exposing new and emerging theories and clarifying known theories. Care was taken not to adopt complete immersion into the midwives' world as in true grounded research, but to
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maintain the ability to discover how the midwives' world of work was constructed and experienced, differently to my own experiences and world view as a midwife teacher and researcher.

The five dimensions of Patton's (1986) participant observation were adopted and included:

- Role of myself as observer
- Portrayal of role to midwives during module sessions and workshops
- Portrayal of study purpose to group
- Duration of observations in five experimental Trusts
- Broad focus of observations ie: exploration of behaviour, thoughts, ideas and attitudes.

Participant observation in the comparison Trust was not undertaken. However, Field notes were completed from meetings attended with the clinical directorate and core midwives from the delivery suite on regular occasions to determine if natural changes had occurred in their in-service education programme towards perineal repair. Midwives were concerned that any new intervention by them would influence my study. Ethically, I could not restrict any new change in practice, further supporting the quasi-experimental design.

Field notes

Field notes were collected continuously from the initiation of the perineal repair working group (PRWG) in December 2001 to the completion of data collection in March 2005. Observations and events were documented systematically and chronologically during the case study in a field dairy. Realists consider that the field is representative of a natural entity observed by the researcher which is objectively described by the observer to the reader. Ethnographers are concerned with what is constructed by the researcher through practical transactions and activities. Care was taken in the construction of data through dialogue, observation and activities. The analysis of field notes therefore reflected the world view representative and seen from the midwives' and students' perspective.
Maintaining a field diary provided details of the context of the study. Data were collected following the facilitation of learning during the work-based module and perineal repair workshops, monthly meetings with members of the PRWG, informal visits to midwives and students in the delivery suite and wards across six Trusts. 'Memos' from my own thoughts, reflections, feelings and observations were documented following these activities. Reactions and responses to midwives, students', manager's and doctor's in the clinical setting were recorded systematically, together with the relationships and decisions made during the course of the study. Notes were entered into the diary as close to the event observed. This was usually undertaken at the end of the event or day. Recording away from the event with practitioners avoided the loss of meaningful interaction and trust which developed over time. Early recording following the event also had the added advantage of ensuring that details were not lost to memory, and incorporated short term reflection (Mulhall 2003:311).

The broad themes used in questionnaires, focus group interviews and participant observation provided a framework in which codes and categories were analysed. Mason (2000:70) stresses that drawing on different dimensions; the researcher is able to collect data in a reflexive manner in preparation for some initial analyses to be made.

Considerations in data analysis

The purpose of analysing quantitative data is to measure phenomena. The theories emerging from the data were consistent with the research questions. Quantitative data analysis was carried out using the statistical package for the social sciences (SPSS version 12) providing descriptive and inferential statistics. This final part of the chapter describes the techniques used for both quantitative and qualitative data analysis. There are nine sections which are described in turn.

Data cleaning and preparation for analysis

Prior to analysis a code book was prepared with a summary of instructions used to convert the information collected from subjects into a format recognisable by
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SPSS. Data was screened and cleaned to avoid errors by checking out of range scores and outliers. Errors were corrected against the code book.

**Power calculations - determining sample size for statistical analysis**

The pilot questionnaire with a return sample of 16 midwives identified a mean level of perceived competency of 5.9 with a standard deviation of 1.653. A two tail test was set at 5% with a power of 80% in order to accept the working hypothesis. A non-directional hypothesis allows for the rejection of the null hypothesis, accepting the experimental hypothesis. The proportion of midwives with level 6 competency was 56.3%. Thus with +/- of 20% a new sample size of a minimum of 45 midwives was required for the experimental educational programme. To predict any difference between the intervention and comparison groups in level of perceived competency, the statistical level was set at .05. This level was low enough to predict whether the difference was due to the educational programme and not by chance alone. In order to support the qualitative aspects of the questionnaire, focus groups were formed to explore specific issues already identified in returned questionnaires consistent with the research questions.

**Quantitative data from surveys - descriptive statistics**

Univariate analysis provided descriptive and summary statistics from the pre- and post-intervention questionnaire data. Central tendency was estimated such as the mean or median score, standard deviation and distribution of scores for normality of variables such as perceived level of competency, perceived confidence, frequency undertaking perineal repair, age and years in midwifery practice. Continuous data was examined for skewness and kurtosis providing an indication of the overall symmetry of the distribution for carrying out parametric or non-parametric tests. These were checked with a histogram.

Frequencies from categorical variables provided the mode and distribution of a single variable such as numbers of midwives and students who attended in-service perineal repair workshops, module, years of experience, areas of work, weeks spent working in the delivery suite, suturing techniques used prior to and
following the educational programme, and engagement in CPD activities. Demographic data represented the midwives' age, level of academic and professional education and occupational grade.

Parametric tests were applied when continuous variables and normally distributed data was presented. Non-parametric tests were used with nominal or ordinal data. Throughout the development of the items in the questionnaire, the measurement was set at interval level where possible to accommodate more powerful statistics allowing a closer control of the effect of extraneous variables (De Vaus 2002:344).

**Inferential statistics**

The normal distribution of mean scores of perceived levels of competency within the general population of midwives was not available therefore a comparison of means between sample and population could not be undertaken. Due to the adequate sample size the significance level was set at 0.05 to avoid making a type 1 error; rejecting the null hypothesis when it is true or a type II error; failing to reject the null hypothesis when it is false and the two groups differ. Cronbach's alpha coefficient was used for inter-item reliability in the questionnaire construction. Parametric and non-parametric statistical tests applied to the data generated from the questionnaires are reported in Table 7.1.
Table 7.1 Statistical tests used for parametric and non-parametric data.

<table>
<thead>
<tr>
<th>Outcome measures</th>
<th>Parametric test</th>
<th>Non-parametric test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference in midwives’ mean scores on level of competency between experimental/comparison groups prior to and following intervention programme.</td>
<td>Two sample unpaired t test</td>
<td></td>
</tr>
<tr>
<td>Difference in midwives’ mean scores of level of competency in experimental and comparison group prior to intervention</td>
<td></td>
<td>Mann-Whitney U Test</td>
</tr>
<tr>
<td>Strength of association between confidence, frequency, support and competency</td>
<td></td>
<td>Spearman’s Rank Order Correlation</td>
</tr>
<tr>
<td>Difference between confidence and professional groups</td>
<td>Pearson’s Chi-Square</td>
<td>Pearson’s product Moment Correlation</td>
</tr>
<tr>
<td>Association between confounding variables ie frequency (experience) and competency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predictive ability of two or more independent variables (confidence, frequency and support) on dependent variable (competency)</td>
<td>Standard Multiple Regression analysis.</td>
<td></td>
</tr>
<tr>
<td>Relationship between nominal independent variable; repair technique and dependent variable; attendance at workshop or module.</td>
<td>Chi-Square for independence</td>
<td></td>
</tr>
<tr>
<td>Difference in midwives’ mean scores of competency between Trusts</td>
<td></td>
<td>Kruskal-Wallis Test</td>
</tr>
</tbody>
</table>

Qualitative data analysis: pre- and post-intervention questionnaire content analysis

An in-depth exploration was made of the free response questions in the pre-and post-intervention questionnaires. This enabled me to explore and understand the views and experiences of midwives and students. Theories from the interpretive paradigm were used to generate and interpret qualitative data. The qualitative software package NUD*IST was considered whereby codes, categories and themes used in sentences or paragraphs could be colour coded, categorised and cross referenced. However, manual analysis of data provided a more workable visual display of a large amount of data.

Qualitative analysis explored the ‘why’, ‘what’ and ‘how’ questions, the part quantitative analysis omits. Correlations can lead to assumptions about causes
and effects. However, these do not provide the whole picture of what influences midwives' decisions and experiences in clinical practice. Words generated by focus group interviews, open ended questions in surveys, participant observation and field notes were described and summarised.

Using a framework approach implications from the data relating to midwifery and organisational practices were drawn and linked to the objectives of the investigation and known theories identified in the literature combining a deductive or a priori approach and 'grounded' (inductive) theory from the data itself.

Framework analysis was used to summarise and classify the data into a thematic framework, lending structure and understanding to the analysis demonstrating accuracy and clarity. The stages for guiding qualitative data analysis adopted for all written texts and transcripts were consistent with Ritchie and Spencer's (1994) framework analysis and are as follows:

- Familiarisation of the data
- Identifying a thematic framework
- Indexing/coding
- Charting
- Mapping and interpretation

Each focus group transcript was read independently and manually transcribed identifying the themes that related to the main and subsidiary research questions and emerging from the literature review. Similar words, patterns, and categories emerged under key themes. Key words, sentences or paragraphs were identified, colour coded and indexed. Sub-themes such as the components of competency ie knowledge, skills attitudes and values were mapped with emerging categories and sub categories. These were then 'charted' to enable comparisons and similarities to emerge between the sub-themes, categories and sub-categories across the focus groups and questionnaire free responses. Thematic analysis from each focus group was compared and cross referenced.
The interpretation and mapping of the data were consistent with my ontological beliefs and the research questions. Concepts and new theories derived inductively from the data are described.

**Data analysis - Focus Groups**

Tape recordings from each focus group interview were transcribed verbatim with an accurate account of the dialogue. Word-for-word quotations of each respondent were made. Interview notes taken by the moderator were compared with the recorded dialogue to elicit descriptions of the participants' characteristics, general enthusiasm, group dynamics and the overall mood during the interview. Ritchie and Spencer's (1994) framework analysis concentrated on group analysis as well as individual midwives and students responses, thus providing units of analysis and individual views.

*Relational analysis* was used to identify the research questions, identifying the text to categorise and code words and patterns, and explore relationships between concepts, strength and direction. Validity was assured by involving a research colleague to establish the set of categories (Silverman 2001). A reliability coefficient between coders was calculated using Cohen's Kappa.

**Analysis of field notes**

Field notes were analysed in a similar way to data from focus group interviews. Codes were developed from the broad themes and categories and subcategories cross referenced. Much of the analysis of field notes occurred simultaneously to recording the data and was recorded in categories with existing theories in mind. This approach may inhibit the freedom of recording the descriptive rather than just impressions. For this reason verbatim quotations were recorded and provided in the results as appropriate. Direct quotations and descriptions support the hypotheses and provide original raw data, further adding to the cross validity of qualitative findings (Silverman 2001:68).
Consideration of missing data

Piloting the questionnaire for reliability and validity was undertaken to reduce the risk of poor response and missing values. Follow-up questionnaires were distributed to non-respondents two weeks following the closing date for return of questionnaires. It was necessary to consider that respondents are more likely to be the ones motivated by the subject of the questionnaire; this could introduce bias because we are not aware of non-respondent views.

Addressing missing data and values assists in the reliability and validity of the results and were dealt with in the following way: the deletion of variables when they were responsible for a significant number of missing values, and were not highly important or pose an unreliable item. The advantage of this approach is that it reduces the loss of listwise cases for analysis. Pairwise deletion was undertaken in multivariate analysis when calculating the correlation of any two variables that had missing values. Due to the limited amount of missing data in the study, the substitution of a valid code was undertaken by inserting a new best value called imputation. The sample means and approach from interval data was adopted to insert the ‘best guess’ for an individual practitioners' missing value by using the measure of central tendency for that variable. While this does provide a value for the missing item, there is some reduction in the size of correlation coefficients between the new value and valid values of other variables. The advantage of this approach is that it avoids biasing the results and loss of cases.

Validity, reliability and rigour

Validity or truth is the extent to which an account accurately represents the social phenomena to which it refers (Silverman 2001:175). Reliability refers to the degree of consistency with which a tool can measure what it is intended to measure, in the given environment (Cluett & Bluff 2000:215). Construct validity, internal validity, external validity, face validity and statistical validity were strictly adhered to. The concept and constructs were similar across questionnaires, focus group interviews, participant observations and collection of field notes. Independent and dependent variables all interrelated. Internal validity through the quasi-experimental research design aimed to ensure that there was a clear
causal relationship between effectiveness of an educational programme and the midwives' and students' perceived level of competency undertaking perineal repair.

Statistical validity was considered further by ensuring the appropriate parametric or non parametric statistical tests were adopted for the levels of measurement. These must be appropriate to reject the null hypothesis and answer the question. Face validity was assured by professionally designed questionnaires (including the competency levels descriptors), focus group interview schedule and participant observation descriptions. Typically, focus group interviews have high face validity due to the credibility and richness of the comments from participants (Webb 2002:30).

Validity and reliability in the qualitative paradigm according to Leininger (1985) is different and should not be compared with the same criteria used for quantitative research. Psychometric approaches such as credibility, applicability and confirmability were made consistently during the study. Rigour was addressed during the research process by embracing the emancipatory interests and transformation of midwives and women through critical social theory and feminism. These issues argue Koch and Harrington (1998:882) are of central importance when interpreting data and representativeness.

The distribution of completed transcripts following the focus group interviews to one member of the focus group further assisted the validation of qualitative data by confirming the interpretation of meaning elicited from the group's discussion. Independent analysis by a moderator provided inter-rater reliability with focus group interview transcripts, content analysis of open-ended questions in pre-and post intervention questionnaires, participant observation and field notes. The triangulation of methodologies and methods used in the study also served as another means of improving the rigour of the research approaches.

**Ethical considerations**

Ethical approval was granted from all Heads of Midwifery in the six participating Trusts (appendix T), Local Research Ethical Committees (LREC) (appendix U),
the Metropolitan Multi-Centre Research Ethics Committee (MREC) (appendix V) and the University of Surrey (appendix W). Consent forms and participant information sheets were provided for all midwives and students across six Trusts during all phases of data collection. Anonymity and confidentiality was assured and maintained throughout the study. Questionnaires and transcripts were coded for the purposes of data analysis and will be destroyed on the completion of the PhD. Codes were only available to me as researcher. All data collected in questionnaires, tape recordings, transcripts and field notes was maintained strictly in accordance with the Data Protection Act (1998). All respondents were volunteers and were free to withdraw from the study at any time without explanation. Student midwives were assured that there were no correct answers, the aim was to elicit their experience from the questionnaires and focus group interviews. Issues relating to power relations between students and researcher were considered in the focus group interviews by inviting the full cohort. Students were also assured that any none-participation in data collection did not jeopardise the completion of their midwifery programme.

Undertaking action research requires careful ethical consideration. Researching in one's own area of practice with midwives and students known to the researcher is challenging and requires tact and diplomacy. As director of studies for post-registration midwifery education at the time of the study, I was responsible and accountable for the quality and outcomes of an educational programme across five Trusts. My responsibility and accountability for the effectiveness of an educational programme could be considered a potential for bias. However, this was offset by my role in education for ensuring that practitioners were fit for practice, purpose and award.

When reporting data from a qualitative perspective it has been acknowledged that interpretation of the facts from the field add to the overall conclusion and should not be omitted (Finch 1985). This is where ethical dilemmas relating to anonymity and confidentiality can occur for the action researcher. Reporting negative comments made by practitioners about their Trust's management, policies or practices could be considered a breach of confidentiality and trust. From the outset, anonymity and confidentiality was assured. However, true evaluation from this study could affect the delicate working relationships amongst
colleagues in practice and education. Thus reporting isolated concerns may not be representative of the whole case study. Concerns were therefore considered in light of the 'knowledge of the actors', their agendas and conflicting value systems within the Trusts (Fraser 1997:164). Reporting the views of all practitioners’ in context of working practises was acknowledged without disclosing names and Trusts. Pseudonyms were provided for the six Trusts and codes for participants. Fundamentally, the pursuit of truth and the maintenance of trust have been paramount in the collaboration between me as action researcher and between individual practitioners. Ethical standards were employed by embracing ethical theories such as non maleficence and beneficence (Singleton and McLaren 1995). Ethical theory takes into consideration the basic values in evaluation study, which relate to moral equality, moral autonomy, impartiality and reciprocity. I was mindful of this necessity throughout my contact with midwives and students and aware of my rights to access afforded by my educational position within the Trusts.

Participants in each Trust were assured that interim and final reports of the study would only include generalisations and not portrayals of individual practitioners. Practitioners were also reassured that any information given confidentially would not be reported to managers in a way that would identify or jeopardise an individual’s practice. This resulted in some role conflict. Fraser (2003: 167) emphasises ‘not betraying trust’ or taking action expected by others. Occasionally, poor practice in perineal management was disclosed to me by a number of midwives. With the current evidence and the new perineal trauma assessment proforma, it was necessary to discuss this issue with the senior delivery suite manager. The manager took on the responsibility of addressing the issue with the midwives concerned. Action-in-reflection enabled me to reveal unsafe practises when identified, in the best interest of professional practice and in the women’s best interest.

Conclusion

This chapter has provided the rationale for a multi-methods approach to answering the main and subsidiary research questions. Pre- and post-intervention semi-structured questionnaires, focus group interviews and
participant observation were data collection methods consistent with the rationale for the quantitative and qualitative methodologies for the study. Appropriate statistical tests were identified based on parametric and non-parametric data generated. Criteria for missing data were applied which aimed to reduce data distortion and bias. Reliability and validity of the tools used for measuring the social phenomenon: competency were discussed. Issues of ethics and confidentiality were presented, highlighting the challenges encountered during the study.

Chapter eight will now look to the analysis of data generated from the midwives' responses from pre-intervention questionnaires and focus group interviews during phase 2 of the study: *An investigation into the experience of midwives and students undertaking perineal repair in clinical practice*. The data from this initial investigation provides the baseline measurements for comparison with the fourth phase of the study in chapter eleven.
CHAPTER EIGHT
DATA ANALYSIS AND RESULTS: 1

PHASE 2 PRE-INTERVENTION - AN INVESTIGATION INTO THE EXPERIENCE OF MIDWIVES UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE.

Introduction

The aim of this initial investigation was twofold. Firstly, to identify key demographic characteristics, organisational considerations and current training opportunities affecting the midwives' and students' perceived level of confidence and competency undertaking perineal repair. The secondary aim was to understand and explain the complex inter-relationship between the multiple factors influencing competency prior to the intervention of an educational programme in 2004 across five Trusts.

Establishing baseline information was important in order to measure and evaluate the future outcome effectiveness of the educational intervention, identifying specific factors found to affect the midwives' competency, decision making, and sensitivity towards perineal management and care. Factors exploring the main and subsidiary research questions are reported in sequence, linked to known theories discussed in chapters one to five. Baseline data relating to student midwives are reported in chapter nine.

This chapter is divided into six parts: the thematic analysis and coding undertaken for the questionnaires and focus group interviews; the demographic characteristics of midwives working in six Trusts; baseline data relating to the factors affecting competency; the data relating to the midwives views and attitudes towards sensitive perineal care prior to the educational intervention; factors influencing the midwives' decision making process implementing perineal repair; and finally the midwives' views of their role as mentors towards senior student midwives receiving instruction and supervision in perineal repair.
Throughout the chapter, qualitative data is presented thematically using verbatim quotes from focus group interviews, and questionnaire free responses.

Reference to Trusts and the origin of verbatim data are coded in the text as follows: Trust intervention (AI, BI, CI, DI, EI), and Trust comparison (FC), Focus group interviews (FG 2003) free responses in questionnaires (Q2003) and field notes (FN).

Thematic analysis and coding - midwives

Data generated through the themes and sub-sections in the questionnaires helped form the framework for the semi-structured questions in the focus group schedule. Thematic analysis was used to collapse the data from the focus group interviews into categories and sub categories which were mapped alongside the free responses in the questionnaires. Data from the six focus groups were compared and cross referenced.

Five themes developed from the literature were used to construct the pre-intervention questionnaire. These were developed for focus group interviews as follows:

1. The midwives' perceived competency (knowledge, skills attitudes and values) when assessing and undertaking perineal repair
2. The midwives' sensitivity towards perineal trauma and repair (attitudes and values)
3. Factors influencing clinical decision making and implementation of perineal repair
4. Influence of power and control within the workplace on the midwives' ability to implement perineal repair
5. The midwives' views of senior student midwives undertaking perineal repair

Nine main categories emerged from the responses in questionnaire free responses and the focus groups. These were colour coded by hand thematically and represented in table 8.1.
Table 8.1 Theme 1 and main categories emerging from focus group interviews.

<table>
<thead>
<tr>
<th>Theme 1: Factors affecting the midwives’ perceived competency when assessing and undertaking perineal repair</th>
<th>Colour Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competency:</strong> concepts relating to knowledge, skills attitudes and values</td>
<td>Red</td>
</tr>
<tr>
<td><strong>Categories:</strong></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>Blue</td>
</tr>
<tr>
<td>Frequency of repair and continuity of practice</td>
<td>Indigo</td>
</tr>
<tr>
<td>Opportunities for repair in practice</td>
<td>Yellow</td>
</tr>
<tr>
<td>Staffing levels, working hours and pay structure</td>
<td>Green</td>
</tr>
<tr>
<td>Organisational considerations</td>
<td>Brown</td>
</tr>
<tr>
<td>Time factor</td>
<td>Mauve</td>
</tr>
<tr>
<td>Feedback, supervision, mentoring and support</td>
<td>Orange</td>
</tr>
<tr>
<td>Trends in practice, policies, protocols and guidelines affecting clinical decision making</td>
<td>Brown</td>
</tr>
</tbody>
</table>

Detailed analysis of each theme, category and sub-category relating to the research questions generated from focus group interviews were coded and analysed similarly and are presented in appendix X.

Six focus group interviews were conducted between the six Trusts between January and April 2004. A total of 38 midwives voluntarily participated forming a heterogeneous group with variable levels of experience, educational and professional background, pattern of work and age.
Demographic characteristics of midwives employed in six NHS Trusts in South East England - 2003

Response rate

738 midwives employed in six midwifery/consultant led units in S.E. were targeted for inclusion in the study. 166 midwives responded to the pre-intervention questionnaires: 145 (23%) midwives responded in the experimental Trusts and 21 (19%) responded in the comparison Trust. The midwives who self-selected for the study were a heterogeneous group, which formed a purposeful sample with varying levels of confidence and expertise in perineal repair working throughout the maternity unit.

Pattern of work and allocation

The pattern of midwives' work varied between Trusts with 42 (25.3%) midwives working in the delivery suite, 34 (20.5%) rotating within the maternity unit, and 37 (22.3%) working both in the unit and community setting. 11 (6.6%) worked permanently on night duty, with the remaining 30 (18.6%) midwives worked either on the bank, within a team, in management, in a lecturer practitioner role or midwifery consultancy. 79 (47.6%) midwives worked between 1 and 10 weeks in the delivery suite. Only 22 (13.3%) midwives worked permanently in this area. There were no significant differences between trusts.

Age

Midwives' ages ranged between 21-60 years with a median of 31-45 years representing a mature midwifery population. There was no significant difference between midwives' ages in the intervention and comparison Trusts (Pearson Chi-Square 3.373 df 2 P > .185). 16 (76.2%) midwives were aged between 31-45 years in the comparison Trust compared to 77 (55%) in the intervention Trusts.
Years practising as a midwife

The number of years practising as a midwife ranged from 4 months to 40 years with a median of 11-20 years. Years of experience are broken down into balanced categories. 3 (1.8%) midwives had returned to practice in the preceding year and 4 (2.4%) had practised midwifery less than 1 year. In 2004, 77 (46.4%) midwives worked full time with 69 (41.6%) were working part time. 20 (12.05%) midwives worked less than 18.75 hrs per week. There was no significant difference between intervention and comparison Trusts.

Clinical grades

Clinical grades ranged from E to I. G to I grade representing senior midwives. 87 (52.4%) midwives were F grade with 59 (35.5%) midwives representing G grades. However there was no significant difference in grades between Trusts (Pearson Chi-Square 24.073a df 25 $P > .515$).

Professional academic characteristics of respondents

Professional qualifications were representative of the status of the midwife in 2003 and are inclusive of post-registration qualifications. Table 8.3 provides a typology of midwives registered with a Certificate in Midwifery, Diploma in Higher Education/Midwifery, BSc (Hons) /BSc (Ordinary), or MSc in Midwifery in the intervention and comparison Trusts and is used throughout the data analysis to link associations between specific variables. There were a higher percentage of midwives with a Certificate in Midwifery which was consistent with the mature age group of midwives. There were no significant differences in midwives' professional qualifications between intervention and comparison Trusts (Pearson Chi-Square 17.480a df 15 $P > .291$).
### Table 8.2 Midwives’ professional qualifications in 2003

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>A Intervention</th>
<th>B Intervention</th>
<th>C Intervention</th>
<th>D Intervention</th>
<th>E Intervention</th>
<th>F Comparison</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>N = 18</td>
<td>21</td>
<td>17</td>
<td>11</td>
<td>11</td>
<td>17</td>
<td>95</td>
</tr>
<tr>
<td>% within Trust</td>
<td>48.6%</td>
<td>60.0%</td>
<td>65.4%</td>
<td>46.8%</td>
<td>47.8%</td>
<td>81.0%</td>
<td>57.2%</td>
</tr>
<tr>
<td>Midwifery Diploma</td>
<td>11</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>39</td>
</tr>
<tr>
<td>Midwifery degree MSc</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>35</td>
<td>28</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>166</td>
</tr>
</tbody>
</table>

#### Teaching and assessing qualifications

130 (78.2%) midwives had undertaken the 997/8 in Mentorship or equivalent teaching and assessing qualification. 36 (21.7%) midwives had no teaching and assessing qualification. 19 (90.5%) midwives in the comparison Trust had their 997/998 mentor preparation equivalent compared to 102 (70.3%) in the intervention Trusts. There was no significant difference between intervention and comparison Trusts in post-registration teaching qualifications (Pearson Chi-Square 3.963 df 3 P > .265).

#### Post-registration education

47 (28.3%) midwives were undertaking post-registration education. This figure reflects the financial climate and available resources for post-registration continuing professional development in 2003. Alternatively this may have been attributed to the midwives’ lack of motivation as a result of the new banding system with Agenda for Change. Stand-alone modules such as The Examination of the Newborn or programmes such as the Diploma in Healthcare, BSc in Midwifery Practice, MSc Advanced Practice in Midwifery or Healthcare Management and MBA were the most frequently accessed at the University of Surrey. 22 (13.3%) midwives attended a study day on perineal repair at various venues across the country. There was a significant difference between
intervention and comparison Trusts in attendance in CPD. 22 (13%) midwives attended from the intervention Trusts with no attendance reported from the comparison Trust (Pearson Chi-Square 14.402a df 5 \( P < .013 \)). See appendix Y for a comprehensive description of the midwives demographic data.

**Midwives’ experience undertaking perineal repair – phase 2**

In order to ascertain whether a work-based module and in-service education programme for midwives would be effective in increasing their perceived level of competency in perineal repair, it was necessary to investigate the factors which made a significant impact on their practice. These factors were addressed subsequently through the intervention educational programme.

**Numbers of midwives undertaking perineal repair in 2003**

Table 8.3 records the numbers of midwives undertaking perineal repair across the intervention and comparison Trusts.

**Table 8.3 Numbers of midwives undertaking perineal repair - 2003**

<table>
<thead>
<tr>
<th>Trust</th>
<th>Intervention</th>
<th>Do you undertake perineal repair?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>A</td>
<td>N = 33</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>89.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>B</td>
<td>N = 32</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>91.4%</td>
<td>8.6%</td>
</tr>
<tr>
<td>C</td>
<td>N = 22</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>84.6%</td>
<td>15.4%</td>
</tr>
<tr>
<td>D</td>
<td>N = 22</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>91.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>E</td>
<td>N = 21</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>91.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>F</td>
<td>N = 20</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>95.2%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Total</td>
<td>N = 150</td>
<td>150</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>% within Trust</td>
<td>90.4%</td>
<td>9.6%</td>
</tr>
</tbody>
</table>
150 (90.4%) midwives stated that they undertook repair. There were no significant differences between the six Trusts ($P > .885$ 2-sided with a df 5) or between professional groups (Pearson Chi-Square $P > .879$ df 3). 86 (51.8%) midwives had been formally assessed undertaking this skill. The senior labour ward midwife was reported as undertaking 56 (33.7%) of the midwives' assessment. 63 (38%) had not received any formal assessment. 21 (67%) of the 31 midwives attending intervention focus groups and 5 (71%) of the 7 midwives in the comparison focus groups stated they could undertake repair competently.

Using the adapted DACUM (Herman & Kenyon 1987) and Benner (1984) model of competency/proficiency and levels descriptors integrated into the midwives' questionnaire (appendix D:8) figure 8.1 reports the midwives' perceived levels of competency in intervention and comparison Trusts in 2003.

Figure 8.1 Mean level of midwives' perceived competency undertaking perineal repair – 2003
36 (21.7%) midwives considered that they were unable to perform perineal repair satisfactorily in order to participate within the clinical environment (level 0). This figure is higher than the 16 (9.6%) midwives who claimed they were unable to undertake perineal repair. Practically, 114 (68.7%) midwives were confident that they could perform this skill competently. The Mann-Whitney U Test was used to test the difference between mean scores of the midwives’ levels of competency in the intervention and comparison Trusts. There was no significant difference between the two groups with midwives in the comparison trust having a mean level of 4. Midwives in the intervention scored a mean of 5. (Z -1.750 P > .080). The higher level of perceived competency in the comparison Trust may be attributed to the increased percentage of midwives working in the delivery suite (13, 61.9%) compared to the intervention Trusts (47, 32.4%). There was no significant difference between the professional groups of midwives and their perceived level of competency (Kruskal-Wallis Chi-square .963 df 3 p > .810).

Confidence undertaking perineal repair

Of the 150 (90.4) midwives who claimed to undertake perineal repair, only 45 (27.1%) perceived themselves to be very confident in this skill. 81 (48.8%) midwives reported as feeling quite confident. Table 8. reports the extent of the midwives’ confidence across professional groups.
Table 8.6 Extent of confidence undertaking perineal repair by professional group during 2003

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Extent of confidence undertaking perineal repair</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not confident</td>
<td>very confident</td>
</tr>
<tr>
<td>Certificate</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Midwifery diploma</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Midwifery degree</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>MSc</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

There was no significant association between professional status and perceived confidence (Pearson Chi-Square 14.109 df 9 P < .118). There were however, a higher percentage of midwives with a midwifery certificate who felt quite to very confident undertaking perineal repair. This finding could be explained by their earlier instruction by doctors, experience and the policy to repair all perineal trauma in the 1980s. There was a marginal significant difference in midwives' perceived confidence between Trusts (Kruskal-Wallis Chi-Square 10.789 df 5 P > .056) with higher levels of confidence perceived in the comparison Trust. Again, this finding could be explained by a higher percentage of certificated midwives. Frequency and experience undertaking the procedure was closely associated with the midwives' confidence and competence. Midwives identified similar factors in the focus group interviews and questionnaire free responses which they considered both influenced and inhibited their confidence and competence when assessing perineal trauma and implementing repair. These are reported in table 8.6.
Table 8.6 Factors associated with the midwives' perceived confidence and competency in perineal repair identified in focus group interviews and questionnaire free responses.

<table>
<thead>
<tr>
<th>Factors supporting confidence and competency</th>
<th>Factors inhibiting perceived confidence and competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Instruction in repair techniques</td>
<td>Lack of mandatory in-service instruction</td>
</tr>
<tr>
<td>Linking theory to practice</td>
<td>Clinical practice</td>
</tr>
<tr>
<td>Linking anatomy when assessing trauma</td>
<td>Lack of clinical experience in perineal repair</td>
</tr>
<tr>
<td>Psychomotor skills</td>
<td>Lack of supervision and mentoring</td>
</tr>
<tr>
<td>How to identify perineal trauma</td>
<td>Lack of opportunity to observe expert</td>
</tr>
<tr>
<td>Observation</td>
<td>Size of perineal tear</td>
</tr>
<tr>
<td>Supervised practice</td>
<td>Confidence in perineal infiltration</td>
</tr>
<tr>
<td>Practical 'hands on' experience</td>
<td>More midwives to instruct</td>
</tr>
<tr>
<td>Workshop with tutor</td>
<td>More time needed on delivery suite</td>
</tr>
<tr>
<td>Practise on models and pads</td>
<td>Lack of skill in subcuticular technique</td>
</tr>
<tr>
<td>Handling equipment and tying knots</td>
<td>'Trend' not to repair perineal tears</td>
</tr>
<tr>
<td>Clinical practice</td>
<td>Support</td>
</tr>
<tr>
<td>Up-dating current practice in techniques</td>
<td>Lack of support</td>
</tr>
<tr>
<td>Instruction at bedside</td>
<td>Need for formal assessment at bedside</td>
</tr>
<tr>
<td>Feeling competent in procedure</td>
<td>Organisational issues</td>
</tr>
<tr>
<td>Support</td>
<td>Staff shortage and lack of time</td>
</tr>
<tr>
<td>Good support from mentor</td>
<td>Need for designated facilitator in perineal repair</td>
</tr>
<tr>
<td></td>
<td>Working part-time, night duty and on the bank</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
</tr>
<tr>
<td></td>
<td>Lack of feedback from colleagues and women</td>
</tr>
</tbody>
</table>

Confidence undertaking episiotomy related to confidence undertaking perineal repair

Infrequency undertaking episiotomy and the lack of confidence in this procedure was related to the midwives' confidence undertaking perineal repair. With a mature population of midwives in this study, 146 (88%) felt quite or very confident to perform an episiotomy. This can be explained by the unrestricted use of this
procedure until the late 1990s. Frequency undertaking episiotomy significantly influenced midwives' confidence.

The data demonstrated that there was a strong positive correlation between the midwives' confidence undertaking episiotomy and confidence undertaking perineal repair (\(\rho = 0.486\), \(n=166\), \(p<0.000\)) with low levels of confidence undertaking episiotomy associated with low levels of confidence undertaking perineal repair. Similarly, frequency undertaking episiotomy was positively correlated with frequency undertaking perineal repair (\(\rho = 0.328\), \(n=150\), \(p<0.000\)). Frequency undertaking episiotomy was also positively correlated with level of competency undertaking repair (\(\rho = 0.366\), \(n=150\), \(p<0.000\)) indicating an association between the midwives' infrequency in performing an episiotomy and perceived lack of competency undertaking perineal repair. The extent of confidence infiltrating the perineum and undertaking an episiotomy was higher in the certificated midwifery group compared to diploma, degree and MSc but the difference was not significant (Pearson Chi-Square 12.743, df 9, \(p>0.175\)).

Experience in the performance of episiotomy is unlikely to change as it is mainly restricted to fetal compromise or performed prior to an instrumental delivery to prevent excessive perineal trauma. The decline in the performance of performing an episiotomy is clearly associated with midwives' confidence and competency undertaking perineal repair. These findings are consistent with the findings in the literature, which reports that the restricted use of episiotomy and the trend of non-repair have both led to the deskilling of midwives in recognising trauma, perineal infiltration and repair.

Standard multiple regression was used to explore the more complex real-life interrelationship between specific variables identified in the questionnaires. These included confidence, frequency undertaking repair and supervisory support and their effects on perceived competency. The independent variables were entered in order of what I perceived to be the highest predictor of competency based on current evidence. Frequency undertaking perineal repair made the strongest contribution towards perceived competency (beta coefficient \(-0.461\), \(p<0.000\)) when controlling for confidence and supervisory support (beta
coefficient .021 \( P > .772 \) and -.001 \( P > .989 \) respectively). These three variables are now reported in order of significance to competency.

**Frequency and confidence undertaking perineal repair**

A total of 60 (36.1%) midwives were currently working on the delivery suite and 48 (28.9%) in the community setting where there is exposure to varying degrees of perineal trauma, and opportunities for repair. With the trend of non-repair and the restricted practice of episiotomy, many midwives have become deskillled in this procedure. This experience can be restricted further with only 77 (46.4%) of midwives employed full time. The frequency of which midwives undertook perineal repair during the period 2003-2004 is reported in table 8.7.

**Table 8.7 Frequency of which midwives undertook perineal repair in 2003**

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>N =</th>
<th>Frequency of undertaking perineal repair?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>very infrequently</td>
<td>infrequently</td>
</tr>
<tr>
<td>Professional certificate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>16</td>
<td>43</td>
<td>17</td>
</tr>
<tr>
<td>Midwifery diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>5</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Midwifery degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>5</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>MSc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>27</td>
<td>72</td>
<td>33</td>
</tr>
</tbody>
</table>

Although midwives in the certificated group undertook repair more frequently there was no statistical significant difference between Trusts (Kruskal-Wallis Chi-Square 2.527 df 3 \( P > .470 \)). There was however a positive association between competence and confidence in the certificated group of midwives who undertook perineal repair more frequently. These midwives were much more likely to feel quite confident and reported slightly higher levels of perceived competency; however this did not reach statistical significance (Pearson Chi-Square \( P > .914 \).
df 9). These findings may be associated with their earlier initiation into perineal repair.

To identify whether there was a relationship between frequency undertaking the skill and perceived confidence and level of competence, Spearman's Rank Order Correlation (rho) was used to calculate the strength of the relationship between the three variables. There was a strong positive correlation coefficient between frequency undertaking perineal repair and perceived level of competence (rho = +.349 n=150 P < .000). There was a very strong positive correlation coefficient between confidence and level of competence (rho = +.360 n= 150 P <.000). There was a stronger positive correlation coefficient between frequency and confidence (rho = +.528 n= 150 P <.000).

The strength in the relationship between confidence, frequency and competency is supported by the comments reported by midwives' in the focus group interviews and from their free responses in the questionnaires. One midwife explains:

'I think over the years when we went through a phase of not suturing small second degree tears I think this is when a lot of midwives actually lost the skill, because we are only suturing more complicated ones that were generally bleeding. There were a lot of people confident in other areas but not getting their suturing skills frequently enough to be confident and were leaving the easier, nicest smallest tears that we have now started suturing again (Trust B1(FG)MW3p:3).

A number of midwives expressed their frustration at not feeling competent to carry out the procedure when they felt competent to care for the woman in all other aspects. Despite attendance at study days and up-dates one midwife stressed the importance of continuous practice towards her confidence:

'It's good having the theory and videos and things but it's not the same as doing it and to keep doing it. In the community, the different roles I have had and the opportunity, you loose the skill and then it's a matter of doing it again. I can
suture the perineum the way I know how to do it, but need to use the new method. I haven’t got continuous practice to the stage where I feel confident with it. (Trust FC(FG)MW1p3)

Frequency undertaking the skill and lack of experience seemed to be a dominant feature influencing midwives’ practice. Experienced community midwives often went through a long period without the need to undertake perineal repair, despite attending up-dates. Lack of experience and skill decay was a consistent finding amongst midwives. Part-time midwives reported spending minimal time on the delivery suite; this meant that if they did get hands on experience they would soon loose the skill due to the gap between allocations. Constant repetition and practise encouraged confidence. Midwives’ lack of experience was associated with: a perceived lack of knowledge in recommended suturing techniques; time constraints; workload; opportunity to access instruction and supervision; and staffing levels.

**Supervisory support leading to confidence and competence**

Support in the pursuit of gaining access to perineal instruction was identified in the data from several sources. Support came through statutory midwifery supervision and discussion of continuing professional development, to supervision and feedback in the delivery suite by peers, senior labour ward midwives, doctors and women themselves and could be interpreted as helpful others where there is emotional support. Just over half the midwives 83 (52.5%) perceived their supervisor to be supportive of their educational needs. 8 (4.8%) midwives had not seen their supervisor, not been asked or had not been seen for educational purposes. Midwives often found the role of the supervisor and manager conflicting whereby there was inconsistency with regards to prioritizing study sessions and funding for senior midwives. Many midwives attended training in their days off. There was however a strong positive correlation between the supervisor meeting the midwives’ educational needs and perceived confidence undertaking perineal repair (Spearman’s Rank Correlation Coefficient $r=.199$ n=146 $P < .016$).
Influence of education and training in perineal repair during the midwives’ pre-registration programme on perceived confidence and competence.

Education and training during the midwives’ pre-registration programme contributed significantly to their perceived confidence and competency undertaking perineal repair once qualified. 93 (56.0%) had received perineal repair instruction during their initial training. 36 (21.7%) midwives found initial instruction useful to a large extent, 37 (22.3%) to quite an extent, 20 (12.0%) to a moderate extent, with 38 (22.9%) midwives finding the instruction useful to some extent. Usefulness of this early introduction to instruction was identified in questionnaire free responses and related to:

- Confidence and competence in the procedure
- Getting the procedure right
- Gaining insight into different repair techniques
- Close instruction and supervision
- Promoted the delivery of excellent care
- Instilled a greater understanding of the anatomical structures of the pelvic floor
- Impressed on midwives the importance of the long term significance of correctly undertaking the role
- Enabling change to best practice

Feedback leading to confidence and competence

Receiving positive feedback from colleagues was considered by midwives to be a key element in promoting confidence. Positive feedback from women themselves and obstetricians was also a strong feature in confirming confidence and ongoing competence. Often, only the woman’s GP held information of perineal outcome in the woman’s records. Concern about the lack of feedback featured strongly in all of the focus group interviews. One midwife rotating to the labour ward stressed the importance of the woman’s feedback following repair:
'I would like some feedback sometime, some five days down the road, comfort and that; it was fantastic in the community. I saw a lady I'd sutured, and because you could follow the woman through 10 days, and she said they were really fantastic and I thought, oh good, actually perhaps I can suture. I don't think the feedback is there sometimes, I think oh, I don't know that was done as well as you could but give it a bash...it would be interesting and nice to know the number of infections, how well you've been doing, whether your suturing well, it's quite difficult to find out if you've sutured that woman well, personally to know what happens 10 days down the line, even a year to know if things had gone back to normal' (Trust D3(FG2003)MW 3p37).

Receiving positive feedback from community midwives was particularly important. Generally there was a lack of opportunity for midwives working in the delivery suite or postnatal wards to visit the women they had sutured due to early discharge home or time constraints. One source of useful feedback came from consultant obstetricians who informed midwives of women returning some months later for re-suturing or re-fashioning. Lack of good communication both verbally and written about perineal healing was highlighted generally. Concerns were raised with the increase in problems with un-sutured perinea. These were highlighted by the community manager:

'When it occurs in more than one midwife [perineal problems] you need training for everybody. How do midwives get competent, how do they know, they all need to know they are competent. You need to know they are healing and resuming intercourse' (Trust FC (FG2003)MW 1p4).

The importance of training was reiterated further:

'Midwives need to be well instructed and supervised and follow up their women to see the effectiveness of their work. I have seen too many badly repaired perineums to think all midwives know what they are doing' (Trust E (Q2003) MW133)
There was no formal audit of perineal healing being undertaken in the six Trusts at this time, thus midwives relied heavily on informal feedback from labour ward and community midwives.

**Usefulness of current in-service perineal repair instruction to competence undertaking skill**

123 (74.1%) midwives attended initial instruction in perineal repair in their Trust. 38 (22.9%) attended an up-date and 42 (25.3%) attended both. There was a significant positive correlation between the usefulness of accessing one-to-one instruction at the bedside and combined workshop and one-to-one instruction (Spearman's rho correlation coefficient $r = +0.598 \ n = 41 \ p < 0.000$). However there was no correlation between workshops, one-to-one instruction and confidence or competence. These findings support the following statements provided by midwives confirming that while education and instruction in workshops is practically useful, it is only one aspect of acquiring confidence and competence in the skill. Experience on the job was perceived to be far more beneficial. One midwife emphasised:

'It is not so much the preliminaries that's the trouble, I've had all the theory, but it's the actual practice that I need, I need someone to look over my shoulder and say "Put the needle there", you know, identify the apex. I'm not confident to do it on my own, I need someone looking over my shoulder, but there just isn't the manpower (Trust B (FG) 3p:2).

One midwife spoke of the immediacy of the situation and her desire to learn:

'The most beneficial to me is when the midwife can say come with me now [midwives' emphasis], do it now and we can do it now; see how things are done at the bedside'. (Trust F (FG2003) MW4 P:4 )

Similarly, midwives stated what would be really useful in gaining confidence and competency was a midwife to sit with them and talk them through the procedure as to which 'bit goes where' without having to rush and being called away. 'Hands on' at the bedside was important but the handling of instruments and
learning how to tie knots was considered fundamental in the initial stages of learning.

Mandatory training was suggested as a means of ensuring all midwives received instruction annually and formal assessment for ensuring there was consistency in evidence-based practice and competency using a validated OSCE (Trust El). Trust Cl had mandatory instruction facilitated by a practice development midwife. In Trust Al and DI workshops were ad hoc. In Trusts BI, El and FC suturing representatives from the company Ethicon facilitated workshops annually. In Trust El emergency skills drills took precedence over perineal repair.

Midwives in the comparison Trust (FC) identified the absence of any workshops by experienced practitioners for two years, and the immediacy of the problem. The need for a specialist practitioner was emphasised by the delivery suite manager. Although the practice development midwife had been identified as the person to institute the training she was not experienced in the skill herself. Two experienced delivery suite midwives had been elected to take on this role following their attendance at a national perineal repair conference to up-date their knowledge.

115 (69.%) midwives' considered continuing professional development was very important. Factors which contributed to importance were:

- The need to keep updated and move with the times
- For competence and motivation
- Broadening the mind
- Good for personal practice and questions old practices
- Evidence-based practice with constant review and regular audit.

Access to CPD was dependent on funding and time out from the ward area in some instances. Attendance at in-house perineal repair workshops though booked was only achievable if the ward areas were quiet. One labour ward manager recognised the importance of CPD but found balancing midwives' needs and staffing the ward difficult. The majority of midwives expressed the
need to have designated 'time out' to attend study sessions. Family commitments presented further problems with motivation and limited promotional opportunities for a minority.

**Organisational constraints restricting the implementation of perineal repair**

Time restrictions, shortage of staff and lack of experienced instructors was a major factor inhibiting one-to-one instruction and supervision in perineal repair at the bedside, voiced by a number of midwives in all focus groups. A senior labour ward midwife explained:

'One of the big things is the time factor, two midwives in the room for suturing'


Another frustrated midwife comments:

'As usual there is never enough staff, I had done it at Uni, [workshop] and then I've done about two since then, but because there just isn't enough time for two midwives to sit with one patient, its usually the shift leader who is the experienced person on and they are just called away, so it is easier, so we end up with the doctors suturing because there is not enough time for the shift leader and an F grade to sit and teach' (Trust BI(FG)mw3p:1)

A return to practice midwife explained the frustrations she felt when repeatedly asking for help to supervise her undertake repair. Time and staffing were problematic and was recognised as a national problem, not just within her unit. On night duty staffing levels were identified as generally low which further restricted midwives' instruction and supervision.

Knowledge of the current continuous subcuticular technique, confidence and support through one-to-one instruction and workshops were considered a basis for implementing perineal repair. However, frequency, opportunity and support undertaking the skill were equally important. Organisational constraints such as
time, inadequate staffing levels, and lack of educational opportunities were factors which contributed significantly to the midwives' level of competency.

**Midwives’ views and attitudes towards sensitive perineal trauma management**

This part of the chapter identifies the views and attitudes of midwives towards sensitive perineal trauma management prior to the educational intervention which relates to the third subsidiary research question posed in chapter 1:17 and highlights areas of sensitivity which could be enhanced with further education. Quantitative and qualitative data are reported.

Views, attitudes and personal values were components of competency investigated alongside midwives' knowledge and skills. Using these attributes, factors influencing the midwives' decisions in their assessment of perineal trauma and implementation of perineal repair were categorised from focus group interviews and questionnaire free responses. There are three sections.

**Midwives’ views towards sensitive perineal trauma management and care**

Table 8.8 represents the factors influencing the midwives' views towards perineal trauma management and are presented in categories and sub-categories.
Table 8.8 Factors identified from focus group interviews influencing the midwives' sensitivity toward perineal trauma and repair

<table>
<thead>
<tr>
<th>Theme 1: Competency</th>
<th>VIEWS, ATTITUDES AND VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-theme: Factors identified which influenced the midwives' views attitudes, and values (sensitivity) towards women's perineal trauma and management</td>
<td></td>
</tr>
<tr>
<td>Categories and sub-categories</td>
<td>Consideration of women's long term problems</td>
</tr>
<tr>
<td>Confidence in perineal repair</td>
<td>Sexual activity and body image</td>
</tr>
<tr>
<td>Ability to repair competently</td>
<td>Lack of awareness and knowledge</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>relating to sexuality and sexual problems</td>
</tr>
<tr>
<td>Feedback from women and colleagues</td>
<td>Delay in sexual intercourse</td>
</tr>
<tr>
<td>Personal attributes</td>
<td>Referral to urogyne or anorectal specialist</td>
</tr>
<tr>
<td>Acknowledgement of own personal thoughts, views, feelings and bias</td>
<td>Consideration of women's psychosocial wellbeing</td>
</tr>
<tr>
<td>Consideration of women's physical health</td>
<td>Women's apprehension and fear to repair/non-repair</td>
</tr>
<tr>
<td>Physical state at delivery</td>
<td>Tiredness and caring for baby</td>
</tr>
<tr>
<td>Pain and soreness</td>
<td>Valuing women's choices and decision</td>
</tr>
<tr>
<td>Micturition</td>
<td>Listening</td>
</tr>
<tr>
<td>Hygiene</td>
<td>Valuing women as people</td>
</tr>
<tr>
<td>Risk of infection</td>
<td>Sharing of Information with women</td>
</tr>
<tr>
<td>Bowels and diet</td>
<td>Healing</td>
</tr>
<tr>
<td>Perineal trauma management</td>
<td>Gaining trust</td>
</tr>
<tr>
<td>Need for good perineal infiltration</td>
<td>Valuing midwives expertise</td>
</tr>
<tr>
<td>Performing a two stage repair</td>
<td>Personal and professional experience</td>
</tr>
<tr>
<td>Perineal healing from repair/non-repair</td>
<td></td>
</tr>
<tr>
<td>Extent of tear</td>
<td></td>
</tr>
<tr>
<td>Bleeding and need for repair (safety)</td>
<td></td>
</tr>
<tr>
<td>Assessment of perineal trauma</td>
<td></td>
</tr>
<tr>
<td>Awareness of anatomical structures</td>
<td></td>
</tr>
<tr>
<td>Time interval to repair</td>
<td></td>
</tr>
<tr>
<td>Discussion of pros and cons of repair</td>
<td></td>
</tr>
<tr>
<td>Short term perineal problems</td>
<td></td>
</tr>
<tr>
<td>Referral to obstetric staff</td>
<td></td>
</tr>
</tbody>
</table>

The midwives' perceived ability to repair confidently and competently were factors reported consistently. Personal beliefs and values featured widely in respect to women's trauma management at delivery together with consideration of short and long terms problems. There was a distinct unawareness by a
significant number of midwives in focus groups as to the problems associated with resuming sexual relationships and sexuality. However, midwives were mindful of sharing information with women.

**Midwives' views towards a model of midwifery care**

Midwives were asked to indicate in the questionnaire which statement of care represented their views towards a model of midwifery. These statements were described and divided into the following models as represented in the literature: radical, conservative and liberal (Klima 2001:288). These models however were not labelled as such in the midwives' questionnaire (appendix D:12) to avoid personal bias. Table 8.9 reports the midwives' orientation towards a model of midwifery care.

**Table 8.9 Model of midwifery closely relating to the midwives' view of midwifery care - 2003**

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>N =</th>
<th>% within professional qualification</th>
<th>radical</th>
<th>conservative</th>
<th>liberal</th>
<th>combination of radical and conservative 1 and 2</th>
<th>combination of all models</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Certificate</td>
<td>47</td>
<td>49.5%</td>
<td>47</td>
<td>17</td>
<td>24</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Midwifery diploma</td>
<td>14</td>
<td>35.5%</td>
<td>14</td>
<td>8</td>
<td>12</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Midwifery degree</td>
<td>11</td>
<td>37.9%</td>
<td>11</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>MSc</td>
<td>2</td>
<td>66.7%</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>44.6%</td>
<td>74</td>
<td>35</td>
<td>40</td>
<td>9</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

There was no statistical difference between professional groups in their chosen model of midwifery care. 47 (49.5%) certificated midwives identified a radical approach to care followed by 24 (25.3%) selecting the liberal model (Pearson Chi-Square 18.377a df 15 P > .243). When a comparison was made between Trusts there was no difference in the models of care midwives identified representing their views towards midwifery practice (Pearson Chi-Square 17.005a df 25 P > .882).
**Midwives' views and attitude statements**

Midwives were asked to indicate the extent of their views and feelings towards seven attitude statements of perineal care in the questionnaire (appendix D:11). The statements were scored accordingly: 5; strongly agree to 1; strongly disagree with a neutral view scoring 3. The total score for the items that made up each scale was 35. Cronbach's coefficient alpha for inter-item reliability for the seven items was 7.5. Negatively worded items had the scores reversed to ensure all items scoring highly indicated a more positive view or attitude towards perineal care. There was a normal distribution of scores ranging from 19 to 31, a mean of 24.72 and standard deviation of 2.3. The total view continuous scores were collapsed into 4 groups of scores with strength of attitude for total statements reported in table 8.10.

**Table 8.10 Total view scores of seven attitude statements towards perineal care - 2003**

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>N =</th>
<th>% within professional qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 0</td>
<td>26</td>
<td>29.5%</td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Midwifery diploma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 2</td>
<td>10</td>
<td>25.6%</td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Midwifery degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 0</td>
<td>15</td>
<td>34.5%</td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>MSc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 0</td>
<td>2</td>
<td>66.7%</td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>30.1%</td>
</tr>
<tr>
<td>% within professional qualification</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Midwives' more favourable or positive attitudes scored between 24 and 31. Attitude scores below 20 were considered less favourable or negative towards sensitive perineal care and long term considerations. Scores between 20 and 23 were considered to be neither favourable nor negative but unsure. 114 (86.1%) midwives indicated positive attitudes towards perineal care. There was a
significant association between positive attitude scores for each midwife and a radical (women-centred) model of midwifery care (Pearson Chi-Square 24.791a df 10 \( P >.006 \)).

Spearman's Rho Correlation was used to test the association between midwives' views of perineal care. There was a strong positive correlation between midwives' view of repair as a normal part of practice associated with the view that if all midwives were instructed in repair then more third and fourth degree trauma would be identified (\( r = .198 \ n = 166 \ P < .011 \)). The view that repair is a normal part of practice was positively strongly correlated with the importance of clinical audit in the evaluation of perineal healing (\( r = .253 \ n = 166 \ P <.001 \)). Audit was very strongly positively correlated with the view that all women should have their perinea checked at least once by the midwife undertaking the repair (\( r = .281 \ n = 166 \ P < .000 \)). Importantly, midwives viewed their role of perineal repair beyond the delivery suite.

Questionnaire free-responses to the seven statements of care reported in table 8.11 revealed that the majority of midwives considered it were part of their role to provide women informed choice when considering repair at delivery both in the hospital and community. Continuity of care was considered important, but more so the competency of the practitioner undertaking the repair. Short term problems such as pain, healing and infection were more likely to be identified by midwives in the focus groups whereas resuming sexual intercourse and issues relating to sexuality were areas least discussed and considered by midwives immediately post delivery.
Table 8.11. Midwives' views related to attitude statements in questionnaire

<table>
<thead>
<tr>
<th>Attitude Statements</th>
<th>Midwives' free response comments in pre-intervention questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Important for home confinements</td>
</tr>
<tr>
<td>2</td>
<td>Community and team midwives need to suture</td>
</tr>
<tr>
<td></td>
<td>All midwives should be competent having attended work-shops</td>
</tr>
<tr>
<td>3</td>
<td>All 3/4th degree tears would be identified if inspection was completed before repair</td>
</tr>
<tr>
<td>4</td>
<td>Not always practical due to early discharge home and work patterns</td>
</tr>
<tr>
<td></td>
<td>Feedback useful from other midwives</td>
</tr>
<tr>
<td></td>
<td>Physical inspection needed</td>
</tr>
<tr>
<td></td>
<td>Midwives need to be aware of the effectiveness of their repair</td>
</tr>
<tr>
<td></td>
<td>Not an attainable standard</td>
</tr>
<tr>
<td>5</td>
<td>Difficult to audit as so many variations of suturing</td>
</tr>
<tr>
<td>6</td>
<td>Providing midwife is competent to advise appropriately</td>
</tr>
<tr>
<td></td>
<td>Appropriate concerns need highlighting ie bleeding</td>
</tr>
<tr>
<td></td>
<td>Clinician better able to assess degree of trauma and advise</td>
</tr>
<tr>
<td></td>
<td>Women often swayed by judgment of the midwife, pros and cons need discussing</td>
</tr>
<tr>
<td>7</td>
<td>It is not important who sutures as long as midwives are competent</td>
</tr>
<tr>
<td></td>
<td>May request female attendant (cultural)</td>
</tr>
<tr>
<td></td>
<td>Midwives conducting the delivery should repair – continuity of care</td>
</tr>
</tbody>
</table>

When prompted about the issues surrounding sexuality in the focus groups two midwives in the same Trust stated:

"I don't think I've ever bought that up" (resuming sexual intercourse)
(Trust BI (FG2003) mw4 p:4)

"I haven't even asked them, I don't think I would know what to say, no (all together no)" Trust BI (FG2003) mw3 p:4)

Decisions for repair/non-repair were based on women's choices and the midwives' expertise. One midwife stated how she needed to act as the woman's advocate:

"degree of tear, trauma she's had, time its going to take to heal, whether torn into the muscle, it's a difficult area, at the end of the day you [midwives'
emphasis] have to make a choice. I think if it needs suturing, if its bleeding, your not going to say it's up to her”. (Trust Bl (FG2003) mw 5 p:5)

Midwives voiced their sensitivity and understanding towards the woman's experience of trauma indicating that:

"...some have been sutured too tight, risk of infection, it works both ways. One of the things I feel quite strongly about are the women who when you say, how do you feel down below, and they don't want you to look, woman knows her own body. We need to think about her sensitivity and trust her, if she feels comfortable, we don't need to look. I've always said if it's uncomfortable then I would look". (Trust El (FG2003) mw3 p5)

Moreover, some midwives displayed their real concerns about getting the suturing right and the woman's future physical wellbeing. This was a major factor inhibiting some midwives in their implementation of repair, one midwife stated:

"I explain to women about what I've found, and the reasons for suturing. This is one of the most important parts of the delivery and I think that's why I don't like suturing, to me it's so... Oh my God someone's got to live with this, that's why I worry about it...I hate it, I hate it, I find it really stressful, I want it to be a perfect job (yes, all in focus group) especially when everything is everywhere“ (Trust F (FG2003) mw2 p5).

These comments support the orientation to favourable and positive attitudes towards sensitive care and were plentiful both in the focus groups and questionnaire free responses. I perceived that some midwives felt constrained and obviously frustrated by the structure of the organisation and their inability to follow-up the women they had repaired and cared for during labour. A greater awareness surrounding perineal anatomy, particularly associated with the classifications of perineal trauma and the function of perineal muscles associated
with the women's bladder, bowels and sexuality were key areas lacking in the midwives' knowledge and understanding across all Trusts.

**Factors influencing the midwives' clinical decision making and implementation of perineal repair**

The final part of the chapter reports the factors found to influence the midwives' clinical decision making process when assessing and undertaking perineal repair and the power structures within the organisation affecting the midwives ability to implement perineal repair. Data are reported in relation to the second subsidiary research question: *To what extent do clinical guidelines, government policies, protocols and individual practices influence midwives' decision making in perineal repair?* Data drawn from focus group interviews are reported in table 8.12 representing the factors which were perceived by midwives to influence their clinical decision making and implementation of perineal repair.

**Table 8.12. Factors influencing clinical decision making in perineal repair**

<table>
<thead>
<tr>
<th>Theme 3: Factors influencing the midwives' clinical decision making when implementing perineal repair</th>
<th>Clinical skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and Training in perineal repair</td>
<td>Opportunity with continuous practise</td>
</tr>
<tr>
<td>Identification of perineal trauma and repair techniques</td>
<td>Opportunity to observe expert midwives</td>
</tr>
<tr>
<td>Current evidence to support practice</td>
<td>Personal and professional experience</td>
</tr>
<tr>
<td>Expert knowledge of women’s trauma</td>
<td>Professional judgement</td>
</tr>
<tr>
<td>Sharing expert knowledge with colleagues and doctors</td>
<td><strong>Personal attributes</strong></td>
</tr>
<tr>
<td>Current ‘trend in repair/non-repair</td>
<td>Incentive for skills training</td>
</tr>
<tr>
<td><strong>Midwives formal assessment of competency in perineal repair</strong></td>
<td>Personal experience</td>
</tr>
<tr>
<td>Need for perineal trauma assessment criteria</td>
<td>Motivation</td>
</tr>
<tr>
<td><strong>Perceived confidence and competence</strong></td>
<td>Perceived professional responsibility</td>
</tr>
<tr>
<td>Frequency undertaking procedure</td>
<td><strong>Supervisory support</strong></td>
</tr>
<tr>
<td>Competency in subcuticular technique</td>
<td>LW managers and PDMs for training</td>
</tr>
<tr>
<td>Feedback from women and colleagues on perineal healing and outcomes</td>
<td><strong>Organisational issues</strong></td>
</tr>
<tr>
<td><strong>Women’s views</strong></td>
<td>Adequate time</td>
</tr>
<tr>
<td>Choices and decisions</td>
<td>Current grading structure competencies</td>
</tr>
<tr>
<td></td>
<td><strong>Guidelines/protocol/policy</strong></td>
</tr>
<tr>
<td></td>
<td>Flexibility of Trust guidelines</td>
</tr>
</tbody>
</table>
Similar categories and sub-categories emerged between the factors influencing confidence and competency reported earlier in the chapter related to decision making, emphasising the complex inter-relationship between factors. Education and training, formal assessment of competency in repair, confidence in repair skills and the need for a designated practice development midwife for perineal repair training were noted most frequently.

**Midwives’ perceived knowledge related to current evidence and issues related to perineal repair**

There was a significant difference between professional groups in the midwives’ familiarity with the recommended perineal repair techniques. Diploma, Degree and MSc midwives were familiar to quite an extent and certificated midwives familiar to a large extent (Pearson Chi-Square 24.893a df 12 $P < .015$). Current knowledge related to suturing techniques and management of second and third degree perineal trauma:

‘Continuous suturing technique is good practice, can leave the skin un-sutured or suture subcuticularly, Vicryl Rapide material of choice, perineum heals quicker if sutured, no difference in pain. (Trust Al (Q2003)mw6)

‘Research shows that midwives are missing a number of third degree tears’ (Trust CI(Q2003)mw91).

‘Controversial issue over whether to suture 2nd degree tears. Excellent research by Kettle’. (Trust BI(Q2003)mw101)

However, only one midwife mentioned the controversy over repair/non-repair and the current ‘trend’ to leave second degree tears to heal naturally. Many midwives were familiar with the recommended continuous subcuticular repair technique causing less discomfort to women and were familiar with the two stage repair technique by Gordon et al (1998) but lacked the skill, confidence or opportunity to implement them. The following factors influenced the midwives’ decisions and implementation of repair:
• Awaiting training to use continuous subcuticular technique
• Lack of patients to practise on
• Working in community
• Need to develop confidence in continuous suturing
• Lack of delivery suite experience
• No one to teach the technique
• Rarely get the opportunity to suture

There was a strong positive correlation between familiarity with the literature and the extent midwives were able to apply their knowledge to practice (Spearman’s Rank Order Correlation Coefficient r = .500 n 161 p < .000). There was no significant difference between professional groups.

**Extent to which knowledge and experience of perineal repair techniques influenced midwives' decisions in perineal repair**

156 (94%) midwives used the recommended suture material: Vicryl Rapide and 4 (2.4%) used standard Vicryl. Midwives' prior knowledge and experience of perineal repair techniques influenced the method of repair undertaken in all three anatomical layers. 88 (53%) midwives used a continuous locking stitch to the vaginal wall, despite the recommended non-locking stitch to enhance comfort and even tension throughout the pelvic floor structure (Fleming 1999). 78 (47%) and 52 (31.3%) midwives respectively used an interrupted or continuous method to perineal muscle and 86 (39.8%) and 40 (24.1%) respectively used an interrupted or continuous subcuticular technique to the perineal skin. The remaining midwives choose a combination of techniques. 16 (9.6%) midwives did not suture some of the time. There was a significant difference between professional groups and techniques chosen. Certificated midwives were more likely to use a non-locking stitch to the vaginal mucosa, interrupted to the muscle layer and interrupted to skin compared to degree and diploma midwives who used the continuous technique to muscle and skin (Pearson Chi-Square 34.451 P < .001). Reasons provided for repair techniques were similar for all three anatomical layers and are reported in table 8.13.
Table 8.13 Rationale for midwives' chosen repair technique.

<table>
<thead>
<tr>
<th>LOCKING STITCH TO VAGINAL WALL</th>
<th>NON-LOCKING STITCH TO VAGINAL WALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>How originally taught</td>
<td>Evidence used to support practice</td>
</tr>
<tr>
<td>Old habits die hard</td>
<td>Previous experience and how taught</td>
</tr>
<tr>
<td>Creates good haemostasis</td>
<td>Habit, ease and familiarity of technique</td>
</tr>
<tr>
<td>Stability of vaginal wall</td>
<td>Locking may become too tight for women</td>
</tr>
<tr>
<td>Research evidence</td>
<td>Taught at recent study day</td>
</tr>
<tr>
<td>Hospital guidelines and policies</td>
<td>Only use locking if profuse bleeding occurs</td>
</tr>
<tr>
<td>Previous experience and confidence in method</td>
<td>Culture and historical use of technique within the unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERRUPTED TECHNIQUE TO MUSCLE</th>
<th>CONTINUOUS TECHNIQUE TO MUSCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiarity with method</td>
<td>Observing doctors and mentors – neater finish</td>
</tr>
<tr>
<td>Old habits die hard</td>
<td>Research and up-date</td>
</tr>
<tr>
<td>Observing others</td>
<td>Experience using technique</td>
</tr>
<tr>
<td>Method taught</td>
<td>Attendance at a Study Day</td>
</tr>
<tr>
<td>Experience – tried and tested</td>
<td>Dependent on size, depth and bleeding of tear</td>
</tr>
<tr>
<td>Historical</td>
<td>Hospital policy using Fleming method – continuous for episiotomy</td>
</tr>
<tr>
<td>General practice/protocol in unit</td>
<td>COMBINATION OF TECHNIQUES TO MUSCLE</td>
</tr>
<tr>
<td>Confidence and practise in technique</td>
<td>Dependent on case for best repair</td>
</tr>
<tr>
<td>Strength to perineal body and to ligate blood vessels</td>
<td>Experience</td>
</tr>
<tr>
<td>Easier removal (infection) if required</td>
<td>Dependent on scar tissue</td>
</tr>
<tr>
<td>Experience as community midwife</td>
<td>Training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERRUPTED TECHNIQUE TO SKIN</th>
<th>CONTINUOUS SUBCUTICULAR TECHNIQUE TO SKIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of removal in community</td>
<td>Subcuticular if small tear</td>
</tr>
<tr>
<td>Method taught</td>
<td>Ease of alignment</td>
</tr>
<tr>
<td>General practice on unit and protocol</td>
<td>Confidence in either technique</td>
</tr>
<tr>
<td>Not taught subcuticular suturing</td>
<td>Research evidence</td>
</tr>
<tr>
<td>Need practise in subcuticular method</td>
<td>Time available</td>
</tr>
<tr>
<td>Assessment of healing</td>
<td></td>
</tr>
<tr>
<td>Feedback from community midwife</td>
<td></td>
</tr>
<tr>
<td>Historical</td>
<td></td>
</tr>
<tr>
<td>Women’s choice</td>
<td></td>
</tr>
<tr>
<td>Not so tight</td>
<td></td>
</tr>
<tr>
<td>Don’t like continuous technique</td>
<td></td>
</tr>
<tr>
<td>Not competent in subcuticular method</td>
<td></td>
</tr>
</tbody>
</table>
Confidence, competence and experience in a technique known to be effective in its outcome were significant factors in determining midwives' choices and decisions. Personal experience and beliefs also influenced the midwives' decision for trauma management in discussion with women as reflected by a senior labour ward midwife:

'Your own personal feelings and beliefs are influenced when you talk to women, if you actually think in your mind that all second degree tears should be sutured you will talk to the woman in such a way, if you are happy to suture or not suture, if you have a bias. I don't have a bias either way, I believe if it needs suturing you influence the woman'  
(Trust Al (FG2003) mw7p5).

There were similarities between the factors influencing midwives' choice of technique; those of habit and experience of the method taught originally, particularly applicable to certificated midwives. Attendance at a recent study day, research evidence, the culture and policy within the unit and the consideration for the woman's comfort contributed significantly to the midwives' choices and decisions. Reluctance to use the subcuticular technique to the skin was attributed to a lack of confidence and instruction in this method. One labour ward manager comments:

'I feel confident doing interrupted. when I trained back in the dark ages during the 1980s when there were a lot of episiotomies, that's what I was taught and I felt really confident in what I was doing and then I went into the unit and learnt subcuticular, then went back into the community you know, when we had a lot of intact perineum's, so when I came back to the hospital and birth centre, and when it came to suturing, I couldn't do this subcuticular technique because I hadn't had enough training in it'. (Trust FC(FG)mw1p:3)

A lack of confidence in undertaking the subcuticular technique was a familiar finding amongst midwives in the focus groups. Despite experienced midwives having instruction in this technique, some were reluctant to use it because of the positive effects of the interrupted technique. Having confidence in applying the
new technique and the long term outcome for women were shown to be of paramount importance to the majority of midwives when discussing this issue. There was a lack of instruction provided in the Trusts in the continuous subcuticular technique. Confidence, competence, experience, observing mentors and doctors, current evidence and instruction influenced midwives, choice in this method.

**Importance attributed to severity of trauma**

There was no significant difference between professional groups or intervention and comparison Trusts with regard to the level of importance midwives' attached to the assessment of perineal trauma. Bleeding, depth of trauma to the vaginal apex and perineal body, and a third degree tear were considered highly important by 84%, 55.4%, 62.7%, 65.1%, and 94% midwives respectively. The remaining midwives considered these areas important. Of concern, was that 15 (9%) and 25 (15.1%) midwives respectively considered that a gaping or jagged perineum was unimportant. This finding may explain why some midwives have left some perinei to heal naturally and the uncertainty of natural healing in the literature.

**The extent policies, protocols and guidelines influenced midwives' decisions when implementing perineal repair.**

There was no significant difference in professional groups related to awareness of policies, guidelines, protocol or evidence for best practice. However, 37 (38.9%) certificated midwives had a greater awareness of guidelines informing them of perineal management. 7 (24.1%) degree midwives were less aware (Pearson Chi-Square 10.655a df 9 P > .300). There was no significant difference between the intervention and comparison Trusts in awareness of guidelines. 16 (76.2%) midwives were familiar with guidelines in the comparison Trust (Pearson Chi-Square 7.235a df 3 P > .065). There was greater familiarity of policies related to second and third degree perineal repair in the intervention Trusts, but this did not reach statistical significance (Pearson Chi-Square 5.206a df 3 P > .156).
Figure 8.2 reports the extent to which written documentation influenced midwives’ decision making in perineal trauma management. There was no significant difference between professional groups. A higher percentage of certificated midwives (34.7%) used written documentation to some extent (Pearson Chi-Square 17.751a df 12 $P < .123$).

**Figure 8.2 Extent to which guidelines, policies or protocols influence the midwives’ decision making in perineal repair**

98 (59%) midwives were not familiar with the EC Directives relating to their training and perineal repair. 48 (28.9%) were familiar to some extent, 14 (8.4%) moderately and 6 (3.6%) familiar quite a bit to a large extent. Table 8.14 reports data from questionnaire free responses for the midwives’ rationale for implementing documentation in the labour ward in 2003.
Table 8.14 Rationale for implementing documentation on the delivery suite - 2003

<table>
<thead>
<tr>
<th>Rationale for implementing written documentation on the delivery suite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines used to some extent but not trained in subcuticular technique</td>
</tr>
<tr>
<td>Guidelines used depending on individual case</td>
</tr>
<tr>
<td>Guidelines not used - undertaken suturing for 15 years, attended yearly updates on new techniques</td>
</tr>
<tr>
<td>Do not use guidelines – practice is good and has been assessed so nothing needs changing</td>
</tr>
<tr>
<td>Use personal experience from community – tend not to leave tears to heal ‘naturally’ although that is not against guidelines</td>
</tr>
<tr>
<td>Not sure of guidelines so can’t be influencing practice</td>
</tr>
<tr>
<td>Do not use policy – rely on known technique and best evidence when changing practice</td>
</tr>
<tr>
<td>Do not use guidelines – have never felt the need to refer to these as I feel competent in my practice (F grade on D/S)</td>
</tr>
<tr>
<td>Does not influence practice – have not read any documents</td>
</tr>
</tbody>
</table>

The extent to which written documentation was currently available and used in the decision making process was dependent on a number of factors. Expert midwives’ used their previous experience and clinical judgment relying on the heuristics of explanatory sufficiency. Experience, confidence and competence took precedence over written instructions some of the time. However, current evidence which supported guidelines acted as a support mechanism for some midwives in the decision process. One midwife explained how she made her decision to repair:

‘...rugged whether it is bleeding or not, women’s preference, some do not want suturing...get another midwife to look at it if in doubt, if woman doesn’t want suturing clinical judgment...if a second degree is going to be left then two midwives check. There is no set policy’. (Trust AI(FG2003)mw7p4)
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The same senior labour ward midwife explained how guidelines affected her decision making:

'I think by and large people practice according to the method they have been shown, it has nothing to do with the guidelines, because the person who teaches has not read the guidelines. They will suture the way they have always sutured. I probably don't suture exactly the same way as there may be minute differences, in principle it will be the same with just slight differences'. (Trust AI(FG2003)mw7p5)

Another labour ward midwife explains:

'I don't think it matters whether you have guidelines or not, you still use your clinical judgment don't you. If it's a gush of blood even if it's a first degree you are going to suture it. I think it should be guidelines we are using, it gives you a framework for practice, but as practitioners we should be able to use our clinical judgement' (Trust BI(FG2003)mw4p4)

The general consensus amongst midwives in the focus groups was that guidelines were more acceptable offering guidance in normal perineal care, enabling them to apply their own expertise and clinical judgement when making decisions with women.

**Power and control in the workplace – influence on decision making**

The extent to which midwives were able to implement perineal repair was influenced to some extent by the power structures within their organisation. These created both positive and negative effects. Table 8.15 reports the themes identified in the focus group interviews which influenced midwives' ability to implement perineal repair.
Table 8.15 Influence of power and control within the workplace on the midwives' ability to implement perineal repair

<table>
<thead>
<tr>
<th>Theme 4: Influence of power and control in the workplace on the midwives' perceived ability to implement perineal repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional experience and expertise</td>
</tr>
<tr>
<td>Midwives' autonomy</td>
</tr>
<tr>
<td>Midwives' clinical judgement</td>
</tr>
<tr>
<td>Competence</td>
</tr>
<tr>
<td>Confidence</td>
</tr>
<tr>
<td>Expert knowledge using current evidence</td>
</tr>
<tr>
<td>Senior midwives</td>
</tr>
<tr>
<td>Senior labour ward manager</td>
</tr>
<tr>
<td>Supervisor of midwives' role</td>
</tr>
<tr>
<td>Designated practice development midwife role</td>
</tr>
<tr>
<td>Women</td>
</tr>
<tr>
<td>Women's informed choice and decisions (autonomy)</td>
</tr>
<tr>
<td>Student midwives' request for instruction and supervision</td>
</tr>
<tr>
<td>Requirement for training in pre-registration midwifery programme</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

New members of staff and midwives returning from maternity leave stressed the importance of integrating unit guidelines to guide their practice. Midwives in Trust C identified a change in the ‘trend’ of non-repair to one of repair of all second degree tears which developed through their risk management process and the Clinical Negligence Scheme for Trusts (CNST). Power was positively exerted through shared clinical governance which was facilitated by the Practice Development Midwife (PDM). Evidence-based guidelines and risk management was the driving force in changing midwifery practice in Trust C. One midwife explained how the current policy in the Trust influenced her practice:

'Since the [practice development midwife] discussed the research, because muscle, scar tissue, if muscle isn't coming together it won't go together...it does make a difference to practice because practice has changed, yes, it has gone from leaving it to not leaving it.' (Trust C (FG2003) mw3 p2)
These findings were in contrast to the comparison Trust where there was only guidance on the repair of third and fourth degree tears. Midwives were expected to rely on their clinical experience and professional judgement in the decision to repair/not repair. One midwife in this Trust admitted that some tears had been inappropriately left to heal naturally with negative outcomes. Issues of 'policing' midwives were highlighted in the comparison focus group (FC). Risk management forms were considered negatively as they were seen as a means of identifying midwives whose practice was sub-standard. The community manager explained:

‘That's not what we are at [policing], we are looking... they may be called risk forms but if that is highlighted, if a midwife has happily left 20 perineum’s unsutured and a couple of them were left due to bad judgement how is she ever to know, as far as she is concerned she thinks she is doing a good job...until someone highlights the problem’. (Trust FC (FG2003)mw1p:6)

Statutory midwifery supervision was identified as the forum where these issues could be discussed so that individual support could be provided for midwives. In Trust A, midwives were reliant on the availability of one specific senior labour ward manager to assess their confidence and competency in perineal repair. This authoritative power was perceived by midwives as a driving force in establishing skills in repair but also disempowered other experienced midwives in instructing less competent midwives (Field notes). The senior labour ward midwife stated in the focus group:

‘... I just watch them do the three [labour ward manager] without any help, initially I am gloved up with them and I am there to watch. If I feel they can do three layers with confidence I sign them off’ (Trust Al(FG2003)mw5p2).

Midwives’ knowledge, self-confidence and their expertise in a repair technique was important in their ability and decision to repair. Incorporating perineal trauma into risk management and CNST in Trust CI was instrumental in the change in their perineal management.
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Midwives' views of their role as mentor towards senior student midwives receiving instruction and supervision in perineal repair

The students' instruction in perineal repair is in accordance with the EU Directives (1987) and has been incorporated into the midwifery curriculum. It is important therefore that there are adequate numbers of midwives who are confident and competent to instruct and supervise students undertaking this skill in clinical practice. The final part of the chapter reports: frequency midwives mentor students; frequency mentors instruct and supervise students in perineal repair; factors constraining instruction and supervision; the midwives view towards the importance of the students' role in perineal repair on registration.

Frequency midwives mentor student midwives

111 (76.5%) midwives in the intervention Trusts and 19 (90.4%) in the comparison Trust held a teaching qualification in 2003. There were no statistical differences between the Trusts (Pearson Chi-Square 3.963 df 3 \( P > .265 \)). 47 (32.4%) midwives in the intervention Trusts and 10 (47%) in the comparison Trust frequently mentored a student. There were no significant difference between the two Trusts, Midwives in the comparison Trust mentored students more frequently (Pearson Chi-Square 5.222 df 4 \( P < .265 \)). There were no significant differences between professional groups and frequency mentoring a student. However, a higher percentage of certificated midwives mentored students more frequently.

Frequency midwives instruct and supervise their students in perineal repair

There was no significant difference between the intervention and comparison Trusts in the frequency of students requesting instruction (Pearson Chi-Square 6.394 df 4 \( P < .172 \)). 28 (21.7%) midwives perceived students very frequently or frequently requested instruction in the intervention Trusts compared to 5 (23%) in the comparison Trust. The higher numbers of students not requesting instruction in the comparison Trust could be explained by the absence of any perineal repair
training for midwives at this time and the limited numbers of students accessing
the delivery suite. 17 (13.2%) students requested supervision very frequently or
frequently in the intervention Trusts compared to none in the comparison Trust.
15 (12.4%) midwives in the intervention Trusts stated that they never instructed
students in repair. There were a greater number of certificated midwives
instructing students, 14 (60.9%) compared to 6 (26.1%) diploma midwives,
reaching statistical significance (Pearson Chi-Square 22.546 df 12 $P < .032$).
There was a weak positive correlation between the midwives’ perceived
confidence to repair and whether they would instruct their student (Pearson r
=.365, $n = 136$, $P < .000$). There was however no association between the
midwives’ perceived level of competency and frequency instructing students.

**Organisational constraints affecting the students’ instruction and
supervision in perineal repair**

Table 9.8 reports the midwives’ rationale for not providing instruction in perineal
repair in order of frequency. These factors are similar to the ones reported by
students. Midwives frequently reported that they were unable to instruct students
due to the lack of opportunity or time followed by a shortage of staff, preferring to
undertake the repair themselves.
Table 8.16 Midwives’ rationale for not instructing senior student midwives in perineal repair

<table>
<thead>
<tr>
<th>Rationale for not instructing students in order of frequency</th>
<th>Total N = 166</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of opportunity</td>
<td>51</td>
<td>30.7</td>
</tr>
<tr>
<td>Time constraints</td>
<td>26</td>
<td>15.7</td>
</tr>
<tr>
<td>Combination of reasons</td>
<td>23</td>
<td>13.9</td>
</tr>
<tr>
<td>Inappropriate for stage in midwifery programme</td>
<td>17</td>
<td>10.2</td>
</tr>
<tr>
<td>No student</td>
<td>16</td>
<td>9.6</td>
</tr>
<tr>
<td>Lack of confidence</td>
<td>14</td>
<td>8.4</td>
</tr>
<tr>
<td>Opportunity not arisen</td>
<td>6</td>
<td>3.6</td>
</tr>
<tr>
<td>Mostly home births</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Not had senior student on delivery suite</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Minimal clinical hours for teaching</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Left handed therefore difficult to teach</td>
<td>1</td>
<td>0.6</td>
</tr>
</tbody>
</table>

The midwives’ perceived importance of perineal repair for the students’ role on registration

65 (39.2%) and 77 (46.4%) midwives respectively, considered instruction in perineal repair very important or important for the student. The majority of midwives in both focus groups and questionnaire free responses expressed how important instruction and supervision was for students in preparing them to become confident in assessing trauma and undertaking repair. Midwives considered that experience could be gained through frequent observation, and by offering them continuity of support and supervision prior to registration. Many midwives reflected on their own lack of instruction as students and regretted not having this experience for their own confidence and competence. A group of midwives agreed that:

'I think they should be doing it (undertaking repair) ...the lack of opportunity when they are qualified, they don’t get the time, it would be really good feeling fairly competent’ (Trust CI (FG2003) MW p:4).
A senior labour ward manager stated:

'They are the ones with the most opportunity and who will go on as newly qualified midwives...caring for women with perineal trauma'
(Trust FC (FG2003) MW1 P:4).

Midwives' own lack of experience, confidence and competence in repair influenced the reasons provided as to why many of them did not instruct students. A minority of midwives expressed their concern over the number of competencies students were expected to achieve prior to registration, and the lack of opportunity for training and funding within the organisation. Table 8.17 reports midwives' positive and alternative views of students receiving instruction and supervision in repair prior to registration.

Table 8.17 Midwives' views of students receiving perineal instruction and supervision

<table>
<thead>
<tr>
<th>Positive views</th>
<th>Alternative views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor is available to provide instruction, supervision and support</td>
<td>More appropriate post-registration</td>
</tr>
<tr>
<td>Development of confidence and competence in assessing trauma and undertaking skill</td>
<td>Relies on confidence and competence of mentor</td>
</tr>
<tr>
<td>Continuity of care for women</td>
<td>An extended role of the midwife</td>
</tr>
<tr>
<td>Holistic care for women</td>
<td>Need to gain basic midwifery competencies and consolidate practice first</td>
</tr>
<tr>
<td>Perineal repair integral role of midwife</td>
<td>Need a change in the organisations' 'culture' of students undertaking repair.</td>
</tr>
<tr>
<td>Fulfils autonomous role of midwife</td>
<td></td>
</tr>
<tr>
<td>Assists in decision making skills</td>
<td></td>
</tr>
<tr>
<td>Empowering for midwife and women</td>
<td></td>
</tr>
<tr>
<td>Less qualified midwives would need training</td>
<td></td>
</tr>
</tbody>
</table>
Summary and conclusion

Competency in the workplace has shown to be dependent on the midwives' self-confidence and vice versa. The extent to which midwives were able to take on the challenge of pursuing a new skill or up-dating their level of competence was dependent on: opportunity; clinical experience; level of support; supervision; ability to up-date current knowledge; and the feedback which they received. There was a multiplicity of factors which influenced confidence in undertaking the 'hands on' skill of repair. Often it was a combination of these factors which affected overall competence. What became most evident in discussion with midwives was the complex inter-relationship between confidence and competence. The data presented here demonstrate that observing expert practitioners, being able to perform the skill frequently and confidently, close supervision and support through feedback were significant factors in midwives' achieving competency in their repair technique.

Of the 150 (90.4%) midwives who stated that they undertook perineal repair, only 114 (68%) felt confident enough to perform this skill competently. Only 86 (51.8%) midwives perceived that they had received any formal verbal recognition of competency undertaking the procedure in the delivery suite.

Confidence undertaking perineal repair was positively correlated with perceived competence reported by a higher percentage of certificated midwives. Certificated midwives in the comparison trust reported higher levels of confidence when undertaking this skill more frequently. Certificated midwives in comparison to diploma and degree midwives were more likely to have experience over a longer period of time when routinely performing episiotomies and accessing medical instruction in repair during the 1980s. This may account for their greater perceived confidence and competence. Factors which influenced the midwives' perceived confidence and competence were: early introduction into perineal repair instruction during their pre-registration programme; attending a workshop and one-to-one instruction in their Trust. There was a significant association between supervisory support and competency undertaking repair and association between familiarity with current evidence and application of this knowledge to
practice. Insufficient time, staff shortage, lack of opportunity and instruction were significant factors impeding confidence and competency. The trend of non-repair for small tears left a number of midwives deskilled over a period of time, particularly for those working in the community, part-time or on permanent night duty. Attendance at workshops was useful to some extent to update knowledge, techniques and dexterity with instruments but equally important was the need to practise the new technique regularly with expert instruction and supervision on a one-one at the bedside.

Support for attendance at external perineal repair study days and in-service instruction was emphasised with the need for monthly workshops led by an expert practitioner. This would increase the numbers of midwives who could instruct and supervise in the delivery suite using recommended repair techniques. Annual mandatory workshops were suggested by the majority of midwives with some means of assessing competency.

A radical model of midwifery care correlated with positive attitude scores and the views midwives held about women’s choice and the woman’s physical and psychological wellbeing. Positive views represented their autonomy responding to women’s needs and acting as their advocate when carrying out decisions associated with perineal management. There were no significant differences between professional groups or Trusts with regard to the model and approach to midwifery care or views related to sensitive perineal care. The midwives’ confidence in their own skills of perineal assessment and repair, knowledge of current repair techniques, research and active participation in the decision making process with women contributed significantly towards positive attitudes about women’s perineal sensitivity. The majority of midwives demonstrated positive attitudes and views to the women’s experience of trauma. However an area which necessitates further review is that of familiarity with perineal anatomy and related physiology. Impaired urinary, faecal and sexual function were not areas that midwives associated with damaged perineal muscle or denervation. However, fears of incompetence were acknowledged by midwives and associated with potential permanent damage to a woman’s sex life. This was one of the reasons given for the midwives’ reluctance to repair.
Factors influencing the midwives’ decision making and implementation of perineal repair related to their perceived level of knowledge surrounding current repair techniques and the importance of identifying anal sphincter trauma. Little evidence was identified by midwives to support non-repair of second degree trauma. Midwives were unable to implement perineal repair if: they were waiting to attend training workshops; there was a lack of opportunity to undertake the procedure; they had a lack of confidence in the subcuticular technique; or lack of availability midwives to teach the recommended techniques. Midwives’ decisions to use a specific repair technique depended on habit and positive experience in the technique adopted. Accommodating women’s choice in repair/non-repair, current evidence and the culture and policies within the unit influenced midwives’ decisions to some extent. Guidelines were only useful to midwives when they were current; evidence based and supported practice as a guide. Clinical judgment played a more significant role in decisions about the type of trauma and whether the trauma should be repaired or not. Decisions in practice were influenced by the Clinical Governance framework and CNST. The role of the PDM in facilitating risk management made a significant difference to the repair of all second degree trauma in Trust CI.

The traditional interrupted techniques for repair to perineal muscle and skin were more frequency practised compared to the recommended subcuticular technique. Certificated midwives were more likely to use the traditional technique. There was no reference by any midwife of the necessity to undertake a rectal examination for the detection of 3rd degree trauma when assessing perineal damage.

There were no significant differences between professional groups or intervention and comparison Trusts in the extent midwives were familiar with or implemented guidelines or polices related to perineal management. There were no guidelines or policies which referred to the midwives role in the management of second degree tears during 2003.

Midwives perceived that they instructed students very frequently whereas students reported in chapter nine that their mentors would only frequently instruct or supervise them in practice. There was a weak positive correlation between the
midwives’ confidence to repair and frequency of which they would instruct their students. There was no correlation between midwives competency to repair and frequency to instruct, indicating that midwives’ own lack of confidence influenced the students’ experience to varying degrees.

Midwives identified that lack of opportunity, time constraints, inappropriateness in training, not having a student and their own lack of confidence influenced student instruction and supervision. The majority of midwives considered instruction very important or important for students prior to registration. Midwives reflected on their own lack of instruction in repair as students and considered that this contributed to their own lack of confidence and competence. Positive views towards student’s instruction included mentor availability, the development of confidence and competence in assessing and undertaking repair and continuity of midwifery care. Perineal repair was considered an integral role of the midwife resulting in less qualified midwives requiring training. It is clear that the midwives’ own confidence and competence in repair and teaching influences their approach to instructing and supervising students. Provision of workshops for midwives and educational support for teaching through the university is imperative if students are to register with a threshold competency in the assessment and repair of perineal trauma.

Chapter nine now looks to the data and results of the student midwives’ experience accessing perineal repair instruction and supervision in the workplace.
CHAPTER NINE

DATA ANALYSIS AND RESULTS: 2

PHASE 2: PRE-INTERVENTION - THE EXPERIENCE OF STUDENT MIDWIVES UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

This chapter provides baseline data relating to the senior student midwives' experience accessing instruction and supervision in perineal repair with their mentor. This data enabled me to answer the fifth subsidiary research question following the educational programme for midwives. The question asked: Will an educational programme in perineal repair for midwives, facilitate greater student participation in undertaking this skill in clinical practice?

The chapter is divided into four parts: the thematic analysis undertaken on the students' questionnaire free responses and focus group interviews; the students' demographic data; the students' experience undertaking perineal repair in 2003; and the students' views and attitudes towards sensitive perineal trauma management.

Thematic analysis and coding – student midwives 2003

This part of the chapter reports the thematic analysis and colour coding from the qualitative data generated from the students' pre-intervention questionnaire free responses and focus group interviews. The process was similar to that undertaken for the midwives' qualitative data in chapter eight. Students' perceived competency and confidence undertaking perineal repair under mentor supervision was collapsed into 10 main categories developed under the theme: factors influencing the instruction and supervision of final year student midwives by their mentors. These are reported in table 9.1.
Table 9.1 Factors influencing the instruction and supervision of final year student midwives by their mentors

<table>
<thead>
<tr>
<th>Theme 6: Factors influencing the instruction and supervision of final year student midwives by their mentors</th>
<th>Colour code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency: knowledge, skills attitudes and values</td>
<td>Red</td>
</tr>
<tr>
<td>Confidence</td>
<td>Blue</td>
</tr>
<tr>
<td>Mentor instruction, supervision and feedback</td>
<td>Orange</td>
</tr>
<tr>
<td>Perceived competence and confidence of mentor to repair</td>
<td>Red</td>
</tr>
<tr>
<td>Perceived mentor support</td>
<td>Orange</td>
</tr>
<tr>
<td>Support in university and clinical practice</td>
<td>Brown</td>
</tr>
<tr>
<td>Organisational considerations</td>
<td>Yellow</td>
</tr>
<tr>
<td>Lack of opportunity in practice</td>
<td>Red</td>
</tr>
<tr>
<td>Education of mentors in current techniques</td>
<td>Green</td>
</tr>
<tr>
<td>Staff shortage</td>
<td>Mauve</td>
</tr>
<tr>
<td>Time constraints</td>
<td></td>
</tr>
</tbody>
</table>

Categories and sub-categories developed from the main theme are mapped in detail and can be seen in appendix Z. Verbatim quotes are presented in sequence in the text to support the results from quantitative data. The DACUM competency levels descriptors (0-3 novice to competent under supervision) are represented in the students' questionnaire (appendix H:7). Reference to Trusts and the origin of verbatim data are coded in the text as follows: Trust intervention (Al, Bl, Cl, DI, EI). Focus group interviews - student midwives (FG st/m 2003) free responses in questionnaires – student midwives (Q2003 st/m) and field notes (FN).

Demographic characteristics of student midwives undertaking their midwifery programme at the University of Surrey - 2003

Response rate

Fifteen student midwives (40.5%) returned their pre-intervention questionnaires. 11 (73.4%) students from the 2001 three year DHE/BSc (Hons) and 4 (26.7%)
from the 2002 18 month BSc (Hons) programmes respectively. The 4 students in the later cohort are also registered nurses. 15 midwives attended a focus group interview at the University of Surrey; 9 and 6 in two groups respectively practising across the five experimental Trusts.

**Age**

Students' ages ranged from 18-45 with a mode of 23 years representing a wide age range with variable levels of life experiences.

**Trust**

Students accessed their practice experience in all areas of maternity from the five intervention Trusts. There were no students representing the comparison Trust due to internal politics. All students spent a minimum of eight weeks on the delivery suite. Student cohorts are combined for analysis due to the small numbers represented.

**Students' experience undertaking perineal repair**

Part three is divided into eleven sections and includes the factors influencing the students' perceived level of confidence, competence, instruction and supervision undertaking perineal repair. It acknowledges the importance of perineal repair to the student's future role as a midwife and the support provided by their mentor in achieving this role.

**Students' perceived level of competence undertaking perineal repair**

Only 2 (13.3%) students had undertaken perineal repair under direct supervision of their mentoring midwife. Level 1 competency was perceived by 1 (6.7%) student who considered that she was able to undertake the skill but not without constant supervision, assistance and guidance.
Students' perceived confidence undertaking perineal repair

2 students perceived that they were quite confident undertaking repair under supervision. Only 1 student in the focus groups considered they were confident and explains:

'...confident to some extent, it feels really rewarding when it is done [the repair]...when it looks right...important how it feels to the woman and how it looks’
(Trust Al (FG2003) st/m1 p:2)

Students articulated various levels of confidence and competence. The majority stated that they felt nervous and anxious about undertaking the procedure initially, largely due to the long term effects of a novice repair, one student stated:

'Nervous, why? Because it is a long term thing, passing urine, affects the woman's sexual health, sexual identity, getting it right...confident but not competent yet, but competent under supervision'.
(Trust El (FG2003) st/m 4 p:2)

These concerns were similar to those voiced by midwives.

Theory and practice of perineal repair in university in preparation for clinical practice

Fifteen (100%) of the respondent students received one, two hour theoretical session with a one hour practical workshop in the assessment of perineal trauma and repair at the university. Table 9.2 reports the students' perceived usefulness of theoretical and practical instruction.
Table 9.2 Extent of usefulness of theoretical and practical instruction in perineal repair in preparation for clinical practice

<table>
<thead>
<tr>
<th>Usefulness of theory in university to clinical practice</th>
<th>Usefulness of workshop in university to clinical practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>N =</td>
<td>%</td>
</tr>
<tr>
<td>not at all</td>
<td>1</td>
</tr>
<tr>
<td>to some extent</td>
<td>5</td>
</tr>
<tr>
<td>moderately</td>
<td>5</td>
</tr>
<tr>
<td>to quite an extent</td>
<td>1</td>
</tr>
<tr>
<td>to a large extent</td>
<td>3</td>
</tr>
</tbody>
</table>

1(6.7%) student did not find the theory useful due to a gap of three months before allocation to the delivery suite. Handling the instruments and locating the needle gave students confidence in tying knots and identifying the anatomical structures on the perineal trainer model. One student felt frustrated and stated:

'...contradicted what was taught in uni with the type of technique the mentor uses in practice...interrupted as opposed to subcuticular...mentor keen to learn new technique and to attend workshop in Trust'

Trust EI (FG2003) st/m 3 p:1

The mentors' own lack of confidence in up-to-date skills was a frequent factor identified by students. The same student continued:

'...My mentor has problems as she does not feel confident and waiting to attend a workshop before teaching me. Mentors in practice do not get enough support'...

Trust EI (FG2003) st/m3 p:2

Areas of usefulness of theory and practical instruction are reported in table 9.3.
Table 9.3 Usefulness of theory and practical instruction in university

<table>
<thead>
<tr>
<th>Usefulness of theory in University prior to undertaking perineal repair in practice</th>
<th>Usefulness of practical workshop in university</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Psychomotor skills</td>
</tr>
<tr>
<td>Increased knowledge and understanding</td>
<td>How to handle instruments and carry out suturing</td>
</tr>
<tr>
<td>Introduced continuous suturing</td>
<td>Marked the beginning of first ‘hands on’ experience</td>
</tr>
<tr>
<td>Better understanding of perineal anatomy</td>
<td>Useful at the time</td>
</tr>
<tr>
<td>How to assess degrees of trauma</td>
<td>Generated interest and awareness in perineal repair</td>
</tr>
<tr>
<td>Better prepared for repair</td>
<td>Allows consistency of procedure for students</td>
</tr>
<tr>
<td>Up-to-date techniques and best methods</td>
<td></td>
</tr>
<tr>
<td>Current recommendations</td>
<td></td>
</tr>
<tr>
<td>Making links to what is observed</td>
<td></td>
</tr>
<tr>
<td>Grounding of information on which to build on in the practice environment</td>
<td></td>
</tr>
</tbody>
</table>

Although some of the students had not undertaken repair, they felt better prepared and ready to ask for instruction in practice following instruction at the university. Some of the students felt the sessions could have been longer and facilitated in smaller groups for learning one-to-one. The students’ self-confidence in their knowledge surrounding perineal anatomy and recommended repair techniques was an important factor in pursuing instruction. The availability of suitable models for practice in all the delivery suites was limited which would have helped to reinforce learnt skills. Students easily forgot basic knot tying and the techniques learnt due to the time delay from their theory in university and placement in the delivery suite. Lack of practice for dexterity and available ‘hands on’ experience in the delivery suite also limited experience and confidence.

Preparation for episiotomy and usefulness for practice

13 (86.7%) students reported that they had received theoretical and practical instruction in episiotomy in university. 7 (46.7%) students did not find this simulated instruction useful due to lack of reality. 2 (13.3%) students found it
useful to some extent and 4 (26.7%) moderately. The remaining 2 (13.4%) students found instruction useful to quite or a large extent.

All students received instruction in perineal infiltration prior to episiotomy. 4 (26.7%) students did not find the simulated infiltration useful, again, due to the lack of muscle reality. 5 (33.3%) students found instruction useful to some extent with the remaining 6 (40.1%) finding instruction useful to a moderate or large extent. 11 (73.3%) students had never undertaken episiotomy in the delivery suite, 3 (20 %) very infrequently and 1 (6.7) frequently. Confidence undertaking the procedure was influenced by experience.

Confidence undertaking episiotomy

8 (53.3%) students did not feel confident undertaking perineal infiltration or episiotomy in clinical practice. Confidence undertaking episiotomy in the delivery suite was influenced by the infrequency of which the procedure was performed in practice. One student felt unsure as to when it should be performed except when observing the registrar prior to an instrumental delivery. 3 students had never observed their mentors undertaking the procedure. 2 students had only seen the procedure performed by the obstetrician. Lack of observation and experience associated with confidence is reported in the free response comments in the questionnaires. Two students explain:

'Not very confident, have not received enough theoretical or practical input in either university or practice'
Trust Al (Q) st/m 5 p:2)

‘Not very confident, firstly because I have never performed it [episiotomy] and secondly because I have only observed it twice out in practice’
Trust DI (Q) st/m 13 p:2)

Lack of confidence was clearly related to lack of experience on the 'real' person and not receiving enough theoretical or practical input in either university or practice by all 15 students. Instruction in episiotomy in a skills lab has been problematic due to the lack of suitably designed models for incision. Added to the
restricted practice of performing episiotomy in clinical practice, students have had limited experience observing their mentor implementing this procedure and therefore have had limited experience observing and assessing second degree perineal trauma.

Due to the limited numbers of students undertaking perineal repair under supervision it was not possible to undertake statistical analysis to determine the association between confidence and competence. However factors identified in the qualitative data demonstrate a clear association between infrequency, lack of opportunity, and lack of confidence and competence undertaking repair. These barriers to learning were similar to the ones reported by midwives in chapter eight.

**Experience of instruction and supervision of perineal repair in practice**

8 (53.3%) students perceived that their Trust provided instruction for midwives in perineal repair, 2 (13.3%) perceived that none were provided (Trust E) and 5 (33.3%) were unsure. Only 4 (26.75) students attended a midwives' initial instruction or up-date workshop in the Trust. 3 (20%) students found these workshops useful to a moderate or large extent. 11 (73.3%) students perceived that they were never encouraged to attend the midwives' workshops.

**Instruction and supervision by mentor**

5 (33.3%) students perceived that they were never encouraged to repair a simple tear or episiotomy. 4 (26.7%) students perceived that they requested instruction very frequently. However, 4 (26.7%) students reported that their mentors volunteered to instruct them in repair frequently. Table 9.4 reports the frequency of which students were encouraged to attend the midwives' workshops and requested instruction and supervision in repair by their mentor.
Table 9.4 Frequency of which students requested and were provided instruction and supervision in perineal repair

<table>
<thead>
<tr>
<th>Frequency encouraged to attend in-service perineal repair workshops</th>
<th>Frequency encouraged to undertake a simple second degree tear or episiotomy</th>
<th>Frequency requested instruction in repair</th>
<th>Frequency requested supervision in repair</th>
<th>Frequency midwife would volunteer to instruct in perineal repair</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Never</strong></td>
<td>N = 11</td>
<td>5</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>%</td>
<td>73.3%</td>
<td>33.3%</td>
<td>6.7%</td>
<td>53.3%</td>
</tr>
<tr>
<td><strong>Very infrequently</strong></td>
<td>N = 2</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>%</td>
<td>13.3%</td>
<td>26.7%</td>
<td>13.3%</td>
<td>13.3%</td>
</tr>
<tr>
<td><strong>Infrequently</strong></td>
<td>N = 2</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>%</td>
<td>13.3%</td>
<td>26.7%</td>
<td>40.0%</td>
<td>13.3%</td>
</tr>
<tr>
<td><strong>Frequently</strong></td>
<td>N = 2</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>13.3%</td>
<td>26.7%</td>
<td>6.7%</td>
<td>28.7%</td>
</tr>
<tr>
<td><strong>Very frequently</strong></td>
<td>N = 2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>%</td>
<td>13.3%</td>
<td>13.3%</td>
<td>13.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>N = 15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Spearman’s rho was used to investigate the relationship between the students request and midwives instruction in perineal repair. There was a good positive correlation between the increase in frequency of which students requested instruction in perineal repair with the increased frequency that the mentor encouraged their students to repair a simple second degree tear or episiotomy ($r = + .700$, $n = 15$, $P < .004$). Similarly, there was a good positive correlation between the increased frequency students requested supervision in repair and the increased frequency their mentor would volunteer to provide instruction ($r = + .650$, $n = 15$, $P < .009$). Assertiveness on the part of the student requesting instruction was positively correlated with the frequency of which the mentor would encourage their student to repair under their supervision ($r = + .672$, $n = 15$, $P < .006$). Students who perceived that they were well supervised and supported by their mentor reported feeling more competent to repair. One student described her feelings:

‘*To some extent [feeling of competence], it feels really rewarding when it is done...when it looks right...importance how it feels and how it looks*’.  
Trust Al (FG2003) st/m1 p:2

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Organisational constraints affecting student’s instruction and supervision in perineal repair

8 (53.3%) students perceived that lack of time was a major factor inhibiting their mentor instructing and supervising repair. 6 (40%) students perceived their mentors' lack of confidence in repair restricted their learning. Table 9.5 reports the constraints experienced by students.

Table 9.5 Factors perceived by students which constrained their instruction and supervision in perineal repair

<table>
<thead>
<tr>
<th></th>
<th>yes N (%)</th>
<th>no N (%)</th>
<th>Total N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>8 (53.3%)</td>
<td>7 (46.7%)</td>
<td>15 (100.0%)</td>
</tr>
<tr>
<td>Midwife considered inappropriate during programme</td>
<td>9 (60.0%)</td>
<td>6 (40.0%)</td>
<td>15 (100.0%)</td>
</tr>
<tr>
<td>Students' lack of confidence</td>
<td>1 (6.7%)</td>
<td>14 (93.3%)</td>
<td>15 (100.0%)</td>
</tr>
<tr>
<td>Midwives' lack of confidence</td>
<td>6 (40.0%)</td>
<td>9 (60.0%)</td>
<td>15 (100.0%)</td>
</tr>
<tr>
<td>In university</td>
<td>1 (6.7%)</td>
<td>14 (93.3%)</td>
<td>15 (100.0%)</td>
</tr>
</tbody>
</table>

One student commented on the response from her mentor when requesting supervision:

'It is better and quicker if I do it, very important to get it right and I am accountable'
(Trust Al (Q2003) st/m1p:3)

Two students commented on their mentor's reaction to their request for instruction one student stated:

'If there is time I will show you how to suture using a model' 'There has never been enough time unfortunately...very few midwives in my trust actually suture or are able to suture tears themselves and therefore unable to supervise or instruct students'...I feel very strongly that perineal repair is a very important role of the midwife and that this is too often overlooked by midwives who are mentoring me'
9 (60%) students reported that they were prevented from gaining experience as their mentor did not consider repair was appropriate during their pre-registration programme. Students perceived that newly qualified midwives took precedence when observing so they came low down in the pecking order. 6 (40.0%) students reported that a number of midwives lacked confidence and competence themselves and needed their own practice time to gain confidence before instructing. Students were quite surprised to find that some of their mentor’s practised out-dated techniques, which influenced their teaching and instruction.

“My mentor admitted she does the old technique and wants to learn the new way before teaching. She doesn’t want me learning the wrong technique’.

The ‘trend’ not to repair some small tears (Trust EI) provided few opportunities for students to observe or carry out repair in this Trust.

The general view was that mentors were positive and supportive about discussing the assessment of the trauma, and facilitating practice either on a model, placenta or belly pork until the opportunity arose for a suitable woman to repair. Some mentors considered it was important for their student to be suturing before qualifying. Experience was very dependent on which mentor the student worked with. Few mentors demonstrated negative attitudes towards students undertaking repair. The size of the repair also influenced the students’ instruction. Small tears tended to be left, or if too big not appropriate for the student to repair.

Importance to student’s role of undertaking perineal repair before registration

Undertaking perineal repair was not a considered priority for the majority of students due to their current work load and priority of midwifery competencies required in the curriculum. One student commented:

*I would like to practice midwifery not as a good suturer but supporter of birth*
Another student stated:

'From my own experience I feel it is important to observe as much perineal repair during the final practice module of year 2. Before this it is more useful to learn other skills...however in order to facilitate this, the midwives need to be competent and confident in their own skills and ability to carry out perineal repair' (Trust Al (Q2003) st/m1p:4)

All students agreed that it was very important that they achieved a minimum level of competence in repair under supervision before registration.

**Supportive learning environment**

Some students in the focus groups did not find their Trust a supportive learning environment and were told that the repair workshops were exclusively for midwives (Trust B). This mirrors some of the comments made by midwives in this Trust. In Trust C one student reported;

'Practice facilitator very supportive to teach ad hoc…'
(Trust Cl (FG2003) st/m5p:4)

While midwives’ attendance at a workshop was a priority, students were permitted to attend. Student workshops were suggested as an option in the Trust during the last midwifery module.

**Students’ views on formal assessment of midwives’ competency**

Formal assessment of midwives competency undertaking repair was considered by students to be a positive means of improving standards of practice and confidence in their instruction and supervision.
Student midwives’ views and attitudes towards sensitive perineal trauma management

**Model of midwifery care**

Students were asked to indicate in their pre-intervention questionnaire (appendix H:10) the statement of care which closely represented their views towards a model of midwifery. These models were described in chapter Table 9.6 represents the students' views.

Table 9.6 Model of midwifery closely relating to the student midwives’ view of midwifery care

<table>
<thead>
<tr>
<th>Model of midwifery closely relating to students' view of care</th>
<th>radical</th>
<th>conservative</th>
<th>liberal</th>
<th>none of these</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwifery programme</td>
<td>% within Midwifery programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSC Hons Short</td>
<td>25.0%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>6.7%</td>
<td>6.7%</td>
<td>6.7%</td>
<td>6.7%</td>
<td>26.7%</td>
</tr>
<tr>
<td>BSC Health Sciences</td>
<td>50.0%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>13.3%</td>
<td>6.7%</td>
<td>6.7%</td>
<td>0.0%</td>
<td>26.7%</td>
</tr>
<tr>
<td>DH E/BSC (ord) Fitness for Practice</td>
<td>42.9%</td>
<td>28.6%</td>
<td>28.6%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>20.0%</td>
<td>13.3%</td>
<td>13.3%</td>
<td>0.0%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Total</td>
<td>40.0%</td>
<td>26.7%</td>
<td>26.7%</td>
<td>6.7%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

6 (40%) students considered that the care they provided women fell under a radical model followed by 4 (26.7%) and 4 (26.7%) students respectively indicating conservative and liberal models. The choice in model of care reflects those views held by midwives suggesting that students support women’s care based on that provided by their mentors. There was no statistical difference between the students' and midwives' views of models of care (Pearson Chi-Square 6.563 df 9 P > .683).
**Student midwives’ views and attitude statements**

Students were asked to indicate the extent of their views related to the seven attitude statements of perineal care in their questionnaire (see appendix H:9). Scoring was the same as for midwives and were described in chapter 8:179. Scores were normally distributed and ranged from 18 to 28, a mean of 23.7 and a standard deviation of 2.3. The total view continuous scores were collapsed into 4 groups of scores with strength of attitude for total statements reported in table 9.7.

**Table 9.7 Student midwives’ total view scores of seven attitude statements towards perineal care**

<table>
<thead>
<tr>
<th>programme</th>
<th>N =</th>
<th>16-19</th>
<th>20-23</th>
<th>24-27</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwifery BSC Hons Short</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Midwifery programme</td>
<td></td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>.0%</td>
<td>75.0%</td>
<td>25.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>BSC Health Sciences</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>% within Midwifery programme</td>
<td></td>
<td>25.0%</td>
<td>26.0%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>6.7%</td>
<td>6.7%</td>
<td>13.3%</td>
<td>26.7%</td>
</tr>
<tr>
<td>DHE/BSC (ord) Fitness for Practice</td>
<td></td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>% within Midwifery programme</td>
<td></td>
<td>.0%</td>
<td>28.6%</td>
<td>71.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>.0%</td>
<td>13.3%</td>
<td>33.3%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Total</td>
<td>N =</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>% within Midwifery programme</td>
<td></td>
<td>6.7%</td>
<td>40.0%</td>
<td>53.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>6.7%</td>
<td>40.0%</td>
<td>53.3%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

8 (53.3%) students reported favourable or positive attitudes towards perineal care, scoring between 24-27. 6 (40%) students scored 20-23, indicating that they were unsure about the statements. Only 1 (6.7%) student had negative or indifferent views regarding perineal care and long term consequences. It is not surprising to find that the students were unsure in their views towards perineal care due to the limited exposure and experience they had encountered with their mentors. There was no association between total scores and model of care chosen. However, students’ free responses in focus groups and questionnaires...
clearly demonstrated their sensitivity towards women's sexual health and activities with consideration of both short and long term effects of trauma, similar to the views held by midwives.

Students presented mixed views on their mentor's attitudes towards sensitive perineal care. Students perceived that the subject of future urinary, bowel morbidity and sexuality were not discussed in any detail. Sexual intercourse was certainly not perceived to be considered a priority. Some midwives were perceived to neglect to discuss these issues at all. However, one student explained the areas that were discussed by her mentor:

'Choice, healing process and comfort, formation of scar tissue, hygiene if left unsutured, having sexual intercourse before 6 week check, infection and keeping the perineum dry'
(Trust C (FG) st/m 2 p:6).

Students perceived that the information given to women regarding a choice between repair/non-repair was variable. Some midwives discussed the different types of healing and soreness between the two types of management, some discussed the advantages of repair for the 'future'. Another student reported how her midwife reassured the woman about her physical appearance:

'My midwife encourages the woman to look with a mirror and they have definitely been cheered by the fact that it didn't look hamped at all and looks normal'
(Trust C (FG) st/m 2 p:6)

I perceived that the students were influenced by their mentors in their views and attitudes towards the women's perineal care. This was demonstrated in a greater awareness of women's resumption of sexual intercourse and body image than provided by the midwives. This awareness may be attributed to greater attention placed on this sensitive area in the midwifery curriculum.
Summary of findings and conclusions

2 (13.3%) students had undertaken perineal repair under direct supervision of their mentoring midwife. Theoretical and practical instruction in episiotomy and perineal assessment and repair at the university was useful to some or a moderate extent. These findings were consistent with the usefulness of pre-registration education for midwives. The majority of students were aware that perineal repair workshops were provided for midwives in their trust. However, only a small number of students were encouraged to attend these workshops. There was a positive correlation between the frequency students requested perineal instruction and the frequency of which their mentors encouraged them to repair uncomplicated trauma. Assertiveness on the part of the student was associated with the willingness of the midwife to instruct and supervise their student.

Major factors contributing to the student's lack of confidence and competence in repair were: lack of instruction and supervision in repair; lack of time; perceived midwives' view of inappropriateness in training; midwives' own lack of confidence and competence in repair techniques and teaching skills. Students' perceived levels of confidence were also associated with a fear of performing a substandard repair which could result in women's long term physical and sexual health. Students also reported that their confidence was affected by the considerable contradiction and inconsistency in perineal techniques between education in university and out-dated methods and knowledge observed with their mentors in practice. The midwives' lack of confidence in the continuous subcuticular technique prevented students' experience to some extent. Some midwives did however recognise this deficit in their knowledge and skills and were seeking their own instruction. Students who were well supported in perineal repair in practice felt more confident to undertake the procedure under supervision.

There were a higher percentage of students indicating a view towards a radical model of midwifery care. There was no significant difference between the views of midwives and students, suggesting that students mirror their mentor's views of care. Total scores for attitude statements towards sensitive perineal care were
similar to midwives indicating positive attitudes towards women’s perineal management. Students perceived that their mentors prioritised perineal care in terms of pain, comfort, healing and infection. Discussion surrounding the resumption of sexual intercourse was rarely experienced by the student either during the antenatal period or following delivery. Some students felt that they carried a weight of responsibility for women’s future sexual activity.

There was a strong indication from the data generated in chapters eight and nine that a training programme was required with an up-date for expert midwives to facilitate recommended trauma assessment procedures, repair techniques and assessment of competency. In chapter eight midwives identified that education and training contributed significantly to their confidence and competence in perineal repair following registration.

Chapter ten now describes phase 3 - the intervention of the in-service perineal repair work shops in five Trusts and access to a post-registration work-base module.
CHAPTER TEN

PHASE 11 - THE EDUCATIONAL INTERVENTION

Introduction

A preliminary investigation of midwives and senior student midwives in 2003 revealed a growing need to introduce a flexible work-based educational programme in perineal repair which would assist in raising midwives' and students' perceived levels of competency undertaking this skill in clinical practice.

Increasing demands made on senior delivery suite co-ordinators for instruction and supervision in perineal repair started to escalate in 2003 resulting from the increased awareness by midwives and students of their role in undertaking this skill. Discussion amongst midwives and subsequent data generated during phase 2 of the study revealed that only 56 (33.7%) midwives across six Trusts were assessed for their competency undertaking perineal repair by an expert midwife. Inconsistency of competency assessment and training in perineal repair has in part, contributed to a lack of standardised perineal trauma assessment and repair technique. Implementing a standardised evidence-based educational programme in perineal assessment and repair is an area of midwifery competency that can alleviate some of the short and long term perineal problems women have identified, and discussed in chapter one.

Chapter ten describes the third phase of the study: the educational intervention programme. This programme encompasses in-service perineal repair workshops across five experimental Trusts and an optional post-registration work-based 10 credit module at degree level. The chapter is divided into four parts: the preparatory study day provided for OSCE instructing/assessing midwives; the in-service perineal repair workshop; the work-based module; supervised practice and the midwives' objective structured clinical examination (OSCE) for competency in perineal repair.
Chapter Ten

Preparation of OSCE ‘instructing’ midwives - ‘Episiotomy and Perineal Repair’– one day workshop.

Part one is divided into three sections: the study day; the midwives’ assessment of competency; and evaluation of the study day.

**OSCE Instructor’s up-date study day- intervention Trusts**

Two alternative study days at the University of Surrey: ‘Episiotomy and Perineal Repair’– Up-date for Perineal Repair OSCE Instructing Midwives were advertised in the five intervention Trusts well in advance and took place in February and March 2004. Heavy work commitments prevented attendance by midwives from Trusts B and E. Alternative opportunities were provided ‘in house’ to enable these midwives to up-date their knowledge and skills. The aims and objectives of the study day were to prepare expert midwives for their role instructing, supervising and assessing midwives’ clinical judgement and decision making skills in the assessment and repair of perineal trauma through the OSCE process. The theoretical and practical content of the study day was planned jointly and facilitated by members of the perineal repair working group (PRWG) (appendix AA). The format of the study day included:

- identification of individual expertise in perineal repair
- an overview of the anatomical structures of the pelvic floor and ano-rectum
- current evidence relating to bi-digital anal sphincter trauma assessment (later referred to as obstetric anal sphincter injuries OASIS, Andrews 2005)
- discussion and implementation of the new perineal trauma proforma (appendix BB)
- standard, areas and levels of competency (appendices CC, and DD)
- evidence for best practice guidelines (appendix EE)
- the OSCE proforma and process (appendix FF)
- recommended repair techniques
- ‘hands on’ workshop using the new trauma proforma
The study day was a forum in which critical reflection, discussion, shared experiences and familiarisation with the continuous subcuticular repair technique and bi-digital anal assessment could take place. All midwives were highly motivated and displayed positive attitudes towards their role as instructing midwives. Time was allocated to discuss the logistics of the OSCE of which all midwives agreed to undertake. All members of the PRWG attended a study day.

A total of twenty eight midwives from the five Trusts attended one of the two study days. Attendance was disappointingly low but reflected staff shortages and work commitments consistent across the Trusts. Table 10.1 reports the numbers of midwives attending a study day and undertaking an OSCE in perineal repair competency.

<table>
<thead>
<tr>
<th>Intervention Trusts</th>
<th>Study day N</th>
<th>OSCE N</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>22</td>
</tr>
</tbody>
</table>

Evaluation questionnaires were completed and a transcript of the study day was provided for the midwives' post-registration education and practice (PREP) portfolio.

**Assessment of competency in perineal repair**

During phase two of the study only 35 (21.1%) midwives across the six Trusts perceived themselves to be at a level of competency which they felt enabled them to instruct, supervise and assess colleagues in perineal repair (level 6: expert). In order to provide midwives and students with a structured and consistent approach to trauma assessment and repair an OSCE was undertaken providing a reproducible tool for assessment. Standardising the assessment of
competency was deemed a positive step forward by the PRWG for maintaining standards and consistency in perineal repair. The formative and summative OSCE documentation mirrored the newly developed perineal trauma proforma and was approved by the examination board of the University of Surrey for assessing midwives' competency in perineal repair. The validity of the OSCE tool for the assessment of competency is discussed in the third part of the chapter.

Six weeks following the two study days at the University, midwives were invited back to refresh their own assessment and repair skills in preparation for their OSCE. Undertaking the assessment of midwives in the delivery suite across five trusts was impractical, intrusive for women giving birth and time consuming for me as teacher and researcher. The OSCE took place under simulated conditions using perineal repair trainers (Limbs and Things) with a moderator. The perineal trainer and OSCE have previously been evaluated positively by Neilsen (2003) with medical residents. The gap between the workshop and formal assessment provided midwives with adequate opportunities to reflect on the study day, familiarising themselves with the referenced handbook provided, recommended repair techniques and preparation for the OSCE. A certificate of competency at level 6 (expert) was distributed to 22 (100%) midwives on the successful completion of their OSCE. Six midwives undertook the OSCE in their Trust due to work commitments on a similar model with me and a moderator.

**Evaluation of the instructor's up-date**

A total of 28 (100%) standard evaluation semi-structured questionnaires were completed immediately following the 'instructors' study day. 27 (96.4%) midwives were very satisfied with the contents of the day considering the information to be very relevant to their current role. 21 (75%) midwives were very satisfied that the study day met their personal learning objectives. These were achieved by: increasing self-confidence; applying the recommended continuous suturing technique and bi-digital anal sphincter assessment; up-dating evidence-based knowledge; confirmation and clarification of own practices and knowledge. Areas of the workshops that midwives considered most useful and relevant to their role as instructors in the delivery suite are presented from evaluation free responses in table 10.2.
Table 10.2 Factors found to be of most value from an update study day to assist midwives in their role as ‘instructing’ midwives in perineal repair.

<table>
<thead>
<tr>
<th>Factors found to be of most value to instructing midwives from an update study day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up-dated knowledge and practical skills</td>
</tr>
<tr>
<td>Up-to-date research discussed</td>
</tr>
<tr>
<td>Practicalities of assessment and repair discussed with colleagues</td>
</tr>
<tr>
<td>Value of various suturing techniques</td>
</tr>
<tr>
<td>Increased self-confidence</td>
</tr>
<tr>
<td>Excellent criteria introduced for assessing perineal trauma (proforma)</td>
</tr>
<tr>
<td>Good use of models</td>
</tr>
<tr>
<td>Feel prepared for OSCE</td>
</tr>
<tr>
<td>Relaxed atmosphere and very open for learning</td>
</tr>
<tr>
<td>Especially reassuring as a co-ordinator undertaking suturing on a daily basis</td>
</tr>
<tr>
<td>Interesting meeting and discussing issues with other midwives from other trusts</td>
</tr>
<tr>
<td>Look forward to practical prior to OSCE</td>
</tr>
<tr>
<td>Bi-digital anal sphincter assessment</td>
</tr>
<tr>
<td>Would have liked more information on anal sphincter involvement</td>
</tr>
</tbody>
</table>

A total of 22 semi-structured evaluation questionnaires were distributed to the midwives who had completed the OSCE six months following the two study days in December 2004 to evaluate the practicality of the OSCE. 68% midwives responded from the five Trusts. 7 (46.7%) midwives considered that the instructors study day prepared them to a large extent, 6 (40%) quite an extent and 2 (13.3%) to a moderate extent in order to carry out their role as instructors. The practicality of using a perineal trainer under simulated conditions enabled midwives to experiment with their techniques. All midwives considered it was appropriate to undertake the OSCE under simulated conditions thus providing:

‘The most realistic method of training after using real life scenarios’ (Midwife 14: instructors study day 2004).

‘It ensures a level of competency is maintained’
(Midwife 8: instructor’s study day 2004)
Recommendations made by instructing midwives are presented in table 10.3 and include the assessment of midwives’ competency undertaking perineal repair using a standardised OSCE.

Table 10.3 Instructing midwives recommendations for assessing midwives’ competency in perineal repair in clinical practice

<table>
<thead>
<tr>
<th>Recommendations for the assessment of midwives’ competency undertaking perineal repair</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education and training</strong></td>
</tr>
<tr>
<td>Need for a regular study session with perineal trainer for all grades of midwives</td>
</tr>
<tr>
<td>Mandatory study day and annual up-dates with OSCE for all midwives</td>
</tr>
<tr>
<td>Assessment of trauma using a recognised proforma</td>
</tr>
<tr>
<td>Recognition of muscle layers using a model for practise</td>
</tr>
<tr>
<td>1-1 Teaching at the bedside</td>
</tr>
<tr>
<td>Supervisor of midwives to discuss professional skills development</td>
</tr>
<tr>
<td><strong>Assessment of competency</strong></td>
</tr>
<tr>
<td>Having objective criteria to ensure consistency in practice</td>
</tr>
<tr>
<td>Observation of at least 10 repairs</td>
</tr>
<tr>
<td>Discussion and practical observation with instruction and supervision</td>
</tr>
<tr>
<td>Continuity of instructor/assessor for midwives</td>
</tr>
<tr>
<td>Encourage midwives to evaluate their own competency level with support from experts in practice</td>
</tr>
<tr>
<td><strong>Support in practice</strong></td>
</tr>
<tr>
<td>Utilise role of PDM and labour ward co-ordinators for instruction, supervision and assessment</td>
</tr>
</tbody>
</table>

The preparation of midwives for their role as instructors and assessors was positively received. The majority of midwives welcomed the OSCE for the assessment of midwives undertaking perineal repair emphasising the need for formal assessment. Increasing the numbers of appropriately prepared midwives was an important step towards supporting and assessing midwives in the delivery suite who would be attending the in-service perineal repair workshops and module.
Educational intervention: 1 - In-service perineal repair workshops for midwives in five trusts

Approval and Funding

Provision of the workshops and funding for training equipment was discussed and approved by the Heads of Midwifery in each Trust. Due to limited funding and training resources for post-registration education, perineal repair workshops were not considered a priority in all Trusts. However, in order to continue with the study it was necessary to provide the workshops in my own time and at my own expense. Sponsorship was sought and kindly provided by Ethicon and Davis and Geek suturing manufacturers. Both sponsors provided suturing materials and assistance with the purchase of two perineal trainer models. Three perineal trainers, suturing pads and instruments were funded by the University of Surrey for pre-and post registration education.

In-service perineal repair workshops – intervention Trusts

During April 2004 to August 2005, I facilitated 46 in-service perineal repair workshops for midwives across five experimental Trusts. Midwives in each intervention Trust were invited to attend a two hour perineal repair workshop. Senior student midwives were invited if spaces were available. Attendance was voluntary, in the midwives' own time or with release from practice. Workshops were facilitated at monthly to six weeks intervals to accommodate individual practitioner needs, working practices and annual leave. Dates were advertised well in advance via the distribution of flyers. Practice development midwives (PDMs) took responsibility for displaying dates, venue and named slots on appropriate notice boards. Due to the limited quantity and quality of perineal trainer mannequins and a single facilitator, attendance was restricted to a maximum of 8 midwives. Table 10.4 reports the attendance of midwives and students at the workshops in respective experimental Trusts.
Table 10.4 Numbers of midwives attending perineal repair workshops from intervention Trusts

<table>
<thead>
<tr>
<th>Trusts</th>
<th>Workshops April 2004 - August 2005</th>
<th>MWs attendance</th>
<th>Student MWs attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 46</td>
<td>N = 208</td>
<td>N = 15</td>
</tr>
<tr>
<td>A</td>
<td>10</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>9</td>
<td>49</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>10</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>34</td>
<td>4 + 1 medical st</td>
</tr>
<tr>
<td>F</td>
<td>Not provided by researcher</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Workshops were designed to accommodate midwives' skills levels from novice to expert. The aims and objectives of the workshop were to: provide a forum for midwives at all skills levels working in hospital and community, including night staff; enable midwives to reflect, share experiences and up-date their knowledge skills and attitudes towards evidence-based perineal management. A venue close to the delivery suite with audiovisual aids provided easy and practical access to the workshop. Attendance at each workshop ranged from 2 to 10 midwives. Clarification of individual learning needs, objectives and levels of perceived competency were established at the commencement of each session. Table 10.5 reports the midwives' identified learning objectives.
Table 10.5 Midwives’ learning objectives identified prior to the commencement of in-service perineal repair workshops

<table>
<thead>
<tr>
<th>Midwives' identified learning objectives prior to the commencement of in-service perineal repair workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>Up-date knowledge and skills</td>
</tr>
<tr>
<td>Know when to refer to experienced midwife</td>
</tr>
<tr>
<td>Already competent – need to up-date</td>
</tr>
<tr>
<td><strong>Practical skills</strong></td>
</tr>
<tr>
<td>When and how to leave the skin un-sutured.</td>
</tr>
<tr>
<td>Learn continuous and subcuticular technique</td>
</tr>
<tr>
<td>Learn non-locking stitch to vaginal all—used interrupted since 1997</td>
</tr>
<tr>
<td>Learn skill from beginning – basic knots and interrupted technique</td>
</tr>
<tr>
<td>What to do with labial tears</td>
</tr>
<tr>
<td>Night duty- to learn subcuticular technique</td>
</tr>
<tr>
<td>To be able to handle the equipment</td>
</tr>
<tr>
<td>Gap in midwifery – community – learn subcuticular technique</td>
</tr>
<tr>
<td>Seen bad tears – want to get it right</td>
</tr>
<tr>
<td><strong>Confidence</strong></td>
</tr>
<tr>
<td>Regain confidence in identifying extent of trauma and suturing</td>
</tr>
<tr>
<td>Confidence in recognising anatomical structures</td>
</tr>
<tr>
<td><strong>Competence</strong></td>
</tr>
<tr>
<td>To feel confident and competent in continuous subcuticular technique</td>
</tr>
<tr>
<td>Increase level of competence</td>
</tr>
<tr>
<td><strong>Women centred care</strong></td>
</tr>
<tr>
<td>To be able to offer continuity of care</td>
</tr>
</tbody>
</table>

The training programme designed for the workshop (appendix C) included: a 45 minute presentation and discussion emphasising the importance of the anatomical structures of the pelvic floor and anorectum in relation to short and long term problems for women; current evidence to support repair/non-repair of second degree tears; reflection on midwives experiences in practice; standard statement, areas and levels of competency; introduction of the new perineal trauma assessment proforma and 'guidelines for best practice'. Formal
assessment of competency using an OSCE was presented and discussed. One hour was provided for the demonstration of the assessment of perineal and anal sphincter damage digitally, utilising the RCOG (2002/4) trauma classification guidelines. Anatomical models and laminated photographs assisted in the clarification of trauma. The Peri-Rule (plastic ruler) designed by Metcalf et al (2004) for measuring perineal trauma was not available for purchase at the commencement of the workshops. However, midwives were shown how to assess and measure trauma digitally using a gloved forefinger, transferring the measurement in centimetres from the ruler in the workshop handbook. This was followed by ‘hands on’ perineal infiltration and repair adopting the continuous subcuticular technique on suturing skin pads and perineal mannequin trainers. All midwives were provided with a comprehensive referenced handbook – *The Principles and Practice of Perineal Repair for the Midwife*. Evaluations of the workshops are presented in chapter twelve.

**In-service perineal repair workshops - comparison Trust.**

The quasi-experimental design of this study relied upon non-intervention in the comparison Trust. However, the increase in the non-repair of second degree tears and the reported incidence of the negative consequences associated with non-repair identified in gynaecological clinics and CNST assessments necessitated a change in practice. Two experienced midwives from the delivery suite in Trust (F) were commissioned by the clinical directorate to provide perineal repair training for midwives with a view to recruiting a midwife to co-ordinate a multidisciplinary perineal trauma follow-up clinic. This unexpected educational development was acknowledged in the data analysis and results. The training in perineal repair in this Trust can only be viewed as a positive change in meeting women’s and service needs in midwifery practice.

Funding and resources were made available in the comparison Trust to support monthly 2½ hour workshops. Midwives were expected to attend the workshop in their own time. Training commenced in December 2004. Two experienced delivery suite midwives facilitated 4, 2 hour sessions monthly accommodating 24 midwives. Midwives working in the delivery suite were prioritised for training. A total of 168 midwives attended workshops up to August 2005. Content of the
workshop was similar to the one used in the intervention Trusts. The Peri-Rule accompanying a perineal trauma assessment proforma (Metcalf et al 2004) was purchased and assessment of trauma was demonstrated alongside a training video. Assessment of competence was undertaken informally on the delivery suite by expert midwives.

**Educational intervention: 2 - Principles and Practice of Perineal Repair for the Midwife – work-based module**

**Work-based module**

A newly designed optional 10 credit work-based module was provided for midwives undertaking the Lifelong Learning BSc (Hons) Midwifery Practice programme or as an accredited standalone module. Module details were advertised in the University course handbook, via flyers and through discussion on Trust visits. 9 and 6 midwives respectively were funded to attend 2 separate modules provided in April 2004 and September 2005. Table 10.6 reports the midwives’ attendance at the modules by Trust.

**Table 10.6 Attendance at the work-based module – Principles and Practice of Perineal Repair for the Midwife**

<table>
<thead>
<tr>
<th>Trusts</th>
<th>Module April 2004</th>
<th>Module September 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bi</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ci</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Di</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>El</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FC</td>
<td>Not provided</td>
<td>Not provided</td>
</tr>
<tr>
<td>Total Midwives</td>
<td>N = 9</td>
<td>N = 6</td>
</tr>
</tbody>
</table>

**Module format**

The theoretical component of the module spanned 7 weeks comprising 100 hours. Hours were divided into: 24 contact hours in the classroom setting (16 hrs facilitated teaching/action learning sets, workshops, reflection, debates and
specialist speakers). 20 hours were designated to specific practice-based learning on the delivery suite with 56 hours allocated to self-directed study and negotiated time release from practice. Six study sessions were delivered in alternative Trusts to meet individual and service needs and to avoid unnecessary travel time. Aims, objectives and module content can be accessed in the module handbook in appendix B. Specialist contributors on the module included: myself as midwife teacher; practice development midwives/OSCE midwives; obstetric physiotherapist; lawyer; consultant obstetrician; user representation; and a marriage guidance representative from RELATE. Midwives were offered the opportunity to attend the urogynaec outpatient clinic in their respective Trusts where available.

**Supervised practice**

The module provided a structure for supervised practice whereby individual midwives negotiated with their labour ward manager placement on the delivery suite for the duration of the module. This placement was fundamental to the success of the module to enable midwives to observe and gain first hand experience assessing perineal trauma and undertaking repair in preparation for both formative and summative assessments in theory and practice. Each midwife was asked to identify her learning objectives and ‘shadow’ a skilled OSCE instructor/assessor who would take joint responsibility for their assessment through a negotiated learning agreement.

**Methods of assessing the midwives' competency in perineal repair**

Assessment of the module was undertaken in two parts. 50% of the module was assessed using an OSCE with the midwife at the bedside in the delivery suite/community setting (appendix FF). The OSCE is an example of an assessment tool which aims to test the attributes of competency by combining the midwives' knowledge, problems solving and decision making abilities, clinical skills and attitudes objectively in every day clinical practice. These skills have been difficult to assess using alternative methods particularly as competence is a complex concept (Lurie 2003). The affective domain can be assessed by tapping into the way in which midwives respond in a negative or positive way towards
women's trauma, care practices and the organisation. Harden (1988:19) describes the OSCE as:

'An approach to the assessment of clinical competence in which the components of competence are assessed in a well planned or structured way with attention being paid to the objectivity'

Midwives' personality traits, world views and attitudes will inevitably be influenced by the contexts in which they find themselves and will be reflected in the judgements and decisions they make towards women's perineal management. The OSCE, used in single simulated scenarios such as described earlier in the chapter and undertaken at the bedside with women represents an innovative tool for assessment moving away from the traditional cognitive assessment to an educational paradigm based on praxis, reflection and change. Traditionally the Objective Structured Assessment of Technical Skills (OSATS) has been used to assess medical and nursing students at multiple stations (Nielson et al 2003, Hammond et al 2006). However, the OSCE has also been successfully implemented clinically for assessing competency in venepuncture, cannulation (Collins 2006) and emergency skills in midwifery (Cook 2006).

The purpose of initiating the OSCE for the assessment of midwives' competency in clinical practice is that it provides a test format particularly suitable for assessing the fifteen identified areas of meta-competencies (appendix CC) required in the assessment of perineal trauma and repair and identified in the perineal trauma assessment proforma (BB). Knowledge and understanding is self- and supervisor-assessed alongside the skills and dexterity of perineal trauma assessment and the repair technique. Performance is measured using absolute (criterion-referenced) task specific checklists and rating scales for levels of competency. This defines the passing score in terms of the items or tasks which need to be performed for safe and competent practice. Criterion-referenced assessment is appropriate because it judges the midwives' performance against pre-determined standards and specific criteria; the OSCE proforma which mirrors the perineal trauma assessment proforma. The DACUM model of competency-based vocational education described in chapter seven figure 7.1 demonstrates the performance rating scale and description of
competence achievement required by midwives with a minimum of level 4 competency.

The assessment tool designed by members of the PRWG needed to be feasible, reliable and valid. The tool is feasible; it can be implemented on a wide scale; demonstrated in the instructor's assessment. The tool is reliable and takes into consideration women's varying degrees of trauma. The tool is valid; it mirrors the perineal trauma assessment proforma and midwives' varying levels of expertise demonstrating construct validity.

Boud and Garrick (1999:189) cite Griffin, who argue that this approach to assessment has the potential for reductionism thus relying on an over emphasis on observed behaviours detracting from knowledge and skills. Griffin claims that the approach is didactic, behaviourist and pedagogical in nature, which does not fit in well with the radical approaches to adult learning. However, to avoid this potential problem, formative and summative OSCEs were carried out authentically at the women's bedside in the delivery suite or home birth setting by an expert instructing midwife holding OSCE accreditation. Competency can be assessed in stages, integrating the cognitive, affective and psychomotor domains acknowledging Ryle's 'knowing how' and knowing that'. Continuous assessment in the delivery suite places the emphasis on the professional judgement of clinically based staff with expert knowledge of the practice context (Norman et al 2002). It also enables midwives to judge for themselves their own level of knowledge and skills. It could be argued that this is a much fairer system of assessment in contrast to the traditional 'one off' assessment. The collaboration of OSCE midwives, practitioners and myself as facilitator in the OSCE process optimises the validity and reliability of the assessment of competence further reducing the theory-practice gap.

**Reflective case study**

Midwives were also required to submit a 2000 word reflective case study for the remaining 50% of the assessment of competency. Reliability of assessment is increased using a multi-dimensional approach combining a written assessment (Verhoeven et al 2000) and a standardised marking grid for objectivity. The
choice of submitting a reflective case study was based on the belief that it
enabled midwives to select and identify with one woman who had sustained
some degree of perineal trauma. The delivery circumstances and subsequent
events could be used to illustrate the care and management provided reflectively
using a recognised model of reflection such as Johns (1994) using narrative in
reflection as a means to capture the lived experience of working with women.

Assessing reflective writing seeks out the cognitive, affective and psychomotor
learning which are extrinsic rather than intrinsic to practice, mirroring one of the
reflective processes described by Schon (1987), Boud et al (1985), Mezirow
(1981), Kolb (1984) and later Jarvis (2006). These processes have been
summarised as analysis, synthesis, evaluation and feeling. Synthesis should
include evidence of transfer of learning and the relation of practice to theory,
critically evaluating practice contexts, processes and outcomes. In essence,
reflective writing should demonstrate deep, critical emancipative and
transformative learning.

Conclusion

The preparatory study day for instructing midwives and the OSCE process
provided a small pool of midwives who were motivated to instruct, supervise and
assess midwives undertaking perineal repair in the delivery suite or community
setting. Although the numbers of midwives attending the workshops and module
were relatively small they were welcomed. The module provided the opportunity
for midwives to study in depth the many areas surrounding perineal trauma
management and was mainly attended by senior midwives working in the
delivery suite.

The responsibility of assessing competency in perineal repair objectively lies with
midwives themselves, expert practitioners and educationalists. Adopting holistic
approaches to competence-based learning and assessment can help to
overcome criticisms that the assessment of competence is fragmented, ignores
context and lacks objectivity. Assessing knowledge, understanding, affective and
psychomotor skills are key considerations in the assessment process,
acknowledging that competence is an evolving, dynamic and relational concept
involving expert clinical judgement, midwives' and assessors' perception, values and attitudes. The multi-dimensional approach to assessment in this module may in-part assist midwives' in achieving competency far beyond that of a single workshop.

Chapter eleven now evaluates the effectiveness of the educational programme on the midwives' perceived level of confidence and competency in perineal repair. Chapter twelve will evaluate the extent the programme offered student midwives greater opportunities for participation in this skill in the clinical area.
CHAPTER ELEVEN
DATA ANALYSIS AND RESULTS: 3

PHASE 4 – THE EVALUATION OF AN EDUCATIONAL PROGRAMME IN PERINEAL REPAIR FOR MIDWIVES.

Introduction

In chapter 8, baseline data generated from the midwives' pre-intervention questionnaires and focus group interviews was reported. The data suggested that 90.4% (150) midwives claimed to undertake perineal repair across six NHS Trusts. On closer analysis it emerged that only 68.7% (114) midwives perceived that they were confident enough to undertake this skill competently in the workplace. Factors shown to influence the midwives' perceived level of competency and confidence at this time were: the availability in the Trust of perineal repair workshops; clinical experience; instruction and supervision; support and positive feedback from both expert colleagues and women. Staff shortages, lack of time and low priority attributed to perineal repair training in some Trusts restricted midwives in developing their competence in perineal trauma management. This chapter reports the effectiveness of the educational programme in perineal repair on the midwives' perceived level of competency undertaking this skill in clinical practice during 2005/6.

The chapter answers the main and four subsidiary research questions from the research itself and is divided into eight parts: thematic analysis and coding of midwives' focus group interviews and post-intervention questionnaire free responses; demographic profile of respondent midwives; the main findings of the effectiveness of the educational programme; factors influencing the midwives' confidence and competency; data supporting the views and attitudes perceived by midwives towards sensitive perineal management; factors influencing the midwives' judgement and clinical decision making process in perineal trauma management and repair; the influence of powerful structures within the NHS organisation found to support and inhibit the midwives' implementation of perineal repair; and the midwives' views of their role as mentor towards
instruction and supervision of senior student midwives undertaking perineal repair.

**Thematic analysis and coding – midwives 2005**

See chapter eight for coding of Trusts and verbatim data.

An identical post-intervention questionnaire was distributed to midwives in 6 NHS Trusts to compare data in un-related pre/post intervention and comparison groups. Six focus group interviews were undertaken between October 2005 and April 2006 using a similar semi-structured interview schedule adopted in phase 2. A total of 29 midwives voluntarily participated forming a similar heterogeneous group in phase 2. Thematic analysis of the data was undertaken and coded under the five themes and eight categories reported in chapter 8. Phases 2 and 4 refer to data collected in 2003 and 2005/6 respectively.

The effects of the educational programme on the midwives' knowledge, skills, attitudes and values are reported individually in order to reveal the intricate nature of competency and the multiple factors which have been shown to influence the phenomenon in this study. Data generated from the perineal repair workshops and the work-based module are analysed concomitantly taking into account the cultural milieu of the NHS organisation and work-base learning in the intervention and comparison Trusts.

**Demographic characteristics of midwives employed in six NHS Trusts in South East England 2005**

This part of the chapter is divided into seven sections and reports the demographic characteristics of respondent midwives during phase 4 of the study.

**Response rate**

During October 2005, 800 semi-structured post-intervention questionnaires were distributed to midwives employed and on the pay roll in the same six midwifery/consultant led units in South East England with a response rate of 102
(14%) midwives in the intervention Trusts and 43 (16%) in the comparison Trust. In total a response of 145 (19%). Midwives returning post-intervention questionnaires were of a similar heterogeneous group to respondents in the pre-intervention investigation, forming a purposeful sample with varying levels of expertise in perineal repair. Generalization of findings to midwives in other Trusts in England is not intended due to the small numbers of midwives studied. However, new theories and organisational issues to emerge from the research can be transferable to some extent to other midwives and teachers employed in wider NHS Trusts and institutes of higher education offering valuable insights and recommendations for establishing similar programmes of education in the future.

**Pattern of work and practice allocation**

The pattern of work and midwives practice allocation across all Trusts was similar to phase 2. 65 (44.8%) and 34 (23.4%) midwives respectively, were allocated to the delivery suite and community. The remaining midwives were distributed across the maternity unit as in phase 2. 35 (24.1%) midwives worked between 1-10 weeks in the delivery suite with 39 (26.9%) midwives spending 11-20 weeks in this area. Only 26 (11.9%) midwives worked permanently in the delivery suite. There were no statistical differences between Trusts.

**Age**

Midwives’ age range (21-61yrs) was similar to those reported in the pre-intervention group. There was a similar median of 35 years with 64 (44.1%) and 60 (41.4%) midwives respectively in the 31-45 and 46-60 year groups, representing an equally mature midwifery population.

**Years practising as a midwife**

The number of years midwives had been practising was similar to the midwives in phase 2. Years practising ranged from less than one year to more than 36 years with a median of 16-20 years.
Clinical grades

Clinical grades ranged from E to I. 78 (53.8%) and 50 (34.5%) midwives respectively represented senior grades F and G (current bands 4-7). There were more senior midwives represented in phase 4 but this did not reach statistical significance.

Professional academic characteristics of respondents

Professional qualifications were representative of the status of midwives in 2005/6 and include post-registration qualifications. These findings are very similar to those reported in phase 2. There were no significant differences between Trusts (Pearson Chi-Square 1.895 df 3 $P > .595$).

Teaching and assessing qualifications

80 (55.3%) midwives during phase 4 had undertaken the mentorship preparation module (997/998 equivalent) or similar teaching qualification. There were fewer midwives with a teaching qualification than in phase 2. There was no difference between the comparisons Trust in 2003 and 2005/6. However there were significantly less midwives in 2005 than 2003 in the intervention Trusts undertaking post-registration teaching qualifications.

Post-registration education

A total of 31 (21.4%) midwives were undertaking post-registration education during 2005 compared to 47 (28.3%) in 2003. These numbers reflect the limited resources available for CPD nationally. Mentorship modules were a priority to support student midwives in their pre-registration programme. The majority of midwives funded their own external study days.
The evaluation of an educational programme on the midwives' perceived level of competency undertaking perineal repair: 2005/2006

This part is divided into eight sections and reports the results which support the hypothesis that: *A work-based module and in-service education in perineal repair for midwives was effective in increasing their perceived level of competency undertaking this skill.*

**Attendance at perineal repair workshops and work-based module**

A total of 88 (60%) respondent midwives attended in-service perineal repair workshops across all Trusts. However, this figure is misleading because in practice, 208 midwives attended the workshops that I facilitated across the five intervention Trusts. The findings reported here represent 85 (83%) midwives attending in the intervention Trusts and 3 (3.4%) in the independent workshops in the comparison Trust commended in December 2004. There was no significant difference in the numbers of midwives between intervention Trusts. 25 (17%) midwives attended an instructor's OSCE preparatory study day in the intervention Trusts to assist in the teaching, supervision and assessment of midwives' competency. A total of 14 (9.6%) midwives from the intervention Trusts accessed the post-registration module in perineal repair at the University of Surrey.

**Numbers of midwives undertaking perineal repair following an educational intervention in 2005/6**

In all, a total of 135 (93.1%) midwives claimed to undertake perineal repair across all Trusts in 2005/2006: 111 (64.4%) midwives in the intervention Trusts and 41 (95.3%) midwives in the comparison Trust with no significant differences between the two (Pearson Chi-Square 3.076 df 5 $P > .688$). There was no significant difference in the numbers of midwives across the Trusts who claimed to undertake perineal repair between phases 2 and 4 (Pearson Chi-Square 1.959 df 1 $P > .162$) or between professional groups (Pearson Chi-Square 1.265 df 3 $P > .737$). However, there were a greater number of certificated midwives across all Trusts undertaking perineal repair than in phase 2.
Midwives’ perceived level of competency following the perineal repair workshops 2005-2006

Using the same criteria and model for assessing perceived competency/proficiency as in phase 2 (DACUM 1987), table 11.1 reports the numbers of midwives’ and their perceived levels of competency following the educational programme in the five intervention Trusts and independent programme in the comparison Trust respectively. Due to the nature of the quasi-experimental design of this study it would have been impossible not to have taken into account the probable Hawthorn effect influencing all midwives working in the delivery suite or community across all Trusts. It was appropriate therefore to analyse and report the differences in perceived levels of competency of all midwives pre- and post-intervention.

Table 11.1 Midwives perceived level of competency following an educational intervention programme in perineal repair 2005 /2006

| Trust | A Intervention | N = | % within Trust | % of Total | B Intervention | N = | % within Trust | % of Total | C Intervention | N = | % within Trust | % of Total | D Intervention | N = | % within Trust | % of Total | E Intervention | N = | % within Trust | % of Total | F Comparison | N = | % within Trust | % of Total | Total |
|-------|----------------|-----|----------------|------------|----------------|-----|----------------|------------|---------------|-----|----------------|------------|---------------|-----|----------------|------------|---------------|-----|----------------|------------|--------|-----|
|       | level 0 | level 1 | level 2 | level 3 | level 4 | level 5 | level 6 |       | level 0 | level 1 | level 2 | level 3 | level 4 | level 5 | level 6 |       | level 0 | level 1 | level 2 | level 3 | level 4 | level 5 | level 6 |       | level 0 | level 1 | level 2 | level 3 | level 4 | level 5 | level 6 |       |       | level 0 | level 1 | level 2 | level 3 | level 4 | level 5 | level 6 |       |       |
|       | 1 | 0 | 2 | 1 | 11 | 5 | 8 |       | 3.6% | 0% | 7.1% | 3.6% | 39.3% | 17.9% | 28.6% | 100.0% |       | 1 | 0 | 0 | 2 | 8 | 2 | 6 |       | 5.3% | 0% | 0% | 10.5% | 42.1% | 10.5% | 31.6% | 100.0% |       | 1 | 0 | 0 | 0 | 2 | 1 | 6 |       | 7.1% | 0% | 0% | 1.4% | 5.5% | 1.4% | 4.1% | 13.1% |       | 2 | 0 | 0 | 0 | 1 | 7 | 3 |       | 6.7% | 0% | 0% | 6.7% | 46.7% | 20.0% | 20.0% | 100.0% |       | 1 | 0 | 0 | 0 | 1 | 7 | 3 |       | 7% | 0% | 0% | 7% | 4.8% | 2.1% | 2.1% | 10.3% |       | 3 | 0 | 0 | 2 | 4 | 3 | 2 |       | 10.5% | 0% | 10.5% | 21.1% | 15.6% | 10.5% | 31.6% | 100.0% |       | 1 | 0 | 0 | 0 | 1 | 5 | 10 |       | 2.3% | 0% | 2.3% | 11.6% | 23.3% | 27.9% | 32.6% | 100.0% |       | 1 | 0 | 0 | 0 | 0 | 5 | 10 |       | 7% | 0% | 7% | 3.4% | 6.9% | 8.3% | 9.7% | 29.7% |       | 1 | 2 | 5 | 15 | 46 | 25 | 43 |       | 6.2% | 1.4% | 3.4% | 10.3% | 31.7% | 17.2% | 29.7% | 100.0% |       | 1 | 2 | 5 | 15 | 46 | 25 | 43 |       | 6.2% | 1.4% | 3.4% | 10.3% | 31.7% | 17.2% | 29.7% | 100.0% |       |

Key: Levels descriptors

<table>
<thead>
<tr>
<th>0 - novice</th>
<th>2</th>
<th>advanced</th>
<th>3</th>
<th>competent</th>
<th>4 - 5</th>
<th>proficient</th>
<th>6</th>
<th>expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>novice</td>
<td>2</td>
<td>advanced</td>
<td>3</td>
<td>competent</td>
<td>4 - 5</td>
<td>proficient</td>
<td>6</td>
<td>expert</td>
</tr>
</tbody>
</table>
135 (93.1%) midwives stated that they were able to undertake perineal repair in phase 4. On closer analysis and using the descriptors in the DACUM model, of the 111 (64.8%) midwives in the intervention Trusts claiming to undertake perineal repair, 14 (13.7%) perceived that they were unable to undertake the skill without some degree of supervision (levels 0-2, novice to advanced beginner) compared to 43 (17.4%) midwives in phase 2. In practical terms, 88 (86.2%) midwives in the intervention Trusts perceived they were able to repair without supervision (levels 3-6 competent, proficient or expert) in phase 4 compared to 102 (40.3%) in phase 2. Findings were similar in the comparison Trust. 39 (90.8%) midwives perceived that they required no supervision in phase 4 compared to 18 (85.7%) in phase 2. These figures would seem to indicate that education made some difference to the midwives' level of perceived competency.

The Mann-Whitney U test for two independent groups was used to test the difference in the midwives' perceived levels of competency pre-and post-intervention perineal repair workshops/module. There was a significant difference in the number of midwives who perceived themselves to be at the minimum level of competency (level 0). 8 (3.2%) midwives post-intervention compared to 36 (14.6%) pre-intervention (5896.5 Z -2.775 P < .006 2 tailed). There was a non-significant difference in the comparison Trust pre- and post-independent intervention (Mann-Whitney U 336.000 n 64 P > .084 2 tailed). However, there were an increased number of midwives in the comparison Trust who claimed to practise at higher levels of competency (levels 4 and 5) in phase 4.

The calculated mean perceived level of midwives' competency in the intervention Trusts was 4.15 with a range of 0-6 and SD of 1.720. The midwives' mean level was 4.67 with a range of 0-6 and SD of 1.322 in the comparison Trust. The Mann-Whitney U Test was repeated in phase 4 to test the difference between mean scores of midwives' perceived competency undertaking perineal repair in the intervention and comparison Trusts. There was no significant difference between mean scores (1832.000, Z -1.616, P > .106 (2-tailed) or between pre- and post-intervention. The small difference in the comparison Trust at level 5 may be attributed to the reporting of a greater number of midwives working in the delivery suite compared to other ward areas across all Trusts. Figure 11.1 reports
the midwives’ mean perceived levels of competency between intervention and comparison Trusts.

**Figure 11.1 Midwives’ mean perceived levels of competency between intervention and comparison Trusts following an educational intervention in 2005**

Attendance at perineal repair workshops appears to have had a positive effect in reducing the numbers of midwives who reported that they were unable to repair competently (level 0 -1) in phase 4. In addition the numbers of midwives who could undertake this procedure without further supervision (levels 4 and 6) had increased. The percentage of midwives who were able to lead, instruct and assess in perineal repair (level 6) increased marginally from 21.1% (30) in phase 2 to 29.7% (29) in phase 4. The most noticeable change was in levels 4 and 6: independent and expert practice.

The up-date preparation and summative assessment of competency in perineal repair for instructing midwives through the OSCE process may have contributed to this small increase in perceived competency as midwives in the preparatory study day had voiced an interest in supporting colleagues perform this activity.
There were no significant differences in perceived competency across professional groups (Kruskal-Wallis Chi-Square 6.557 df 3 P > .087). Figure 11.2 reports the percentage of midwives who reported higher level of perceived competency post-intervention.

**Figure 11.2 Midwives' perceived levels of competency in perineal repair pre-and post perineal repair workshops in intervention trusts.**

![Chart showing percentage of midwives reporting higher level of competency pre- and post-intervention.]

**Assessment of competency in perineal repair – 2005/2006**

A total of 83 (57.2%) midwives had been formally assessed in the delivery suite undertaking perineal repair during phase 4. 45 (31%) midwives were assessed by the senior labour ward midwife across all 6 Trusts. More midwives were formally assessed by doctors in the comparison Trust (6, 4.1%). These findings are similar to phase 2. 21 (14.5%) midwives in the intervention Trusts had been assessed by their OSCE midwife using the new levels descriptor (DACUM 1987). 34.5% of midwives continued to use self or peer assessment. There was no significant difference in the numbers of midwives not receiving some kind of formal assessment between phases 2 and 4.
Effectiveness of a work-based module inclusive of workshops on the midwives' perceived level of competency

A total of 12 midwives completed a work-based module in 2004 and 2005 in the intervention Trusts and undertook a summative assessment in the theory and practice of perineal repair. 3 of the original 6 midwives withdrew from the module in 2005 due to organisational difficulties and unforeseen personal circumstances. The numbers of midwives undertaking the module alone were therefore inadequate to apply inferential statistics and statistical significance.

12 (100%) midwives undertook the OSCE for the assessment of their competency undertaking the assessment and repair of perineal trauma with their supervising midwife and achieved a minimum level of 4. All midwives maintained or increased their perceived levels of competency. Table 11.2 reports the differences in perceived levels of competency following the work-based module.

Table 11.2 Midwives' perceived level of competency pre-and post-module attendance

<table>
<thead>
<tr>
<th>Trusts</th>
<th>Midwives' perceived level of competency prior to module in April 2004</th>
<th>Level six months post module</th>
<th>Midwives perceived level of competency prior to module in September 2005</th>
<th>Level six months post module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al</td>
<td>Midwives A level 3 B level 0 C level 0</td>
<td>5</td>
<td>Midwives A level 0</td>
<td>4</td>
</tr>
<tr>
<td>BI</td>
<td>Did not attend</td>
<td>B level 4</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>CI</td>
<td>Did not attend</td>
<td>Did not attend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DI</td>
<td>A level 0 B level 6 C level 0 D level 5 E level 1 F level 0</td>
<td>4</td>
<td>C level 5 D level 6 E level 2 F level 5</td>
<td>Discont</td>
</tr>
<tr>
<td>EI</td>
<td>Did not attend</td>
<td>Did not attend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>Not provided</td>
<td>Not provided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>Level mean = 1</td>
<td>Level mean = 4</td>
<td>Level mean = 3</td>
<td>Level mean = 4</td>
</tr>
</tbody>
</table>

246
Midwives' perceived knowledge surrounding perineal repair literature and current recommendations following perineal repair workshops

Midwives' perceived knowledge was acquired from a number of different sources such as external study days and peer group learning thus credit is not attributed solely to the in-service workshops and module. These findings demonstrate that midwifery knowledge was constructed through action learning sets, self-directed and experiential learning and reflection on action. Knowledge transfer also occurred during the mentoring of student midwives and observing and participating with expert practitioners in the delivery suite, therefore statistical findings are interpreted with this in mind.

There was a non-significant difference in the numbers of midwives familiar with the literature surrounding perineal trauma management during phase 4 in the pre-and post-intervention groups. 17 (56.7%) midwives, were familiar to a large extent with the continuous subcuticular repair technique and RCOG (2004) perineal trauma classifications in phase 4 compared to 13 (43.3%) in phase 2 (Independent-samples t-test pre-intervention group M = 2.95 SD = 1.108. post-intervention group M 3.21 SD 1.172; t =-1.734 P < .084). The extent to which midwives were familiar with the literature and able to apply their new knowledge to clinical practice was strongly positively correlated (r = .647, n =102, P < .000).

These findings compare favourably with the pre-intervention Trusts in phase 2 where there was a weak but positive correlation (r = .208, n 145, P < .012).

Similar results were found in the comparison Trust. 11 (84.6%) midwives were familiar to quite an extent in phase 4 compared to 2 (15.4%) in phase 2. While this finding was practically significant the difference did not reach statistical significance when applying the independent-samples t-test (pre-comparison group M 3.19, SD = .928, post-comparison group M 2.86, SD 1.265 t =1.062 P >.108). However, there was a strong positive correlation between familiarity with the literature and the extent midwives were able to apply their new knowledge to their practice in the comparison Trust in phase 4 (r = .685 n 43, P < .000) demonstrating a stronger correlation in phase 4 compared to phase 2 (r = .405 n 21, P < .000).
New information which midwives in the study found they could relate directly to their practical experience included: an increased level of awareness of obstetric anal sphincter injuries (OASIS) and the importance of perineal trauma assessment; identification and degree of trauma using the RCOG (2004) classifications and the perineal trauma proforma. A review of the anatomical structures of the perineum and anorectum provided midwives with a greater understanding of how to assess trauma accurately, clarifying the rationale and recommendations for the repair all second degree trauma.

Assessment for OASIS undertaken pre-and post-repair was considered more frequently by midwives in phase 4 compared to rarely in phase 2. The change in practice towards a continuous and subcuticular repair technique resulted in part from the discussion of current evidence, the participation in the procedure in the workshops and the confidence midwives' had gained to integrate new knowledge and skills in clinical practice. Educational factors found to affect the midwives' perceived level of knowledge drawn from post-intervention questionnaire free responses and focus group interviews are reported in table 11.3.

Table 11.3 Factors influencing perceived knowledge from an educational intervention in perineal repair – 2005 /2006
### Integrated practical knowledge – workshops and work-based learning

<table>
<thead>
<tr>
<th>Propositional knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion of current evidence for best practice</td>
<td></td>
</tr>
<tr>
<td>Importance of suturing muscle and repair of all second degree tears</td>
<td></td>
</tr>
<tr>
<td>Increased depth of knowledge of perineal and anal muscles</td>
<td></td>
</tr>
<tr>
<td>Exploration of new trauma proforma and assessment of trauma</td>
<td></td>
</tr>
<tr>
<td>Handbook – Principles and Practice of Perineal Repair for the Midwife</td>
<td></td>
</tr>
<tr>
<td>RCOG (2004) classification of trauma</td>
<td></td>
</tr>
<tr>
<td>Enhanced knowledge of trauma scoring</td>
<td></td>
</tr>
<tr>
<td>Encouraged me to research more into the subject</td>
<td></td>
</tr>
<tr>
<td>Prompted interest in the module to become an OSCE instructor</td>
<td></td>
</tr>
<tr>
<td>Confidence developed from new theory</td>
<td></td>
</tr>
<tr>
<td><strong>Psychomotor skills</strong></td>
<td></td>
</tr>
<tr>
<td>Practise suturing on models</td>
<td></td>
</tr>
<tr>
<td>Looking at trauma diagnostics and good assessment and evaluation of a tear</td>
<td></td>
</tr>
<tr>
<td>Importance of rectal examination pre- and post repair/intact perineum</td>
<td></td>
</tr>
<tr>
<td>Continuous non-locking technique – confidence in technique</td>
<td></td>
</tr>
<tr>
<td>Measurement of trauma</td>
<td></td>
</tr>
<tr>
<td>Helped consolidate previous experience</td>
<td></td>
</tr>
<tr>
<td>Understanding how to assess perineal trauma, especially third degree tears</td>
<td></td>
</tr>
<tr>
<td>Up-dated assessment skills</td>
<td></td>
</tr>
<tr>
<td><strong>Peer group learning</strong></td>
<td></td>
</tr>
<tr>
<td>Sharing information with colleagues from different Trusts</td>
<td></td>
</tr>
<tr>
<td><strong>Practical knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>Theory from workshop integrated with work-based learning</td>
<td></td>
</tr>
<tr>
<td>Enhanced skills rather than knowledge, but now aware of third degree tear</td>
<td></td>
</tr>
<tr>
<td>When and when not to suture</td>
<td></td>
</tr>
<tr>
<td>1-1 teaching on the delivery suite</td>
<td></td>
</tr>
<tr>
<td><strong>Attitudes and values</strong></td>
<td></td>
</tr>
<tr>
<td>Impact of muscle structure on perineal outcome for women, short and long term</td>
<td></td>
</tr>
<tr>
<td>Provided a rationale for suturing and women's choice</td>
<td></td>
</tr>
</tbody>
</table>

For many midwives new information was a means of rethinking their practice. Midwives commented on the impact the workshops had made on their clinical practice:
‘It (the workshop) has taught me to do subcuticular suturing and repair of labia which extends my competence’
Trust El (Q2005) mw193 p:6

‘Feel confident that I am using a technique which follows latest recommendations’
Trust Al (Q2005) mw1 p:2

Some of the longer qualified midwives had made significant changes to their repair technique reporting greater confidence. Their senior labour ward midwife noted:

‘The midwives who have attended the workshops have given very positive feedback and for me there was a gap in my knowledge and so I was very pleased...I have been suturing since 1986, there were a lot of midwives the same. Since the workshop with help, they are not afraid to ask me to help them to do it, there are some that are just so confident’ ...it is brilliant to see two or three of them doing it...some say yes I can do it, but it took years for some of them’
Trust Bl (FG2005) mw2 p:2

‘Understanding how to assess perineal trauma, especially third degree tears’
Trust Cl (Q2005) mw109

‘I wouldn’t have made changes to my practice without this workshop’
Trust Al (Q2005) mw10

Theory relating to the implications of repair/non-repair boosted midwives’ confidence and the evidence they were able to share with women about the procedure and its implications:

‘I really had a good knowledge base, so I was quite confident and with the supervision, it all kicked off and using the proforma was quite good because I had evidence under my belt’
Trust Al (FG2005) mw7 p:1
Findings in the comparison Trust were similar to those in the intervention Trusts. Midwives valued the independent workshops provided by two full time labour ward midwives, stating the influences the instruction and support had on their future practice skills:

‘...research based, possibly more confidence, reinforcement for practice and made me aware that I am still doing things the way they should be done...it enables you to check third degree tears although an invasive procedure, the check makes you realise why you have to do it, its good...its something you always do post suturing (rectal examination) now that you know it is accepted practice, you are taught to do it before suturing as well’

Trust FC (FG2005) mw 7 p:2

‘It’s also the use of the Peri-Rule, again this has come from research...it is used even if you haven’t been on the workshop’

Trust FC (FG2005) mw 9 p:2

Midwives in the comparison Trust had adopted the newly licensed Peri-rules which had been purchased specifically for measuring perineal trauma. Unfortunately, these single use rulers were not considered a necessity in the current financial climate by labour ward managers in the intervention Trusts. Alternatively, midwives were taught in the workshops to use their gloved right fore finger to measure digitally the length and depth of the trauma in centimetres. Recent findings by Lundquist (2004) recommends that trauma involving perineal muscle and extending more than 2 cms in any direction and bleeding requires suturing for good tissue alignment and healing.

Long rotations, up to nine months away from the delivery suite inhibited the confidence some midwives had developed during their various instruction. Some midwives found that despite the workshop and one-to one instruction the fear of suturing women competently was always there.

Midwives identified several aspects of the workshop which required review: more time to dedicate to supervision of suturing and practise for complete beginners; half day workshops for theory and practise; two facilitators for larger groups;
having adequate equipment; different educational levels for those with differing experiences; study sessions required on a regular basis. A video was considered to be a useful tool for visualising the colour and separation of the vaginal mucosa, muscle and skin layers. A video was currently being prepared for midwives (Kettle 2005, personal communication). Coloured laminated photographs were used to illustrate degrees of trauma as an alternative.

**Effectiveness of the module for enhancing midwives’ perceived knowledge**

At the commencement of the two module intakes, the midwives’ knowledge relating to the prevention of perineal trauma, the anatomy and function of the pelvic floor muscles and the implications associated with perineal damage was very limited. I perceived that there was little awareness of the association of poor or no repair with urinary or faecal incontinence. Midwives were also unable to make links with the function of perineal muscles following repair/non repair in respect to muscular strength, perineal integrity and sexual function. However, 3 midwives reflected on the effects the module theory had made to their competency and approach to women’s care. One midwife explained:

‘The module was evidence-based, very helpful to make you think of the evidence, does the perineum require suturing? Considering the women’s consent as well...when you are explaining something that is evidence-based the women are more understanding of the reasons they probably need suturing so that was a great help, the research figures related to a more positive approach to the women’

Trust DI (FG2005) mw 1:p2

The same senior labour ward midwife explained how the module had changed her as a practitioner and her skills in repair technique:

‘...so much confidence with subcuticular suturing whereas before I had never been trained...I am quite comfortable with that, didn’t see the need to change but having been to the course it was very good for me...it highlighted the problems it could cause to women for years to come, in the beginning perhaps and wanting to do a good job. I was so narrow minded...I am identifying more third degree tears since your study’
Table 11.4 reports the factors which midwives considered forwarded their learning over and above attending a single workshop. Factors making a significant difference to the midwives learning were: a greater understanding of the variety of psychosocial problems women encounter resulting from perineal trauma; the contribution of the marriage guidance counsellor from RELATE; litigation issues presented by the barrister; experience from the 'user'; visits to the urogynaecology clinic; supervision and assessment with an OSCE midwife; learning through the OSCE process; learning from supervising others in the delivery suite; and feelings of empowerment. Organisational difficulties are reported later in the chapter.
Table 11.4 Midwives’ perceived competency in perineal repair following completion of a work-based module - April 2004 and September 2005 cohorts

<table>
<thead>
<tr>
<th>Factors affecting perceived competency following a work-based module in perineal repair</th>
<th>Practical Skills</th>
<th>Attitudes and values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propositional Knowledge</td>
<td>Flexibility of techniques with jagged tears</td>
<td>Awareness of women’s sexual problems with poor or no repair.</td>
</tr>
<tr>
<td>Women’s perspective from RELATE</td>
<td>Increased confidence</td>
<td>Urinary and faecal incontinence – non repair</td>
</tr>
<tr>
<td>Guidelines and policies</td>
<td>Suturing labial tears</td>
<td>Women’s perspective from RELATE</td>
</tr>
<tr>
<td>RCOG guidelines for third degree tears – depth of anal sphincter tear</td>
<td>Proforma assisted in assessing trauma instilling confidence</td>
<td>Organisational issues</td>
</tr>
<tr>
<td>Evidence to support rectal examination x 2</td>
<td>Building confidence in continuous technique</td>
<td>Time constraints</td>
</tr>
<tr>
<td>Litigation issues</td>
<td>Witnessing repairs</td>
<td>Need recognised time release from work place</td>
</tr>
<tr>
<td>Perineal trauma proforma</td>
<td>Experience</td>
<td>Lack of study time</td>
</tr>
<tr>
<td>Knowledge increased confidence and competency</td>
<td>Boosted confidence</td>
<td>Staffing issues</td>
</tr>
<tr>
<td>Peer group learning</td>
<td>Learning from new experiences</td>
<td>Chronic staffing shortage</td>
</tr>
<tr>
<td>Study days at Uni, discussion groups, action learning sets.</td>
<td>Learning from supervising others</td>
<td>LW ‘overload’ with module midwives</td>
</tr>
<tr>
<td>Sharing midwives’ experience through reflection</td>
<td>Audit of healing</td>
<td>Shortage of expert OSCE midwives</td>
</tr>
<tr>
<td>Learning from ‘user perspective’</td>
<td>Observation of secondary intention healing</td>
<td>Working shift after study day</td>
</tr>
<tr>
<td>Experience of third degree tear</td>
<td>Gave confidence to start procedure</td>
<td>Part-time hours</td>
</tr>
<tr>
<td>Visit to urogynaecology clinic and ‘stress tests’</td>
<td>Formal assessment</td>
<td>Opportunities</td>
</tr>
<tr>
<td>Support</td>
<td>Confidence to undertake OSCE</td>
<td>Moved from D/S</td>
</tr>
<tr>
<td>Support/perceived lack of support from LW manager</td>
<td>Gaining OSCE certificate</td>
<td>Short rotation to D/S</td>
</tr>
<tr>
<td>Able to discuss learning outcomes with named supervisor</td>
<td>Self-awareness</td>
<td>Midwives working in community and lack of LW experience</td>
</tr>
<tr>
<td>Support from colleagues on the module</td>
<td>Learning to be more assertive</td>
<td>Lack of opportunity to witness and repair from experts</td>
</tr>
<tr>
<td>Lack of support from some managers</td>
<td>Feelings of empowerment to approach suturing with confidence</td>
<td>Community staffing levels low</td>
</tr>
<tr>
<td>Delayed OSCE</td>
<td>Learning from expert OSCE midwife</td>
<td>OSCE supervising levels low</td>
</tr>
<tr>
<td>OSCE midwife very supportive</td>
<td></td>
<td>Lack of opportunity for supervision</td>
</tr>
</tbody>
</table>
The midwives’ approach to perineal repair techniques following an educational intervention – practical skills

This section reports the significant changes in the repair techniques midwives adopted following the educational intervention and answers the main research question further by confirming that combined, education, experience and confidence facilitates positive change.

From the total number of midwives who undertook repair in the intervention and comparison Trusts, 91 (62.8%) midwives were using the recommended (RCOG 2004) continuous non-locking stitch to the vaginal wall. 47 (32.4%) midwives continued to use the locking stitch compared to 88 (53%) in phase 2. For the repair of perineal muscle, 89 (61.4%) midwives had changed from the interrupted to continuous suture technique with the remaining 27 (18.6%) and 23 (15.9%) midwives respectively using interrupted or a combination of the two techniques. The frequency of which midwives used the interrupted technique was lower than reported in phase 2.

The most significant change made by midwives in their repair technique during phase 4 was to the perineal skin. 82 (56.6%) midwives were using the continuous subcuticular technique. 23 (15.9%), 20 (13.8%) and 13 (9.0%) midwives respectively were applying interrupted, a combination of both or combination and none suturing some of the time. 1 (.7%) midwife omitted to repair second degree tears compared to 16 (9.6%) midwives during phase 2 reflecting the reverse trend towards the repair of all second degree traumas in 2005/2006.

There was a significant difference between professional groups in the numbers adopting the continuous technique when comparing all midwives pre- and post-intervention. 45 (60%) Diploma, 36 (62.1%) Degree and 4 (57.1%) MSc midwives were using a continuous repair technique to the vaginal wall compared to 70 (40.9%) certificated midwives (Pearson Chi-Square 47.616 df 15 \( P < .000 \)). A reverse difference was found with a higher percentage of degree and diploma midwives using a continuous suture to perineal muscle. There was a non-significant difference in the subcuticular repair technique to perineal skin with 9
(15.5%) degree midwives using this technique in phase 2 compared to 22 (37.9%) in phase 4.

There was a significant difference in the repair techniques between the pre-and post-intervention groups. 71 (49%) midwives had changed from using a continuous locking stitch to the vaginal wall in phase 2 to 63 (66.3%) using the non-locking technique in phase 4 (Pearson Chi-Square 17.101 df 4 \( P < .002 \)). More midwives in the comparison Trust were using a non-locking technique in phase 4, 27 (90%) compared to 3 (10%) in phase 2 (Pearson Chi-Square 15.607 df 3 \( P < .001 \)).

56 (58.3%) midwives in the post-intervention groups were using a continuous suture to the perineal muscle in phase 4 compared to 20 (21%) in phase 2 reaching statistical significance (Pearson Chi-Square 34.698 df 3 \( P < .000 \)). There was no significant difference in the comparison group pre/post intervention which may be attributed to the established use of the continuous Fleming technique in this Trust, omitting a locking stitch to the vaginal wall.

There was a highly significant difference in the techniques applied to the perineal skin in the pre/post-intervention groups. 45 (62.5%) midwives used a continuous subcuticular stitch to the skin in phase 4 compared to 21 (25%) in phase 2. 36 (85.7%) midwives adopted the continuous subcuticular technique in the comparison Trust in phase 4 compared to 13 (61.9%) in phase 2. These findings did not reach statistical significance (Pearson Chi-Square 5.845 df 3 \( P > .119 \)). Table 11.4 reports the differences in repair techniques adopted by midwives in 2003 and 2005/6.
Table 11.5 Comparison of repair techniques adopted by midwives in six NHS Trusts in S.E. England in 2003 and 2005/6

<table>
<thead>
<tr>
<th>Repair Techniques</th>
<th>2003</th>
<th>2005</th>
<th>P value - Pearson’s Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VAGINAL WALL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locking</td>
<td>88 (53%)</td>
<td>47 (32.4%)</td>
<td><em>P &lt; .002</em></td>
</tr>
<tr>
<td>Non-locking</td>
<td>65 (39.2%)</td>
<td>91 (62.8%)</td>
<td><em>P &lt; .001</em></td>
</tr>
<tr>
<td><strong>MUSCLE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrupted</td>
<td>78 (47%)</td>
<td>27 (18%)</td>
<td><em>P &lt; .000</em></td>
</tr>
<tr>
<td>Continuous</td>
<td>52 (31.3%)</td>
<td>89 (61.4%)</td>
<td><em>P &lt; .000</em></td>
</tr>
<tr>
<td>Combination</td>
<td>2 (1.2%)</td>
<td>23 (15.9%)</td>
<td>-</td>
</tr>
<tr>
<td><strong>SKIN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrupted</td>
<td>66 (39.8%)</td>
<td>23 (15.9%)</td>
<td><em>P &lt; .002</em></td>
</tr>
<tr>
<td>Continuous subcuticular</td>
<td>40 (24.1%)</td>
<td>82 (56.6%)</td>
<td><em>P &lt; .000</em></td>
</tr>
<tr>
<td>Combination/tech</td>
<td>20 (15.9%)</td>
<td>20 (13.8%)</td>
<td>-</td>
</tr>
<tr>
<td>Combination/repair/non</td>
<td>1 (.7%)</td>
<td>13.9%)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Numbers of midwives</strong></td>
<td>166</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

Midwives’ application of suturing techniques was based on a number of factors: Newly acquired information; confidence in the continuous method; frequency applying a new or up-dated technique; the type of perineal trauma observed. Factors influencing the midwives’ decisions were similar to those reported in table 8:14 supported by the comments made in focus groups discussions:

‘Continuous and subcuticular...sometimes a bit of both, if it is very complicated I have to use interrupted’
Trust BI (FG2005) mw3p:3

Midwives’ heightened awareness of the advantages of the continuous technique towards women’s comfort and perineal healing influenced their change in practice. Midwives’ skills in trauma assessment and exercising clinical judgement had improved significantly. The practice development midwife (PDM) in Trust BI identified these changes in their focus group discussion:

‘I think a lot of people that did the workshops with you found it very valuable. They have changed their techniques and they have been introducing those to
their students. Obviously a lot of learning is by observation so people are picking it up and asking...I think it has made them aware to bring their own practice up-to-date with current evidence which surrounds perineal suturing technique. There are people moving towards the continuous and subcuticular technique...and people are learning to assess what they have got in front of them but if it is a tear that they have to pull together piece by piece then they are going back to the old interrupted sutures, so it's on a very individual basis'.
Trust Bl (FG2005) mw1 p:1

Feedback received from the practice development midwife in Trust El emphasised the change in the trend of non-suturing second degree tears:

'They found them useful, [workshops] thought provoking. I suppose we have been through the whole cycle of suturing everything and then that research that was done which suggested perhaps you didn't need to ....I think people are coming out of the other end of that and looking at the trauma to the perineum in a slightly different way because of what you were saying in your workshops...people are suturing more than they did beforehand'
Trust El (FG2005) mw1 p:1

The realisation in the workshops that there was no robust evidence to support non-suturing enabled midwives to reflect and actively change their practice. A PDM observed:

'...It has changed dramatically, [trend] midwives thought there was evidence to support non-suturing and they didn't actually know and when you say there is no firm evidence it's been a bit of a wake-up call'
Trust Ci (FG2005) mw1 p:2

The suturing of all second degree tears was unanimous across all Trusts and appeared to be influenced by the evidence presented in the workshops and the introduction of the trauma proforma:

'Second degree tears, they are sutured...change, a change in practice from teaching really'
Chapter Eleven

Data Analysis and Results: 3

Trust Al (FG2005) mw4 p:2

One experienced labour ward coordinator explained how the workshop in the module had changed her repair technique and her attitude towards women's comfort:

'I found it extremely valuable, I mean I have been a midwife for years and I have always learnt to do interrupted suturing, I've always wanted to do a continuous method and since I have attended your workshop I haven't looked back, I'm just like a changed midwife really... it has definitely changed my practice because I have found it a lot easier rather than interrupted, the way it was taught in the workshop it takes me half the time it used to... because the workshop was research based, I feel it makes it more comfortable for the woman and it looks better... I just feel fulfilled it has changed my practice'


Midwives' were also much more aware of the importance of accurate trauma assessment. However, there were no significant differences in the level of importance midwives assigned to the assessment of perineal trauma between phases, Trusts or professional groups. There was a non-significant difference in how midwives perceived gapping, jaggedness and direction of the tear. A higher percentage of all midwives in phase 4 considered these areas very important in the assessment process.

Factors influencing the midwives' competence associated with the educational intervention

Multiple regression analysis was used again to predict which variables made the most significant contribution to the midwives' perceived competency undertaking perineal repair.

**Frequency of repair and confidence in skill**

Similar to the findings in phase 2, frequency (experience) undertaking perineal repair made the strongest contribution to perceived competency (beta coefficient
In contrast, confidence and support (beta coefficient .068 $P > .342$ and -.019 $P > .792$ respectively) made non-significant contributions.

There was very little difference in the extent of frequency of which midwives undertook perineal repair between phases 2 and 4. However, 43 (13.8%) midwives undertook repair more frequently in phase 4 compared to 33 (19.0%) during phase 2. There was a non-significant difference in frequency of repair between professional groups with certificated midwives undertaking the procedure more frequently (Kruskal Wallis Chi-Square .526, df 3 $P < .913$).

Following an educational intervention across all trusts there was a stronger positive correlation coefficient between the frequency midwives undertook perineal repair and their perceived level of confidence between phases 4 and 2. This association showed that the more experience midwives gained the more confident they felt undertaking the procedure ($r = + .662 \ n = 94, \ P < .000$). Similarly, frequency of repair was strongly positively correlated with perceived level of competency ($r = + .313 \ n = 134 \ P < .000$). In addition, the more self-confident midwives felt about undertaking repair the higher their perceived level of competency ($r = + .592 \ n = 136 \ P < .000$). Table 11.6 reports the association between frequency, confidence and perceived competency in perineal repair following an educational intervention.
Table 11.6 Correlation between frequency, confidence and midwives’ perceived level of competency in perineal repair 2005

<table>
<thead>
<tr>
<th></th>
<th>extent of confidence undertaken perineal repair</th>
<th>Frequency of undertaking perineal repair</th>
<th>perceived level of competency assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>extent of confidence</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>.579**</td>
</tr>
<tr>
<td>undertaking perineal</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.592**</td>
</tr>
<tr>
<td>repair</td>
<td>N</td>
<td>136</td>
<td>134</td>
</tr>
<tr>
<td>Frequency of</td>
<td>Correlation Coefficient</td>
<td>.579**</td>
<td>1.000</td>
</tr>
<tr>
<td>undertaking perineal</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.313**</td>
</tr>
<tr>
<td>repair</td>
<td>N</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td>perceived level of</td>
<td>Correlation Coefficient</td>
<td>.592**</td>
<td>.313**</td>
</tr>
<tr>
<td>competency assessed</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>136</td>
<td>134</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.05 level (2-tailed).

Experienced midwives however, were often the ones reluctant to change their practice, inhibiting the experience of newly qualified midwives. This attitude is reflected in the comments made by a delivery suite coordinator in one focus group discussion:

‘What worries me is that the older experienced midwives who are coordinators still think they aren’t bothered to come to your workshop, they say when you are in a hurry its much quicker to use the old method, but I beg to differ, there is the evidence, it is more comfortable, but they still...in the community they still use the old method’.

(Trust Bl (FG2005) mw2p2)

Perceived confidence following perineal repair workshops and module

Following the workshops in the intervention Trusts, 32 (33.3%) midwives considered they were very confident carrying out various repair techniques. 44 (45.8%) midwives stated that they were quite confident. The midwives’ level of perceived confidence was similar in the comparison Trust. 14 (35%) midwives considered that they were very confident with 20 (50%) stating they were quite confident. There were no significant differences between the intervention and comparison trusts in levels of perceived confidence (Mann-Whitney U 2061.0 n 145 P>.542).
There was a non-significant difference in the midwives’ level of perceived confidence undertaking repair pre- and post-intervention (Mann-Whitney U 6063.0 n 226 P > .690). Certificated midwives reported higher levels of confidence post-intervention compared to the remaining professional groups. Midwives who continued to use the interrupted suturing technique did so because the positive experience and effects using this technique instilled confidence. Similarly, midwives’ ‘tried and tested’ experience using the continuous non-locking subcuticular technique also promoted self-confidence. Confidence implementing a new or up-dated technique was influenced by the experience and frequency of performing it on the delivery suite and the opportunities available for attending the up-date training.

Work-based learning and problem-solving was one of the most important aspects of gaining confidence in the new subcuticular technique as explained by a senior midwife:

'It was the doing, the practising it myself, yes, until you try and do it yourself, it looks terribly easy but when you do it yourself, then you've got to find your own way of doing it. It may be different, holding the instruments, so that’s the best way of learning – the doing'.

(Trust El (FG2005) mw 1p:3)

'Being able to repair Jane’s perineum successfully has definitely boosted my confidence in what was new area of practice for me. This experience enabled me to put theory from the module into practice'.

(Trust Al (Q2005) mw 18 p5)

A consistent finding in the two cohorts of midwives at the completion of the module was their increased confidence in assessing trauma referring to the trauma proforma and completing a repair successfully. Confidence was further enhanced through building on previous knowledge and skills and being supported by their mentor/supervisor enabling them to put these into practice. Another midwife who was already an expert in the skill of repair found that reflecting and sharing experiences with her peers and critically analysing the research evidence in discussion groups provided her with new confidence when
supporting, teaching and assessing other midwives in the delivery suite. This particular midwife provided much support to novice midwives in her Trust undertaking the module.

**Supervisory support and feedback**

There were mixed reports regarding support. Some midwives in both intervention and comparison Trusts found they were unable to attend study days due to limited funding and shortage of staff. They could only attend in their own time. The majority of midwives across intervention and comparison Trusts discussed CPD at 12 month intervals 78 (76.5%) and 31 (72.1%) respectively. The majority of midwives undertaking the module received good supervisory support from their designated OSCE supervisor for instruction when they were available but encountered difficulties in accessing their supervisor for their formative and summative assessments. One midwife who had never undertaken repair in her previous employment reflected in her case study on the confidence she felt with the support of her mentor:

'I had arranged for a senior midwife to supervise and guide me through the process [assessment of trauma]. This made me feel secure ...I could do no harm, but also aware that I may be corrected if necessary. I felt worried about appearing completely incompetent. At the time of suturing I felt anxious and nervous but keen to get started. The presence of a midwife I trusted meant I knew the result would be good and gave me a sense of security and reassurance'

Trust D (module case study 2004 mw 49)

Midwives considered that by receiving feedback on the positive or negative outcomes of their repairs from their supervisors contributed to their self-confidence.
Organisational factors influencing module effectiveness on perceived level of competency

Of the 12 midwives who completed the modules in 2004/5, 5 encountered organizational difficulties which impeded their experience and competency in perineal repair and 2 were consistently transferred from the delivery suite due to staff shortages and necessity for adequate skill mix on other ward areas. Three midwives were undertaking the module simultaneously in one Trust which required extra OSCE midwives for supervision and support which was not always available. Feeling frustrated and disillusioned about the concept of continuing professional development and let down by their managers, 3 midwives considered that they could not contribute adequately to the group work set in the module. As a result these midwives withdrew. Juggling study time and fighting for experience on the delivery suite often created low morale.

My role as insider-researcher and as a supportive coordinator was extremely challenging knowing the organisational constraints the Trusts were experiencing and balancing the needs of the midwives. Following much discussion, correspondence and negotiation with the labour ward manager and heads of midwifery in Trusts A and D, personal development plans were developed jointly with the midwives’ mentors to enable them to complete their practical OSCE nine months later (FN 2004).

All midwives considered that undertaking the required formative and summative OSCE assessments during the module was a powerful driver towards achieving their competency. These findings were in contrast to the midwives attending the Trust workshops where they were responsible for seeking out their own assessment with an OSCE supervisor in their respective Trust. Only three midwives in Trust Cl volunteered to undertake the OSCE following the workshops. The PDM played a significant role in supporting these midwives.
Factors influencing midwives' attitudes and values towards sensitive perineal care following an educational programme 2005/2006

Data generated during phase 2 of the study confirmed that midwives were sensitive to women's immediate short term needs following delivery. Relief of perineal discomfort, avoidance of infection and general physical and psychological wellbeing were a priority. There was some awareness of the sensitive sexual issues related to perineal trauma, repair and healing. However, I perceived that this area was infrequently discussed with women to enable them to make an informed choice about their perineal management post delivery. This part of the chapter answers the third subsidiary research question and shows how midwives' behaviour has been influenced by their positive attitudes and views towards perineal care. This part is divided into six sections.

Model of midwifery care in phase 4

It was appropriate to identify whether midwives had adopted a different model of midwifery care in view of the recommendations made by the National Service Framework (2004), Working Time Directive (2004) and CNST levels within the Trusts. Consistent with phase 2, there were a greater number of midwives reporting a view towards practising a radical model of midwifery care. 33 (43.4%) certificated and 17 (47.2%) diploma midwives respectively. All professional groups followed this trend by reporting a conservative model of care opposed to a liberal model adopted in phase 2. Findings were similar in the intervention and comparison Trusts. However, there were no statistical differences between professional groups or Trusts pre- and post-intervention (Pearson's Chi-Square 14.247 df 10 \( P > .162 \)). Policy changes had not made any significant differences to the way in which midwives followed a model of midwifery care. Some midwives revealed that despite a leaning towards a radical model of care, in reality they were pressured into practising a conservative model, particularly in the hospital setting due to the level of high risk care for women required in their Trust.
**Midwives' views and attitude statements – 2005/6**

Midwives in phase 4 were again requested to indicate their views related to seven attitude statements of perineal care (appendix D:11) to identify whether there had been any change in views following an educational intervention. The scoring of the attitude statements were described in chapter eight. Similar to the findings in phase 2, there was a normal distribution of scores ranging from 18-31, a mean of 25.37 and a standard deviation of 2.383. Total view continuous scores were collapsed into 4 groups of scores. Attitude scores below 20 represented a more negative attitude towards sensitive perineal care and long term problems. Attitude scores between 20-23 were considered neutral with scores between 24 and 31 representing favourable or positive attitudes towards providing holistic, evidence-based competent perineal care. Table 11.7 reports midwives' total scores of the seven attitude statements across professional groups during phase 4.

**Table 11.7 Total view scores of seven attitude statements 2005-2006**

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Total score of seven attitude statements towards perineal care post-intervention</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional certificate N =</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>% within professional qualifications post intervention all</td>
<td>1.3%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Midwifery diploma N =</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>% within professional qualifications post intervention all</td>
<td>2.8%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Midwifery degree N =</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>% within professional qualifications post intervention all</td>
<td>.0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>MSc N =</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>% within professional qualifications post intervention all</td>
<td>.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Total N =</td>
<td>145</td>
<td></td>
</tr>
<tr>
<td>% within professional qualifications post intervention all</td>
<td>1.4%</td>
<td>18.9%</td>
</tr>
</tbody>
</table>

During phase 4, 120 (82.7%) midwives scored between 24 and 31 compared to 114 (86.1%) in phase 2 indicating equally positive or favourable attitudes towards perineal care. There was a non-significant difference in the numbers of midwives scoring 24-27 between pre-and post-intervention, 93 (56%) and 95 (65.5%)
respectively. The most noticeable changes in scores were in the comparison Trust: 29 (20%) midwives scored with more favourable attitudes compared to 12 (7.2%) in phase 2. There were a greater number of certificated midwives with scores of 24-27. However this difference did not reach significance (Kruskal-Wallis Chi-Square .614 df 3 P > .893). There was a significant difference in total means scores for all midwives pre- and post-intervention (Mann-Whitney U 6014.000 P < .012) and means scores of all midwives pre- and post comparison (Mann-Whitney U 293.500 P < .022). There was a different positive non-significant association of high attitude scores equally associated with both radical and conservative models of care in phase 4 reflecting the changes in clinical practice mentioned earlier (Pearson Chi-Square 45.740 df 52 P > .717). There were stronger positive correlations between specific attitude statements post-intervention in midwives across intervention and comparison Trusts which support the strength of their feelings towards instruction and role in perineal repair and the importance attached to the identification of severe trauma and personal audit of perineal healing. There was a change to a stronger positive correlation between the midwives' belief that perineal repair is a normal part of practice and if all midwives were instructed in perineal repair more third and fourth degree tears would be identified ( rho = .315 n 145 P< .000). This change is particularly encouraging and is supported by the comments made by midwives in questionnaire free responses:

'Rotas should arrange all midwives to work on delivery suite, therefore all midwives should be able to repair and should be aware of 3rd and 4th degree tears with specific training'
Trust Bl (Q2005) mw 31 p:15

It was also very encouraging to find that midwives were concerned about their role in auditing perineal healing. There was a strong positive correlation between the role of perineal repair as a normal part of practice and the importance of an audit of perineal healing (r = .176 n 145, P<.035). There was a strong positive association between women's choice in repair/non-repair and importance to women as to who undertakes their repair (r = .208 n 145, P< .012, r = .242 n 145, P< .003). These findings are in contrast to the views of midwives in phase 2 where there was no significant correlation.
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Midwives practicing in the hospital were more likely to follow-up their women after repair, others found it difficult due to early discharge home, working on delivery suite or working part-time hours. Midwives commented:

'Very frequently...I feel it is essential to follow up such an important procedure for personal audit and as a mechanism of debriefing for the woman'
Trust Al (Q2005) mw7 p:13

Despite difficulties visiting women, midwives in all Trusts were aware of the importance of auditing perineal healing pursuing some feedback through the community midwife or by telephoning the women. Midwives undertaking the module were rarely able to follow up women due to staff shortage and lack of time, so they were not routinely inspecting the perineum during the puerperium if women felt comfortable. This trend appears to have developed from providing women with a choice of inspection, early discharge home and restricted community visiting.

**Influence of perineal repair workshops and module on midwives views towards sensitive perineal care**

A greater number of midwives in focus group interviews appeared to demonstrate a heightened awareness and understanding towards perineal anatomy and the negative affects of non-repair on the women's future sexual activity. This included dyspareunia, the association between lack of perineal muscle integrity, tissue alignment, nerve damage and associated urinary and faecal incontinence. Midwives were also more aware of the negative outcomes of missing a third degree tear. Following the module and workshops midwives reflected on the importance to them of the relationship between the perineal anatomy, physiology and associated maternal outcomes:

'Has really made me think about the function and purpose of the muscles and the impact if left inadequately repaired'
Trust Al (Q2005) mw 35
'I also think of the knock on effect, later in life, not just later but several months, the problems for women who haven't been sutured properly or haven't been sutured at all, you have that in mind, that whatever you do at this point could have a lasting effect on that woman'.

Trust El (FG2005) mw 1 p:3

Midwives' perceived that the knowledge gained from attending the workshops or module contributed to greater confidence in providing more comprehensive information to women to enable them to make informed choices about repair/non-repair. Of particular significance, midwives perceived a greater awareness and confidence towards the assessment of third degree tears. This enabled them to act as the woman's advocate, reassuring them of the comfort and healing associated with a continuous subcuticular technique. Some midwives acknowledged that there were gaps in their knowledge particularly regarding the repair of labial lacerations.

New sub-categories to emerge during phase 4 included: valuing the woman's self-dignity; body image; perineal scar tissue and its cosmetic effects; cultural beliefs; providing more informed choice towards perineal management. Table 11.8 reports the multiple factors influencing the midwives' sensitivity towards perineal management following the perineal repair workshops and module in 2004/5.
Table 11.8 Factors influencing midwives’ attitudes and values towards perineal care following an educational programme 2005 -2006

<table>
<thead>
<tr>
<th>Theme 1: Competency</th>
<th>Organisational considerations</th>
<th>Consideration of women’s physical health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-theme: Factors influencing midwives views, and values towards sensitive perineal trauma management following an educational programme</td>
<td>Time constraints and shortage of staff</td>
<td>Pain and infection, lochia and blood loss</td>
</tr>
<tr>
<td>Attitudes and values</td>
<td>Working permanent night duty</td>
<td>Healing of repair/non-repair</td>
</tr>
<tr>
<td>Education</td>
<td>Feedback</td>
<td>Weakness to muscle with non-repair</td>
</tr>
<tr>
<td>Research evidence affecting views on women’s care</td>
<td>Feedback/lack of feedback from women, colleagues and obstetrician</td>
<td>Bladder control and anal involvement</td>
</tr>
<tr>
<td>Heightened awareness of dyspareunia, urinary and faecal incontinence</td>
<td>Problems at subsequent deliveries.</td>
<td>Postnatal advice</td>
</tr>
<tr>
<td>Importance of competence in repair for women</td>
<td>Women’s confidence in midwives’ competence undertaking the repair</td>
<td>Perineal examination following repair</td>
</tr>
<tr>
<td>Module identified women’s long-term problems</td>
<td>Women’s belief in midwives’ clinical judgement</td>
<td>Affects on sex life</td>
</tr>
<tr>
<td>Evidence-based knowledge assisted in a more positive approach to women’s care</td>
<td>Midwives’ views towards women’s care</td>
<td>Resuming sexual activity and dyspareunia</td>
</tr>
<tr>
<td>Practical experience</td>
<td>Repair part of continuity of holistic care</td>
<td>Consequences of poor perineal alignment</td>
</tr>
<tr>
<td>Professional experience</td>
<td>Informed choice in repair/non-repair</td>
<td>Scar tissue and cosmetic effects</td>
</tr>
<tr>
<td>Techniques related to women’s comfort and freedom of pain</td>
<td>Consistency of perineal repair techniques</td>
<td>Women’s self-assessment of healing with a mirror</td>
</tr>
<tr>
<td>Identification of third degree tears</td>
<td>Rectal assessment invasive for women</td>
<td>Women’s long term problems</td>
</tr>
<tr>
<td>Views on perineal care in clinical practice</td>
<td>Fear identifying tear and getting it right</td>
<td>Long term affects of poor or non-repair</td>
</tr>
<tr>
<td>Infrequency of perineal repair</td>
<td>Correct tension of repair/pain</td>
<td>Future pregnancies and deliveries</td>
</tr>
<tr>
<td>Ward allocation</td>
<td>Need for confidence</td>
<td>Importance of pelvic floor exercises</td>
</tr>
<tr>
<td>Women’s early discharge home</td>
<td>Act as women’s advocate</td>
<td>Nerve damage</td>
</tr>
<tr>
<td>Women on community out of area</td>
<td>Correct management of labial laceration</td>
<td>Urinary and faecal incontinence</td>
</tr>
<tr>
<td>Midwives competence undertaking repair</td>
<td>Feedback to women on healing: repair/non-repair</td>
<td>Vaginal wall prolapse</td>
</tr>
<tr>
<td>Women’s psychological wellbeing</td>
<td>Regaining self-dignity</td>
<td>Valuing cultural and ethnic background</td>
</tr>
</tbody>
</table>
Informed choice

Midwives were more likely to offer informed choice about the women’s perineal management in phase 4. However, long term problems were factors found to influence their decision to encourage women to have their trauma sutured. Three midwives offered the following advice:

‘The evidence, the weakness of the healing, healing more effective if repair to the muscles...scar tissues can be quite hard...and it can have an impact on their sex lives...alignment can be poor, may need to come back, the risk of infection’. ‘I think most women want you to tell them to be sutured, they want you to take responsibility’.

(Trust C (FG 2005) mw 1P:8)

‘I would talk to her about repair versus non repair, things like urinary incontinence and the things that can crop up later on, her sex life and all that sort of thing... I don't think they consider urinary incontinence as something that is going to happen to them, they are much more interested in their sex life, there are a lot of women who have problems with their bladder control after damage to their perineum, occurring much later in life’

(Trust E (FG2005) mw 1 p:15 )

‘If they didn't want to be repaired you would have to be very clear with them the extent of the trauma, why its important to repair it, discuss future sex life, infection risks, blood loss, lots of things around that to enable them to understand the importance as to why they need a repair’

(Trust B (FG2005) mw1p:7)

There were also alternative views of women's choice:

‘I think some midwives leave second degree tears because they are not confident. They cover their backs by offering the client a choice, but making the question biased i.e. ‘I don't think you need suturing but I can do it if you want' of course the client will say no!’
Midwives were much more likely to provide women with the evidence to support their decisions if the women requested natural healing, particularly regarding the alignment of the tissues, the weakness of healing and infection without repair and the resulting scar tissue (FG Trust E1 2005).

**Perceived importance to women of competent midwife**

A number of midwives expressed the importance women attached to their confidence in the midwives' competence undertaking repair:

'The woman needs to feel confident that the person repairing her perineum is competent, although she doesn't necessarily need to know them'
Trust CI (Q2005) mw 56 p:15

'Women wish to feel confident that they are sutured by someone competent...probably find it more acceptable to be sutured by the person who delivered the baby'
Trust A (Q2005) mw 13 p:14

These comments made by midwives reflect the views reported by women in chapter one.

**Recognition of long term perineal problems**

Pain, infection and the future function of the perineum were the midwives' main considerations towards long term perineal morbidity. Two midwives spoke of the potential long term problems that could be encountered by some women:

'vaginal wall problems...faecal and urinary incontinence, especially if not examined properly'
Trust FC (FG2005) mw 7p:8
'You get women from different ethnic backgrounds who are concerned about the way they look [their perineum], some cultures are not concerned about how it looks anatomically, other cultures where I worked in London where we had big ethnic minorities were quite fastidious about how it appeared, particularly those who shave completely...it appears very destructive [repair] and this is not the way they want to be'
Trust BI (FG2005) mw 3 p:5

One midwife voiced her concern about women’s experiences of urinary incontinence associated with the midwives' competent perineal assessment:

'Why do women think incontinence is normal, its not normal and you don’t expect to have continence issues after childbirth...so many women block it out for years...had they been properly assessed and sutured well they may never have gone down that line, faecal incontinence etc for months'.
(Trust BI (FG 2005) Mw 3

I perceived there was still a concern amongst some midwives of a ‘blame culture’. Feeding back to a colleague of a poorly healing perineum was considered to reflect negatively on individual practice. An anonymous postnatal questionnaire was considered to be an objective means of gaining feedback for perineal audit from all midwives. There was considerably more discussion related to perineal audit in phase 4 compared to phase 2.

The evaluation of current guidelines, policies and practices and their effects on the midwives’ decisions to implement perineal repair

This part of the chapter answers the first subsidiary question: ‘To what extent do government policies, clinical guidelines and individual practices influence midwives’ perceived decision making when managing perineal trauma and repair? Findings from the research confirm that midwives make their decisions about perineal trauma management dependent on the level of their expertise; referring to national guidelines and Trust policies to support their decisions. The new perineal trauma proforma played a significant part in assisting midwives
assess perineal trauma more accurately. However, decision making was multifac-tual. The results are reported in seven sections.

**Factors influencing the midwives’ decision making implementing perineal repair**

Table 11.9 reports the multiple factors which were found to influence the midwives’ decision making process when undertaking the assessment and repair of perineal trauma. These included: education; work-based learning; undertaking the OSCE; written documentation; acting as the women’s advocate; and offering informed choice.

**Table 11.9 Factors influencing midwives’ decision making when implementing perineal repair**

<table>
<thead>
<tr>
<th>Factors identified in post-intervention focus group interviews which influenced midwives’ decision making when implementing perineal repair</th>
<th>Women's perineal healing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education and training</strong>&lt;br&gt;Current evidence&lt;br&gt;Perineal repair workshop&lt;br&gt;Module&lt;br&gt;OSCE process&lt;br&gt;<strong>Practical knowledge</strong>&lt;br&gt;Earlier assessment of anal sphincter damage&lt;br&gt;Work-based experience&lt;br&gt;<strong>Written documentation</strong>&lt;br&gt;Clinical guidelines&lt;br&gt;Perineal trauma proforma score&lt;br&gt;Trust policy/protocol&lt;br&gt;RCOG 2004 guidelines&lt;br&gt;<strong>Assessment of midwives’ competency</strong>&lt;br&gt;OSCEs&lt;br&gt;OSCE supervisors&lt;br&gt;<strong>Organisational structures</strong>&lt;br&gt;Practice development midwives&lt;br&gt;Mandatory perineal repair workshops&lt;br&gt;CNST and Clinical Governance&lt;br&gt;KSF framework</td>
<td>Cosmetic effects&lt;br&gt;Bleeding&lt;br&gt;Midwife as women’s advocate&lt;br&gt;Women’s choice</td>
</tr>
</tbody>
</table>
Midwives' perceived familiarity with national and trust guidelines, policies and protocols.

Trust guidelines incorporating the recommendations for the continuous subcuticular repair technique and repair of second degree tears (Green Top Guidelines 23: RCOG 2004) were the most frequently cited documents relating to perineal management by 113 (76.7%) midwives across all Trusts during phase 4 compared to phase 2 (113, 68.1%). Midwives were more familiar with a Trust protocol, policy or evidence for best practice in phase 4 compared to phase 2. There was no significant difference between phases. There was a significant difference in the numbers of midwives (36, 83.7% compared to 16, 76.2%) familiar with their Trust guidelines after the completion of an independent training programme in the comparison Trust (Pearson Chi-Square 9.786 df 3 \( P < .020 \)). While one would not expect to find a significant difference in a control group it is important to note that evidence-based perineal management was introduced independently in this Trust in December 2004.

A total of 73 (50.3%) midwives were not familiar with the EEC Directives related to the education and training for midwives in perineal repair compared to 98 (59%) in phase 2. The largest professional group who were unfamiliar were certificated midwives. Greater familiarity within the diploma, degree and MSc groups may be explained by the integration of the directives within current pre- and post-registration midwifery competencies. Table 11.10 reports the documentation available in all Trusts in 2005 to guide midwives in their role undertaking perineal repair.
Table 11.10 Documentation implemented by midwives in all trusts in 2005/2006

<table>
<thead>
<tr>
<th>Written documentation currently implemented in Trusts to midwives when assessing and implementing perineal repair</th>
<th>Trust Al</th>
<th>Trust BI</th>
<th>Trust CI</th>
<th>Trust DI</th>
<th>Trust EI</th>
<th>Trust FC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Protocol</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perineal Trauma proforma</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Evidence for best practice midwifery guidelines</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Proforma designed by Metcalfe et al (2002)

**Extent to which written documentation influenced midwives' decision making in perineal repair**

During phase 4, 132 (98.6%) midwives considered that written documentation influenced their decision making from some to a large extent compared to 136 (81.9%) in phase 2. However the differences were not significant. There were no significant differences between professional groups in the extent written documentation influenced clinical decision making (Pearson Chi-Square 8.709 df 9 P > .465). However, 76 (53.1%) certificated midwives were more likely to use guidelines to a large extent compared to 35 (24.5%) and 28 (19.6%) diploma and degree midwives respectively.

There were no significant differences during phase 4 between intervention and comparison Trusts related to the extent guidelines, policies or protocols influenced midwives' decision making (Pearson Chi-square 25.446 df 20 P < .185). Similarly, there was no significant difference between the intervention Trusts pre-and post-intervention in the extent written documentation influenced the midwives' decision making (Pearson Chi-Square 19 .950 df 16 P / .223).
Thus accepting the null hypothesis that there is no statistically significant difference in the extent midwives are influenced by government policies, guidelines or protocols when making their decisions in the management of perineal trauma. However, the most frequently used documentation relating to perineal management by midwives on the delivery suite were Trust guidelines and the new perineal trauma proforma. Figure 11.3 reports the extent to which written guidelines and policies influenced the midwives decision making in perineal trauma management.

Figure 11.3 Extent to which guidelines and policies influence midwives' clinical decision making in perineal repair
One midwife explained the extent written documentation affected her decision making:

'No, I don't think it does to me personally, its been ingrained, I suppose if I was in doubt, put it this way having studied them from the outset they are ingrained in my mind, so I wouldn't need to go checking...they are used to guide practice. It's about safe practice; we have the proforma to follow. It tells you about the examination, so yes, to some extent...the protocol provides uniformity' Trust DI (FG 2005) p:4

An experienced practice development midwife described how her experience governs her practice which is supported by Trust guidelines:

'If I found from my experience that the woman had a problem, this is the best course to run, I would go with that [ guidelines], as a practitioner you have to be able to back up your decision yourself, and if it goes wrong, you've only got yourself to blame. I think you have to use experience and when you have been doing the job for a long time, things tend to go round in circles, what you were doing 20 years ago might of gone out of fashion then comes back again, so I don't think experience is a bad thing. If something has worked time and time again and you know it is safe then there is no reason why you shouldn't carry on doing it this way. During training you start at a certain point but learn from experience'.

Trust El (FG2005) mw 1 p:5

**Extent to which midwives implemented the new perineal trauma proforma**

A total of 80 (78.4%) midwives in the intervention Trusts were referring to the newly designed perineal trauma proforma to assist them in the assessment and measurement of perineal trauma. Midwives were less likely to be familiar with the document if they had not attended a workshop, worked on the wards or in community. A total of 32 (84.2%) diploma midwives were more likely to refer to the new perineal trauma proforma (appendix BB) for guidance compared to the remaining professional groups. There was a significant difference between the intervention Trusts in the extent midwives were familiar with and implemented the
proforma. 27 (26.5%) midwives in Trust AI compared to 8 (7.8%) in Trust DI. (Pearson Chi-Square 24.012 df 8 *P* < .002). 26 (17.9%) midwives in the comparison Trust were using an independently designed proforma (Metcalf 2002). Figure 11.4 reports the numbers of midwives across the Trusts using a perineal trauma proforma.

**Figure 11.4. Numbers of midwives implementing a new perineal trauma proforma in 2005**

The perineal trauma proforma was incorporated into the policy document in Trusts AI, CI, and DI. Part of the document was entered into the computer system for completion post delivery in Trust BI. However, this was not readily accessible on the delivery suite as a document to guide trauma assessment. The independent proforma used in the comparison Trust became a standard document in the women’s case notes although it was not followed by all midwives. The limited numbers of midwives referring to the proforma in Trust EI had been attributed to a lack of support from senior labour ward midwives. Similarly, the midwives in Trust DI were only able to access the proforma once they had commenced a perineal repair workshop or module. An adapted version
was subsequently integrated into the women’s case notes in Trusts Al, Cl, and DI during the later part of phase 4. Women with second degree tears were now being routinely sutured by the majority of midwives following the integration of the RCOG (2004) guidelines and trauma proforma into their Trust guidelines or policy.

**Affects of the perineal trauma proforma on perceived competency and clinical judgement**

The majority of midwives considered that the perineal trauma proforma was an important document in enabling them to accurately complete a comprehensive assessment and measurement of trauma:

‘We are doing it more logically now [trauma assessment] and getting a second person to check if you are unsure, you are actually following a set of rules now which before was subjective rather than objective... you have to follow the policy but your experience tells you to make a judgement as to what to do at the time’.

Trust Al (FG 2005) mw 4:3

The midwives attending the workshops perceived that their skills and confidence in visualising and digitally assessing perineal trauma was noticeably enhanced using the trauma score on the proforma following the instruction and demonstration in a perineal repair workshop. They reported that the most useful component of the proforma was identifying and scoring the extent of the tear in three anatomical dimensions: the vagina, perineal muscles and skin. This detailed assessment enabled midwives to recognise the importance of the bidental rectal examination for identifying anal sphincter damage (OASIS) prior to and following repair. Novice midwives were most likely to refer to the trauma proforma for guidance.

An experienced practice development midwife in Trust El stated:

‘Yes, that’s been really useful,[demonstration of anal sphincter assessment] where your two fingers are coming together and you get a lot more idea how
thick that is [anal sphincter muscle] or are my fingers lying directly on top of each other, that does help yes'
Trust E (FG) mw 1 p:3

Reflecting in her case study 1 midwife wrote:

'My feelings of security when using the proforma were confirmed in a recent study by Metcalfe (2004) who also found that using a similar tool bought improved assessment and uniformity to perineal repair...the proforma has been a huge support to me throughout the course, it enabled me to identify the need for repair and as time has passed I have been able to justify not suturing a tear following discussion with the woman'.
Trust Dl (module case study 2004 mw 49)

Another midwife explains:

'Given me more confidence, more detail as to how I need to view suturing because the proforma goes through everything step by step'
Trust C (FG 2005) mw 2 p: 2

Focus group discussion identified the apparent increase in the incidence of third degree tears in Trusts Bl, Cl and El. It was emphasised by midwives that the incidence had changed due to an increased level of knowledge, vigilance and earlier recognition of third degree tears and not the occurrence per se.

'The incidence of third degree tears has gone up because of the recognition and more being detected, it looks as if we have had an increase but I think what we have had is an increased detection doing a rectal examination before repair...we haven't had any obvious missed third degree tears whereas in the year prior to using the proforma we had missed 3 in the birth rate of 2000 picked up early in the postnatal period...we haven't had any since we have been using the proforma...I think that is good'
Trust Cl (FG 2005) mw 1p:2
There was a marked increase in the numbers of midwives who stated that they were examining anal sphincter damage prior to repair. A practice development midwife explains:

‘People are making decisions around current evidence and doing what's appropriate at the time...most people are happy to do a rectal examination post repair, but I think the teaching to physically assess before hand using the tool [trauma proforma] which is also on the computer, so you have to remember to use the trauma score, as it always comes up. They may think about it and the training has also highlighted the necessity to do the pre-check and document more thoroughly and particularly the free text in the written notes about how you conducted that repair’.
Trust BI (FG 2005) mw 1:1

Trusts BI and El were least likely to use the proforma for perineal assessment following delivery. Midwives in Trust El were reluctant to complete the new proforma due to an already copious amount of documentation. The lack of support and implementation of the proforma from senior labour ward midwives was also evident in these two Trusts (FN2005/6). Midwives in Trust DI found the consistent unavailability and disappearance of the proforma on the delivery suite frustrating despite the support of the practice development midwife.

**Extent clinical expertise affects decision making in perineal repair**

Applying current evidence and combining midwifery expertise enabled midwives who had attended the workshops to distinguish accurately the difference between a second and third degree tear. A midwife in Trust C explains the factors influencing her decisions:

‘Experience and judgement comes into it. It's about getting someone else to check, it's about team work as well’.
Trust CI (FG 2005) mw 1 p: 4

Professional and personal expertise was shared amongst colleagues:
'I have been a midwife for more than 20 years so knowledge has been gained through experience and people do come up and say, can you have a look at this and personally I would suture, I would have left in the past but now I would suture it...it's a personal thing based on having your own children with tears'.

Trust F (FG 2005) mw 7 p:4

Midwives' decisions to leave small non-bleeding tears (less than 2 cms) and not involving deep perineal muscle were based on clinical experience, supported by the evidence of Lundquist (2004) discussed in the workshops.

**New knowledge and decision making**

Familiarity with recommended suturing techniques, the outcomes of repair/non-repair and confidence in trauma assessment influenced the midwives' skills in judgement and decision making in repair management. In phase 4, midwives were more familiar with the recommended continuous subcuticular technique acquired during the perineal repair workshops and instruction in clinical practice. New knowledge and experience enabled them to exercise wider clinical judgement and shared decisions with women in their care. National and Trusts RCOG (guidelines) and the trauma proforma were the documents most referred to assisting midwives in their decision making process. Expert midwives were more likely to use written documentation to support their decisions.

**Influence of power and control within the organisation on the implementation of perineal repair**

This final part of the chapter answers the second subsidiary question: *to what extent does power in the workplace influence midwives' decision making when implementing perineal repair?* This question is answered by reporting the powerful structures within the organisation which midwives found to positively and negatively influence their implementation of perineal repair. Factors influencing the exercise of power in the workplace during both phases were similar. The most significant factors influencing positive change during phase 4 are reported under three sections: the introduction of the OSCE process; the implementation of mandatory perineal repair workshops by the practice
development midwife; support provided by OSCE supervisors and obstetric consultants.

**Objective Structured Clinical Assessment (OSCE) of midwives at the bedside**

A total of 32 (100%) midwives completed an OSCE either following the instructors study day or on the completion of the post-registration module. However, only 3 midwives completing their OSCE through the module were competent at a level (level 6) which they could instruct and assess other midwives in perineal repair. Across the intervention Trusts only 22 midwives completing the OSCE study day were at level 6. Due to the lack of a statutory assessment of midwives’ competency in perineal repair other than through the module examination process and educational institution, few midwives volunteered for a formal OSCE. The overall numbers of midwives competent to instruct, supervise and assess in clinical practice were therefore limited during the study.

The following discussion in a focus group highlights some of the midwives’ views towards undertaking an OSCE at the bedside:

Facilitator: ‘What are your thoughts on midwives being formally assessed at the bedside for competency in perineal repair using an OSCE?'

MW 2: G grade labour ward: ‘No problem, midwives are more than happy’

MW 3: (PDM): ‘I think it is a positive thing, but I think it is difficult to put into practice since each woman and tear is different, the documentation is the same but the women are different’

Facilitator: ‘It’s about using the OSCE process, which we follow in the trauma proforma’

MW 2: ‘I think is a good thing because it sets the standard’.

Trust BI (FG 2005) p:3

The labour ward manager in Trust A emphasised the need for more OSCE trainers on the labour ward to support and instruct both midwives and students. However, problems with staff shortage and time constraints were factors...
inhibiting continuity in supervised practice and formal assessment. The practice
development midwife facilitating perineal repair workshops in this trust stated:

'It's having someone OSCE trained, sometimes there isn't the time for supervision
and you just can't ...we can do it, just by people doing it [undertaking trauma
assessment and repair] three or four times feeling confident, being observed,
then they can be OSCEed...its creating the process in the Knowledge and Skills
Framework and making it more pressing for midwives to do it.'
Trust Al (FG2005) mw 3 p: 4

Another senior labour ward midwife emphasised the need for midwives' individual
responsibility. Similarly an experienced midwife confirms:

'It needs to be a little bit more formalised otherwise you don't know where people
are with their expertise. If someone is not particularly confident in doing it your
not going to choose them to oversee less competent people, it does need
formalising'.
Trust El (FG2005) mw 1 p:3

A lecturer practitioner in the same focus group stressed the importance of a
dedicated team of midwives who had undertaken the extra OSCE training to
assess colleagues:

'Midwives need the appropriate knowledge and skills and be familiar with the
OSCE technique and trauma proforma and use that, all midwives should be
assessed to make sure they are competent as we do not know the competency
of most midwives unless there are problems we hear about'.
Trust El (FG2005) mw2 p:6

Formal assessment was perceived to create a potential problem for some
experienced midwives with some averting or resisting the process. Formalising
competency was considered a threat to some midwives perceiving their practice
was under scrutiny (FN 2005). Undertaking an OSCE through the educational
institution was considered a positive means of empowering midwives to achieve
their competency.
The role of the practice development midwife in the provision of mandatory perineal repair workshops

The role of the practice development midwife (PDM) in the support and organisation of perineal repair study sessions stemmed from the planning in the Perineal Repair Working Group (PRWG). The extent to which PDM were able to integrate perineal repair workshops into current mandatory skills up-dates in 2004 depended on workshop facilitators and available time in the timetable for the workshops. Subsequently, a total of 8 PDM across five Trusts attended the instructor's up-date and completed an OSCE. The educational institution as a system provided the structure of the workshops whereby PDM were able to exercise a positive position of power through their CPD role in placing perineal repair instruction higher on the mandatory study day agenda.

The two delivery suite midwives facilitating the workshops in the comparison Trust were supported by the Obstetric Consultant and were able to exercise their authority as senior midwives on the delivery suite advocating that all staff working in their clinical area complied to attend the workshops to up-date their competency or develop new skills in repair.

During phase 4 mandatory perineal repair workshops were provided alongside existing skills drills in Trusts Al and Cl. The Clinical Negligence Scheme for Trusts (CNST) and the integration with risk management, Clinical Governance (CG) and the skills requirements for higher banding in the Knowledge and Skills Framework (2004) continued to be a driving force towards mandatory sessions.

Influence of Consultant Obstetricians and Heads of Midwifery

The organisation’s hierarchy played a significant role in the support of both positive and negative behaviour change explained by a PDM:

'We had a previous Head of Midwifery who was not so concerned [about perineal repair workshops] but we have one now who is very supportive of the workshops and evidence-based practice because she was worried about perinea being left so she was very supportive of change and the guidelines, so its an organisational
thing as well as practice, she was the one supportive of me setting up the workshops’
Trust C (FG2005) mw 1 p:2

Support provided by consultant obstetricians was considered to be a powerful influence in the success of this study in Trust CI. The new labour ward manager in Trust Al was extremely proactive in facilitating the staff with an F grade (band 6) to achieve competency in perineal repair. Consultants were similarly supportive of this role for midwives to prevent potential litigation. Five midwives attending the focus group in Trust Al agreed that the workshops should become mandatory to maintain professional standards.

Limited resources, staff shortages and lack of commitment from the Head of Midwifery contributed to the lack of support in Trust EI (FN2005). Mandatory perineal repair sessions were not considered to be a priority by the PDM or labour ward manager in Trust Bl. These views influenced the extent to which midwives were encouraged to attend workshops and complete the trauma proforma in this Trust:

'I could not incorporate anything else into mandatory training because we already have so much in there and its not mandatory...i think it is an integral part of the role of the midwife, I've no problem with people who formally assess at the appropriate point but I don't think that it is a high enough priority or risk to make it mandatory, if you look at mandatory training a lot of things that carry risk are skills, where perineal repair is a skill that people can keep up-to-date on 3 yearly basis. Mandatory training is something to think about for the future, but not as annual thing'
Trust Bl (FG2005) mw 1 p:4

Advocating mandatory workshops were considered to reduce the threat to experienced midwives who were reluctant to up-date their knowledge and skills in practice:

'Its not a bad thing to make it mandatory, some wonder how they would be perceived going on an up-date, being mandatory would get over that, making
sure they have the current evidence. There is a lot of bias for those on delivery suite but midwives do come from clinic, the wards and community, I know as I was one, and they don't do a lot of repairs'.

Trust El (FG2005) mw: lecturer practitioner 2 p:8

OSCEs were found to influence how some midwives were able to achieve their competency in perineal repair. Having adequate number of OSCE midwives was an important part in this process. Support from PDM, heads of midwifery and consultants in the development of the midwives role in perineal repair were powerful influences over their competence in this skill.

Midwives' views of their role as mentor towards instruction and supervision of senior student midwives undertaking perineal care

This final part of the chapter evaluates the students' experience of instruction and supervision in perineal repair from the midwives' perspective. Analysis and results have been restricted to the views of midwives in the intervention Trusts due to none-student participation in the comparison Trust. This part is divided into seven sections.

**Numbers of midwives mentoring students in 2005**

86 (83.5%) midwives in the intervention Trusts who had a teaching qualification mentored students in phase 4 compared to 147 (86.9%) in phase 2. The non-significant difference in the numbers of midwives found between the two phases may be attributed to the reduced number of midwives who accessed mentorship modules and the impact of restricted funding for CPD locally and nationally in 2005 (O'Sullivan 2006:5). 6 (5.8%) mentoring midwives could not suture. Only 3 (2.9%) midwives stated that there was a lack of opportunity to instruct their student. 5 (2.9%) midwives were not mentoring students currently.

A total of 59 (57.3%) certificated midwives continued to be the largest group mentoring students followed by diploma midwives, findings similar to phase 2. 62 (42.7%) of mentoring midwives had attended a perineal repair workshop either in their Trust or part of the work-based module.
Frequency of which students requested instruction and supervision in perineal repair in 2005

A total of 87 (84.4%) midwives perceived that their students had never or very infrequently requested instruction in perineal repair compared to 101 (78.4%) midwives in phase 2. Students' perceptions were similar in respect to their instruction, though 15 (57.7%) stated that they had requested supervision.

Only 31 (30%) midwives claimed to have voluntarily offered instruction very frequently or frequently to their students. 71 (69.8%) midwives infrequently or never offered instruction voluntarily in phase 4 compared to 50 (41%) during phase 2. The practical differences and similarities between the two phases may be attributed in part to fewer midwives mentoring students, a small number of midwives' lack of confidence in their own skills in repair and the lack of adequate time for comprehensive instruction and close supervision. Midwives' confidence in their repair skills was positively correlated with the frequency they instructed their students. The more confident the midwives perceived they felt in the skill the more frequently they instructed their students (r = .365, n = 136, P < .000).

Factors inhibiting students' instruction and supervision in 2005

Reasons as to why midwives in the intervention trusts were unable to undertake their role instructing and supervising students more regularly are presented in order of frequency in table 12.5. Similarities are reported in the findings between phases 2 (table 9.9) and 4 (table 12.5).
Table 11.12 Midwives’ rationale for not instructing senior student midwives in perineal repair in 2005

<table>
<thead>
<tr>
<th>Midwives’ rationale for not instructing senior student midwives in perineal repair</th>
<th>Total N = 103</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not a problem</td>
<td>30</td>
<td>29.1</td>
</tr>
<tr>
<td>Lack of confidence</td>
<td>18</td>
<td>17.5</td>
</tr>
<tr>
<td>Time constraints</td>
<td>13</td>
<td>12.6</td>
</tr>
<tr>
<td>Combination of reasons</td>
<td>13</td>
<td>12.6</td>
</tr>
<tr>
<td>Inappropriate for stage in midwifery programme</td>
<td>9</td>
<td>8.7</td>
</tr>
<tr>
<td>Do not suture</td>
<td>6</td>
<td>5.8</td>
</tr>
<tr>
<td>Attend mostly home births</td>
<td>4</td>
<td>3.9</td>
</tr>
<tr>
<td>Not had student midwife on delivery suite</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Lack of opportunity</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>No student</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Hasn’t come up</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Student unhappy or afraid to repair</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

A total of 30 (29.1%) midwives did not find instructing their students in repair problematic. This factor was supported by the positive comments made by student midwives themselves who found their mentors willing, encouraging, informative and supportive in this role. However, the three most frequently reported reasons for midwives not offering this experience to their students were: lack of confidence in repair; time constraints; a combination of reasons; or considered inappropriate during the midwifery programme. Students cited similar reasons reported in part 2.

The midwives’ view of students undertaking perineal repair

The majority of midwives considered that the student had the ideal opportunity during their pre-registration programme to observe trauma, receive supportive instruction and supervision from their mentor. An experienced mentor stated:

‘Doing it as a student, when they qualify at least they have the underpinning knowledge that they can build on instead of starting from scratch, then they have
a mentor and once they are trained that bit at the beginning being newly qualified is terrifying enough without having to take on brand new responsibilities'

Trust EI (FG2005) mw 1 p:5

The labour ward manager in Trust A commented:

'It is very well known that I am pro [suturing] and I think they should be [the student], it is part of practice and it should get their competence up and running before they qualify, it would make them a more competent midwife...You need the OSCE trainers on the labour ward as well...I am very pushy when it comes to suturing as most people know and I do get my students suturing, but we have been so busy that it is very hard to put aside time to make sure it is going ahead. '

Trust AL (FG2005) mw 4 p:3

'I agree they should do it, but it does mean they should have a competent midwife showing them'

Trust DI (FG2005) mw 3 p:4

'I think it depends on the expertise of the midwife and the person delivering, how confident they feel, how busy the unit is, and if the midwife they are with doesn't feel confident to supervise them then if there is nobody else available then that can be a problem'

Trust EI (FG2005) mw 1 p:4

Newly qualified midwives who had received instruction at the university during phase 2 reflected on their experiences in both focus group discussions and questionnaire free responses:

'As a student you receive a lot of support and this increases confidence. I found that my training and at the end of the course it meant I could start suturing sooner as a midwife'

Trust AL (Q2005) mw 20 p:19
Midwives who had received instruction themselves as students at the university recently were more likely to be in favour of instructing students and reiterated the significant difference it made to their confidence and competence before qualifying:

'I did some suturing just before I qualified and I think that's why I got on so quickly and I push the students'.
Trust Al (FG2005) mw 7 p:3

**Increased numbers of students undertaking perineal repair under supervision**

A labour ward coordinator in Trust B highlighted the increase in the numbers of midwives qualifying with repair skills since providing the midwives' workshops:

'We are having some students in their third year and towards the end of their second year who are competent in suturing and that is marvellous...there is a degree as to who their mentor is but certainly two or three years ago we did not have everybody qualifying not being able to suture, it was as simple as that'.
Trust Bl (FG2005) mw 1 p:5

Midwives in Trust A and D considered that repair was a necessity and was expected within the band 6 grading structure for midwives:

'Job description, it is now expected of newly qualified midwives'
Trust Di (Q2005) mw 72 p:19

**Organisational constraints**

Adequate time for instructing and supervising was a major constraint voiced by a number of midwives across the intervention Trusts:

'Time, because, often the senior midwives are quite useful when you are busy, they can go and get on with something else while you suture, so the two of you are busy, the teaching...its always much quicker to do it yourself.'
Midwives’ themselves considered that they too needed the opportunity to gain their own expertise, especially when newly qualified, which often prevented them from instructing their student. The following midwife described her experience as a student:

‘I was with a newly qualified student, and she wanted to do it [repair], and I was desperate to do it, but I said no, you go and do it because it was easy and she was thrilled, it did take us three times as long but we did have the time, it wasn’t so manic and it just delayed us a bit longer, she was thrilled, I was thrilled, its that split second when you think no, I won’t do it myself but just let her do it’.

Midwives’ perceived importance of students’ undertaking perineal repair prior to qualification.

A total of 94 (91.2%) midwives considered that undertaking perineal repair as a student was important or very important to their practice prior to registration. These findings were similar to those found during phase 2 and consistent with the students’ views of achieving a threshold competency. Table 11.13 reports the midwives’ views towards senior students receiving instruction and supervision in assessing and repairing perineal trauma prior to registration.

The students’ practical and theoretical knowledge in assessing perineal trauma and undertaking a simple tear was considered by the majority of midwives to be an important component of the pre-registration midwifery programme. Reflecting on their own experience as students, midwives viewed the supervision and support they had received from their mentor was easier to achieve prior to registration due to the supernumerary status of the student. These midwives considered that building self-confidence and baseline competency in repair reduced their stress levels when practising this skill as newly qualified midwives. As individual Trusts are now expecting newly qualified staff to be competent in perineal repair it is important that students are provided the opportunity to undertake this skill while they have supervisory mechanisms in place.
Table 11.13 Midwives’ views of student midwives undertaking perineal repair - 2005

<table>
<thead>
<tr>
<th>Positive views</th>
<th>Alternative views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational advantages</td>
<td>Educational disadvantages</td>
</tr>
<tr>
<td>Part of midwives’ role</td>
<td>Need to consolidate training first, undertake repair as part of preceptorship</td>
</tr>
<tr>
<td>Important to have a good knowledge of perineal anatomy</td>
<td>Important after other criteria are met in practice portfolio</td>
</tr>
<tr>
<td>Starting point as a qualified midwife</td>
<td><strong>Practical experience - disadvantages</strong></td>
</tr>
<tr>
<td>When qualified have extra pressures and time constraints.</td>
<td>Students struggle with practical aspects of course due to excessive theoretical</td>
</tr>
<tr>
<td><strong>Practical experience</strong></td>
<td>requirements</td>
</tr>
<tr>
<td>More awareness of perineum at delivery</td>
<td>Pressure to get ‘numbers’ need experience to gain confidence in caring for</td>
</tr>
<tr>
<td>Experience and expertise built up earlier</td>
<td>labouring women first</td>
</tr>
<tr>
<td>To gain insight into assessing trauma and repairing tears</td>
<td>Normal midwifery should take priority</td>
</tr>
<tr>
<td><strong>Confidence and competence on registration</strong></td>
<td>PR should be high on the list of competencies for the newly qualified midwife</td>
</tr>
<tr>
<td>Provides students’ confidence and competence on registration</td>
<td>Important but priority to qualified midwives first</td>
</tr>
<tr>
<td>Prevents them developing a phobia about trying to suture</td>
<td><strong>Self-confidence</strong></td>
</tr>
<tr>
<td>Students should be prepared but not necessarily competent</td>
<td>Some students lack confidence and not keen to start</td>
</tr>
<tr>
<td>If student feels confident</td>
<td>An important but an extended skill</td>
</tr>
<tr>
<td>Provides confidence before working alone</td>
<td>Depends on student and confidence levels</td>
</tr>
<tr>
<td>Builds on training and confidence</td>
<td><strong>Advantages to women</strong></td>
</tr>
<tr>
<td><strong>Support and supervision</strong></td>
<td>Provides continuity of care for women and avoids delays</td>
</tr>
<tr>
<td>Important because difficult to observe and get supervision after qualification</td>
<td>suturing</td>
</tr>
<tr>
<td>Confidence and competence gained under constant supportive</td>
<td>Provides total care at home births</td>
</tr>
<tr>
<td><strong>Trust expectations</strong></td>
<td><strong>Constraints</strong></td>
</tr>
<tr>
<td>Job description – now expected of newly qualified midwives</td>
<td>Difficult to find time to train newly qualified midwives</td>
</tr>
<tr>
<td>Once qualified expected to repair as soon as possible</td>
<td></td>
</tr>
</tbody>
</table>
Some midwives were genuinely concerned about the level of theoretical and practical work students had to undertake to achieve their current competencies before registration stating:

'Students have enough to think about to get through the course. We can show them, but not to repair themselves...they need to consolidate their training first, then part of preceptorship undertake repair'

'A lot of pressure to get ‘numbers’ [deliveries] etc. As a recently qualified midwife I personally needed to gain experience of caring for labouring women and confidence in my own practice, only now do I feel comfortable to start supervised repair myself’ [qualified in 2004].
Trust Al (Q2005) mw 21 p:19

Midwives considered that normal midwifery practice was a priority, competency in repair could be achieved post-registration.

**Summary of findings and conclusions**

Perineal repair workshop or attendance at the work-based module appears to have had a positive effect on the percentage of midwives in the intervention Trusts that were subsequently able to undertake perineal independently at level 4 and expertly at level 6 during phase 4. The educational intervention may in part have contributed to the increased numbers of midwives (88 86.2%) in phase 4 who were at a level of competency (3-6 competent to expert) whereby they could practice without supervision or guidance. 39 (90.8%) midwives in the comparison Trust perceived similar levels of competency. There was a significant difference in the numbers of midwives in the intervention trusts who perceived that they were at a lower level of competency (level 0) during phase 4 (8, 3.2%) compared to 36 (14.6%) midwives during phase 2 ($P< .006$). There was no significant difference in the comparison Trust, though more midwives perceived a shift from level 4-6 (proficient to expert).
A significant number of midwives were adopting a non-locking stitch to the vaginal wall, applying a continuous repair technique to the muscle layer and adopting a continuous subcuticular repair to the perineal skin during phase 4. There were similar significant findings in the comparison trust excluding a non-significant difference when suturing perineal skin. This lack of difference may be attributed to the Fleming technique (continuous) already adopted in this Trust.

There was no significant difference in the midwives’ perceived level of confidence or frequency undertaking repair between phases 2 and 4 in either intervention comparison Trusts or professional groups. Frequency of repair and confidence undertaking repair remained highly positively correlated. Expertise equated with higher levels of confidence. Frequency was also strongly positively correlated with the midwives’ perceived levels of competency.

Similar to the findings in phase 2, all professional groups adopted a predominantly radical model of midwifery care followed by a conservative model. There were no statistical differences between phases or Trusts. There was a significant difference in the mean total attitude scores towards the seven attitude statements representing midwives sensitive care in the intervention Trusts and comparison Trust respectively, between phases 2 and 4. Table 11.14 reports the summary of comparisons of means for the constructs of competency supporting the main research question.
Table 11.14 Summary of comparison of means and frequencies for the constructs of competency pre- and post intervention 2003/2005

<table>
<thead>
<tr>
<th>Competency</th>
<th>N</th>
<th>Mean</th>
<th>Std.D</th>
<th>P. values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived levels</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention Trusts</td>
<td>247</td>
<td>3.65</td>
<td>2.64</td>
<td>&lt;.006*</td>
</tr>
<tr>
<td>Comparison Trust</td>
<td>64</td>
<td>4.05</td>
<td>1.72</td>
<td>&gt; .535</td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention Trusts</td>
<td>247</td>
<td>3.06</td>
<td>1.139</td>
<td>&gt; .084</td>
</tr>
<tr>
<td>Comparison Trust</td>
<td>64</td>
<td>2.72</td>
<td>1.105</td>
<td>&gt; .077</td>
</tr>
<tr>
<td>Techniques in repair</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention Trusts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal wall</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>&lt; .002*</td>
</tr>
<tr>
<td>Muscle layer</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>&lt; .000*</td>
</tr>
<tr>
<td>Perineal skin</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>&lt; .000*</td>
</tr>
<tr>
<td>Comparison Trusts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal wall</td>
<td>64</td>
<td>-</td>
<td>-</td>
<td>&lt; .001*</td>
</tr>
<tr>
<td>Muscle layer</td>
<td>64</td>
<td>-</td>
<td>-</td>
<td>&gt; .135</td>
</tr>
<tr>
<td>Perineal skin</td>
<td>63</td>
<td>-</td>
<td>-</td>
<td>&gt; .119</td>
</tr>
<tr>
<td>Total attitude scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention Trusts</td>
<td>247</td>
<td>25.14</td>
<td>2.461</td>
<td>&lt; .022*</td>
</tr>
<tr>
<td>Comparison Trust</td>
<td>64</td>
<td>24.56</td>
<td>1.893</td>
<td>&lt; .023*</td>
</tr>
</tbody>
</table>

*Significant at the 0.05 level 2 tailed)

There was a non-significant difference in the numbers of midwives familiar with their Trust guidelines referring to the RCOG (2004) recommendations in both intervention and comparison Trusts post intervention. There was a non significant difference in the numbers of midwives who considered that guidelines, policies or protocols influenced their clinical decision making in perineal repair during phase 4. 78.4% midwives referred to the new perineal trauma proforma in the intervention Trusts. Midwives in the comparison Trust referred to an independent proforma.

The construction of new knowledge in part was generated through the participation in the OSCE instructor’s update, perineal repair workshops, and completing the work-based module. Midwives’ questionnaire free responses identified that new knowledge and skills instilled feelings of empowerment to approach suturing with confidence and motivation towards running workshops in their Trust. Midwives were better able to relate the anatomical structures of the
pelvic floor and anorectum with the RCOG classifications of trauma developing a clearer understanding when making decisions to repair. Most significantly, all midwives across the Trusts recognised the importance of undertaking a bi-digital rectal examination prior to repair for the recognition of anal sphincter damage and associated third and fourth degree tears. Midwives perceived that their confidence had been increased through the confirmation that the suturing techniques they were using were underpinned by current evidence. The three most frequently voiced factors enhancing midwives’ future confidence was the demonstration and application of the assessment of trauma, continuous subcuticular repair technique and identification of anal sphincter damage.

Positive attitudes towards providing women more informed choice about the consequences of non-repair were demonstrated across all focus groups. The majority of second degree tears were being repaired. Poor perineal healing and possible urinary or faecal incontinence without repair was more freely discussed with the recognition of sexual implications. Midwives who had attended the module perceived that their knowledge had been broadened significantly, particularly in relation to litigation and risk management. Learning from the ‘user’ added a new dimension to their views and attitudes towards greater sensitive care.

Midwives’ relied largely on their clinical experience and judgement for making decisions in perineal repair. Decision making was supported by following Trust guidelines or a protocol. Assessing trauma following an objective and structured perineal trauma proforma assisted midwives’ self-confidence in measuring the severity of perineal trauma enabling them to make accurate and expert decisions. The trauma proforma was considered by the majority of midwives as an important tool in the assessment of anal sphincter damage and the recognition of third and fourth degree tears.

There were a number of powerful mechanisms in place which contributed to the implementation of perineal repair workshops and the midwives’ perceived competency. Introducing the OSCE process, mandatory study days and the role of the PDM in facilitating access to perineal repair workshops with their active support in clinical experience enhanced their level of competency.
Support from Heads of Midwifery, PDMs and consultants were a powerful influence over the integration of the trauma proforma into the women’s case notes and implementation in practice. Alternatively, lack of support from senior managers, for CPD, limited resources for equipment and staff shortages influenced the numbers of midwives accessing workshops in two intervention Trusts. Supporting positive change within the organisation relied heavily on the attitudes of senior staff. Where positive attitudes were evidenced midwives were more likely to find success in their endeavour to attain and maintain confidence and competency in perineal repair.

Midwives’ views relating to the students experience of instruction and supervision in perineal repair were similar to those of the students. The majority of midwives considered this skill important during the midwifery programme due to the consistency of mentor support, supervision and feedback. Midwives considered that experience in perineal trauma assessment and repair as senior students was an invaluable starting point, encouraging them to build self-confidence and a degree of competence before registration. These views were influenced by some midwives’ experience of instruction and supervision as students themselves.

Facilitating the midwives’ confidence and competence in perineal repair has shown to make a substantial difference to the student midwives’ experience of instruction, supervision and threshold competency at the point of registration. Thus, all midwives who mentor students need to be supported in their role jointly by tutors and clinicians to facilitate this skill confidently and competently in clinical practice.

Chapter 12 will now report the student midwives’ data supporting the effectiveness of the educational programme for midwives in facilitating greater student participation in perineal repair in clinical practice.
CHAPTER TWELVE

DATA ANALYSIS AND RESULTS: 4

PHASE 4 – EVALUATING THE STUDENT MIDWIVES’ EXPERIENCE OF PERINEAL REPAIR FOLLOWING AN EDUCATIONAL PROGRAMME FOR MIDWIVES

Introduction

In chapter 11, the effectiveness of a new educational programme in perineal repair for midwives was reported. This chapter reports the findings of the students’ experience of instruction and supervision in perineal repair following this intervention. A greater number of students reported to be able to undertake perineal repair to higher levels of competency when they perceived that their mentor was competent in the skill, thus answering the third subsidiary question: *How effective is a work-based module and in-service training programme in perineal repair for midwives in facilitating greater student participation and competency for undertaking this skill in clinical practice?*

This chapter is divided into four parts: the thematic analysis and coding of student data; the students’ demographic characteristics; the student midwives’ experience of instruction and supervision in perineal repair; and the students’ attitudes and views towards sensitive perineal care.

Thematic analysis and coding: student midwives - 2005

Qualitative data emerging from questionnaire free responses and focus group interviews were organised under the five themes presented in chapter 9. These report the students’ experience of instruction and supervision in perineal repair following their mentor’s attendance at either an OSCE instructors update, work-based module or in-service perineal repair workshop. Categories have been colour coded as in chapter 9 and integrated under the main theme: the student midwives’ competency undertaking perineal repair under supervision. Appendix Z
provides a comprehensive account of the subcategories emerging from the categories which are reported in Table 12.1.

Table 12.1 Categories and sub-categories generated from post-intervention questionnaire free responses and focus group interviews following an educational intervention for students and midwives

<table>
<thead>
<tr>
<th>Theme: Student midwives’ perceived competency undertaking perineal repair under supervision following an educational intervention for midwives.</th>
<th>Colour code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency: New knowledge, skills, attitudes and values</td>
<td>Red</td>
</tr>
<tr>
<td>Confidence</td>
<td>Blue</td>
</tr>
<tr>
<td>Mentor instruction, supervision and feedback</td>
<td>Orange</td>
</tr>
<tr>
<td>Mentor’s confidence and competence to repair</td>
<td>Red</td>
</tr>
<tr>
<td>Support in university and clinical practice</td>
<td>Orange</td>
</tr>
<tr>
<td>Organisational issues – workshops for midwives and students.</td>
<td>Brown</td>
</tr>
<tr>
<td>Organisational constraints – funding, staff shortages, time</td>
<td>Brown</td>
</tr>
<tr>
<td>Opportunities in clinical practice</td>
<td>Yellow</td>
</tr>
<tr>
<td>Perceived mentor’s knowledge and skills in trauma assessment and recommended repair techniques</td>
<td>Red</td>
</tr>
<tr>
<td>Influence of policies and guidelines on midwives decision making</td>
<td>Brown</td>
</tr>
</tbody>
</table>

Quantitative data generated from students’ post-intervention questionnaires were organised into descriptive statistics. Inferential statistics have only been applied where student numbers for analysis dictate. Despite limited numbers of students it is anticipated that new theories generated through qualitative data may be transferable to similar cohorts of student midwives in pre-registration midwifery programmes in England.
Demographic characteristics of student midwives undertaking their midwifery programme at the University of Surrey – 2005

**Midwifery programme**

26 (74%) senior student midwives returned post-intervention questionnaires. 15 (57.7%) students had completed two years of their three year DHE/BSc (Hons) programme (2002 cohort) and 11 (42.3%) students, 12 months of an 18 month BSc (Hons) programme (2003 cohort). Student cohorts are combined for analysis due to their limited size. There was an improved student response rate in these two cohorts compared to the 15 students represented in phase 2. Respondents in 2005 considered the study to be instrumental to their future practice as midwives and were keen to participate in the study. 14 students, 6 and 8 respectively in two groups, attended post-intervention focus group interviews in 2005.

**Age**

Students’ ages ranged from 18 – 50 years with a mode of 24 years representing variable levels of life experiences and maturity. Student ages were similar in phases 2 and 4.

**Trust**

Students accessed their practice experience in all areas of maternity from the five intervention Trusts with a minimum of 12 weeks practice in the delivery suite dependent on the working pattern of their mentor.

**Evaluating the student midwives’ experience in perineal repair following an educational programme for midwives**

Part three is now divided into ten sections.
**Students' perceived competency undertaking perineal repair**

14 (53.8%) students had undertaken perineal repair under the direct supervision of their mentoring midwife in 2005 compared to 2 (13.3%) in 2003. There was a significant difference between the numbers of students during phase 4 who considered that they were sufficiently confident to undertake perineal repair under the supervision and assistance of their mentor (level 1). 13 (50%) students compared to 2 (13.3%) students during phase 2 (Mann-Whitney U = 106.500 n = 41 \( P < .006 \)). 2 (7.7%) students perceived that they could undertake repair with minimal guidance and assistance (level 2) during phase 4 compared to none in phase 2. This is a positive development, demonstrating that there was a notable increase in the numbers of students able to undertake repair under supervision.

**Perceived confidence undertaking perineal repair**

A total of 7 (26.9%) students felt quite confident to undertake an uncomplicated repair under their mentor’s supervision. However, 12 (46.2%) students were either not or not very confident to undertake the procedure under supervision. There was a small non-significant increase in the numbers of students who felt quite confident in 2005 compared to 2004. Working with a confident and experienced core midwife on the delivery suite made a significant difference to one students’ level of confidence:

‘I was working with a core midwife one day and she was brilliant, she said come with me and I said I can’t do it, but she made me put a few stitches in, ...when I said ‘no’ she said come and watch’...

Trust CI (FG2005) st/m 1 p:2

When I asked the student how she felt following this experience she stated:

‘Fantastic, I wanted to do it again, it gave me a bit more confidence to start, I just wish that every time someone needs suturing they will push you in so you can do it’.

Trust C (FG2005) st/m 1 p:2
Talking the student through the procedure by their mentor and getting positive feedback was considered to be an important factor for gaining self-confidence. Another student expressed how her confidence was affected when she was encouraged by her mentor:

'My mentor was going to the university to do the up-date [instructors up-date] and she said once she had done that she would show me...then one day my mentor said come with me, it was only a couple of stitches, I did it and I felt so confident, I came out with a grin on my face, bouncing out and so next time I had a small tear which needed stitches I did it, the more you go forward the more confidence you get'

Trust EI (FG2005) st/m 6 p:2

Students stressed the importance of being encouraged by mentors who were confident themselves to repair:

'I think if the midwife isn't confident, she won't encourage you to do it'

Trust DI (FG2005) st/m 5 p:2

The students' self-confidence undertaking a complex and important procedure was clearly enhanced by the support of a confident mentor. Further factors influencing the students' perceived confidence and competence in repair are now reported.

**Instruction and simulation in the university**

During 2005/2006, 26 (100%) students received the equivalent of one study day in the theory and practice of perineal repair at the university. Indications for an episiotomy, recommended repair techniques, current evidence to support the repair/non-repair of second degree tears and familiarisation with the new perineal trauma proforma were discussed alongside the RCOG (2004) classifications of perineal trauma. Further opportunities to practise repair skills in the skills laboratory were provided towards the middle of the third year.
A two hour practical workshop included an introduction to episiotomy technique, handling suturing equipment and tying knots on a perineal skin pad. The perineal trainer mannequin was available for more able students to apply the continuous subcuticular technique as their self-confidence and competence dictated during the workshop. 7 (26.9%) students considered the instruction at the university useful to some extent with the remaining 19 (73.1%) students considering the instruction moderately useful to quite an extent. Positive aspects of the study day related to the direct links made between the anatomy and physiology of the perineum with the recognition of various classifications of trauma and the assessment required using the trauma proforma in practice. Students stated the importance of the preparatory sessions in the university before approaching women in the delivery suite for the first time:

'I think the anatomy was very important, to know which bit goes where, deep muscles and skin, the workshop was useful with handling the instruments, holding the suture material that helped a lot'
Trust D (FG2005) st/m 3 p:1

'Allows you to put theory into practice without practising on the woman first'
Trust E (FG2005) st/m 6 p:1

New knowledge was considered essential in the information students were able to provide for the women in their care:

'The workshop has improved my knowledge and the available evidence that will contribute to the advice and support given to women'.
Trust A (Q2005) st/m 20 p:2

Practising repair techniques in a safe learning environment amongst peers was a significant factor leading to the students’ confidence. Students’ perceived that their confidence and competence undertaking assessment and perineal repair during phase four of the study was dependent on a number of key factors: reviewing previously taught anatomy and physiology of the pelvic floor in greater depth, and discussion of current evidence. A practical 'hands on' workshop in the university provided students with greater confidence handling instruments,
grasping basic skills in locating the suture material and tying knots, and a readiness to attempt putting theory and suturing into practice under supervision (Q2005 st/m 8).

**Confidence and the new perineal trauma proforma**

10 (71.4%) students from the two focus groups had cited the new perineal trauma proforma in the delivery suite. Students in Trust B had not seen this on the labour ward but stated that it was completed by the midwives on the computer. The students in Trust A had not been exposed to the proforma. One student in Trust D was able to describe how perineal trauma was assessed by the midwives on the delivery suite and the importance of using the proforma:

> 'Measuring 2x2x2 [tear in anatomical dimensions] using your finger to measure the size, skin trauma whether it needs suturing, patient's consent, if it is not sutured it has been checked by a second midwife, there are issues of litigation if you don't'.

Trust D1 (FG2005) st/m 3 p:4

Asked if the proforma had assisted midwifery practice the student replied:

> 'Yes it [the proforma] has influenced their [midwives'] practice, bought awareness about the size of the tear...whether it is bleeding, if it measures less than 2 cms...'.

Trust D1 (FG2005) st/m 3 p:4

Not all students had been exposed to the assessment of trauma using the proforma:

> 'Some midwives aren't measuring the tears before leaving them'

Trust E1 FG2005 st/m 6)

Students in Trust E had seen the proforma on the delivery suite but it was not being used to assess trauma in all cases. Students who had attended the workshops in the university found the structure and the process of using the
trauma proforma assisted them in identifying which tears required repair, providing greater awareness of the need for a proper perineal assessment. This knowledge had instilled confidence and encouraged the students to go out in practice to assess and suture (Q2005 st/m18 p:2). Students valued the assessment process and the need for the opinion of a second midwife as required.

**Perceived mentor's confidence and competency in perineal repair**

The students' perception of their mentors' confidence and competency was a significant factor in the extent they were enabled to put their theory into practice. Despite good preparation in university a number of students commented:

'My hospital mentor couldn't suture and she had to get the co-ordinator or supervisor to come in and suture, so I was never given the opportunity. By the time someone said go and have a go I didn't have the confidence'

Trust D1 (FG2005) st/m 1 p:1

Students perceived that the midwives who had attended the workshops were different in their attitude and approach to repair:

'There is a divide, those who are competent and those who are not...if you look at who does the suturing and who doesn't, it's the newer ones who are suturing and the older ones or part time who don't seem to be doing it, they think there's no difference and don't use continuous'.

Trust E1 (FG2005) st/m 6 p:3

One student perceived that there had been an increase in the level of confidence and competence amongst midwives in their Trust, especially in adopting the recommended repair techniques:

'The midwives who have done the course [module] or the workshops are more eager to get on, they seem more confident. I've noticed the newly qualified midwives are using continuous suturing and the ones who used to use
interrupted, as long as you get your act together its whatever you are confident doing. I know we are advised to do continuous’
Trust DI (FG2005) st/m 3 p:2

The students who perceived that their mentors were confident and competent themselves in the recommended repair techniques were more forthcoming when instructing and supervising them.

Experience in episiotomy

There was little difference in the students' experience performing an episiotomy in 2005. 24 (92.3%) students stated that they had received theoretical and practical instruction in episiotomy in the university, similar to the cohorts in 2004. It is not surprising therefore that 25 (96.2%) students had no or very little confidence performing this skill. Reasons for their lack of confidence were similar to the cohorts in 2004 and were attributed to lack of experience:
‘Very rarely undertaken by midwives [episiotomy] so lack of experience and confidence’
Trusts BI (Q2005) st/m17 p:2

‘Have only done one and observed 2 during training and do not feel confident in carrying it out’
Trust BI (Q2005) st/m 1 p:2

Students suggested that their confidence in episiotomy could be enhanced in the following ways: by providing more help and advice with practical sessions in the delivery suite; the opportunity to perform the procedure prior to the registrar undertaking a forceps delivery, and practise on models in their clinical placement. However, it is unlikely that students will be offered a greater opportunity undertaking episiotomy in the delivery suite in the future due to the restricted use in current practice resulting in an increasing number of inexperienced midwives for instruction.
Attendance at the midwives' workshops

24 (92.3%) students were familiar with the current provision of in-service training for midwives in perineal repair in their Trust. There was a significant difference in the frequency of which mentors encouraged their students to attend an in-service workshop between 2003 and 2005. 17 (41.4%) students in 2005 attended a midwives' workshop compared to none in 2003 (Mann-Whitney U 19.5 n 41 P<.000). However, due to the limited places on these workshops, only 9 (34.6%) students were able to access one, finding it useful to some or quite an extent for reiterating previously acquired knowledge and skills. Table 12.2 reports the usefulness of the midwives' workshops for supporting their own skills in repair.

Table 12.2 Usefulness of the midwives' perineal repair workshops to students' practice and competence

| Usefulness of midwives perineal repair workshops to students' practice and competence |
| Competence |
| Complemented existing knowledge |
| Discussion of relevant research in repair/non-repair |
| Shared learning with mentor |
| Enhanced practical skills |
| Greater awareness of a comprehensive perineal assessment and rationale for repair/non-repair |
| Reminder of skills previously taught |

Students were much more likely to be encouraged to attend a workshop by their mentor in 2005. The majority of students perceived that the workshops had influenced their mentors' attitude towards repair and the extent they were able to provide consistent instruction and supervision:

'The workshop was brilliant, applying the theory straight away...there has been a changed attitude in staff... it depends on the mentor, one had recently attended the course [module] and she was very keen for me to get going'

Trust AI (FG2005) st/m 5 p:2
'You enabled us to go over the anatomy and physiology, we were then able to practise knots on the skin pads and models, it was so fresh you could go and do it, I felt I could go back to the mother and that instilled confidence in me. I knew more, my midwife attended and it made a difference to her too, it changed her attitude towards the stitches'.

Trust DI (FG2005) st/m 3 p:3

**Instruction and supervision of perineal repair by the mentor**

10 (38.5%) students considered that their mentors frequently or very frequently encouraged them to undertake the repair of a simple tear or episiotomy compared to only 2 (13.3%) in 2004. However 21 (80.8%) and 15 (57.7%) students respectively, never or infrequently requested instruction or supervision in repair. The lack of request may have been attributed in part to the students’ reluctance to ask a mentor who they perceived lacked confidence or were not ready to undertake the skill themselves. There was a positive association between the midwives’ confidence and the frequency of which they would instruct their students. Midwives with a greater extent of self-confidence following a perineal repair workshop in the intervention Trusts instructed their students more frequently in perineal repair (Spearman’s rho = +.298 n 96 P< .003). There was no statistical difference between phases 2 and 4. Consistent with the student cohorts in 2004, there was a good positive correlation between the frequency of which students had requested instruction in repair and the increased frequency that mentor’s had encouraged their students to repair a simple tear or episiotomy (Spearman’s rho = +. 443 P < .023).

Students in 2005 were much more likely to request instruction and supervision in repair, particularly if they perceived that their mentor felt confident in their ability to repair using the recommended technique. Students’ confidence in undertaking a repair of a simple tear was very highly negatively correlated with the frequency they would request supervision by their mentor (Spearman’s rho = -.630 P < .004). Students who didn’t feel confident to embark on a repair were more likely to ask for supervision more frequently. The students’ orientation to request instruction and supervision also depended on how they perceived their mentors’ attitude towards teaching and supervising them in repair. Table 12.3 reports the
factors which influenced the students' decisions to request assistance in repair and the responses provided by their mentors.

Table 12.3 Response from midwives when students requesting instruction and supervision in perineal repair – 2005

<table>
<thead>
<tr>
<th>Midwives' response to students' request for instruction in perineal repair</th>
<th>Constraints influencing instruction and supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction and supervision</td>
<td>Instruction and supervision</td>
</tr>
<tr>
<td>Mentor willing but student declined</td>
<td>Infrequently requested due to mentors themselves undertaking repair under supervision.</td>
</tr>
<tr>
<td>Mentor keen if woman has adequate analgesia</td>
<td>Never requested as all women delivered have had intact perineum's or superficial grazes</td>
</tr>
<tr>
<td>Midwives talked through and student observed only</td>
<td>Not considered a suitable tear for a learner</td>
</tr>
<tr>
<td>Feedback</td>
<td>Time constraints</td>
</tr>
<tr>
<td>Mentor always willing to talk through repairs and anatomy</td>
<td>Always too busy, student ended up completing notes and weighing baby while mentor sutures</td>
</tr>
<tr>
<td>Support</td>
<td>Told 'you can do it next time as we are busy'</td>
</tr>
<tr>
<td>Mentor encouraging and supportive</td>
<td>Told, 'woman too uncomfortable, not enough time, next time perhaps'</td>
</tr>
<tr>
<td>Involved student in perineal repair during training</td>
<td>Perceived mentors' confidence and competency</td>
</tr>
<tr>
<td>Midwife very patient and informative</td>
<td>Midwife only does interrupted sutures</td>
</tr>
<tr>
<td>Time constraints</td>
<td>Those unhappy with their own practice never allow student to attempt suturing</td>
</tr>
<tr>
<td>Not enough time but mentor keen to instruct with student observing</td>
<td></td>
</tr>
</tbody>
</table>

Generally, mentors were very supportive towards instructing and supervising their students if they themselves had the time, the tear was small; they felt confident...
and were not under supervised practice themselves. The following statements from students confirm this in their focus group discussion:

'In our Trust they are very keen to get students suturing, this year has been better, but we need the mentors to support the students, not all of them are suturing yet'
Trust Al (FG2005) st/m 4 p:2

'My mentor has just done the workshop and was very keen to get her practice up-to-date before teaching me'
Trust El (FG2005) st/m 7 p:2.

'Sometimes they say you don't need to be able to suture until you are qualified, they are not willing, other mentors say watch me and get a couple under your belt, some midwives aren't confident themselves to suture'.
Trust DI (FG2005) st/m 3 p:3

The midwives' own confidence and competence undertaking the recommended repair technique strongly influenced whether they were prepared to instruct and supervise their students. The following quotes from a questionnaire free response support this:

'I feel there is a large difference in knowledge and understanding between midwives. Some midwives have no confidence in perineal repair and therefore are completely un-willing to instruct students, which is a shame for students and clients'.
Trust El (Q2005) st/m 18 p:5

'My midwife was not competent in perineal repair, she was ill prepared, she hadn't been on an up-date, she left me in the room with the woman to find a midwife to show her how to do the new technique, she hadn't even heard of the continuous technique'.
Trust El (FG2005) st/m 8 p:2
Unfortunately, there was very little change in the extent midwives was able to support their students adequately in Trust E. Only two midwives undertook the OSCE in this Trust.

**Organisational factors affecting the students' instruction and supervision in perineal repair**

Table 12.4 reports the factors influencing the incidence of which students were able to receive instruction and supervision in perineal repair.

**Table 12.4 Factors perceived by students which constrained their instruction and supervision in perineal repair - 2005**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>time constraints</td>
<td>9</td>
<td>34.6</td>
<td>34.6</td>
</tr>
<tr>
<td>midw lack of confidence</td>
<td>2</td>
<td>7.7</td>
<td>42.3</td>
</tr>
<tr>
<td>inappropriate at stage in programme</td>
<td>2</td>
<td>7.7</td>
<td>50.0</td>
</tr>
<tr>
<td>no opportunity</td>
<td>1</td>
<td>3.8</td>
<td>53.8</td>
</tr>
<tr>
<td>complicated tears</td>
<td>1</td>
<td>3.8</td>
<td>57.7</td>
</tr>
<tr>
<td>lack of competence</td>
<td>1</td>
<td>3.8</td>
<td>61.5</td>
</tr>
<tr>
<td>combination of reasons</td>
<td>9</td>
<td>34.6</td>
<td>96.2</td>
</tr>
<tr>
<td>left handed</td>
<td>1</td>
<td>3.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The most significant factors preventing midwives from instructing and supervising their students in phase 4 was a lack of time, reported by 9 (34.6%) students. These findings are consistent with the factors reported during phase 2 in chapter 9, table 9.6. Students reported a combination of factors inhibiting their instruction. However, only 2 (7.7%) students perceived that their mentor lacked confidence in perineal repair in phase 4 compared to 6 (40%) in phase 2. Midwives were less likely to report that the procedure was inappropriate during the midwifery programme in 2005.

There was a difference towards a positive attitude by midwives in clinical practice following an educational programme, whereby students were more likely to be encouraged by more confident mentors to pursue the skill of repair. If students
were unable to attend a workshop, impromptu teaching sessions on the delivery suite took place occasionally.

Lack of available training equipment inhibited alternative one-to-one teaching sessions in some Trusts. Sponges remained the only available training material in Trusts A, B and E to enable students to practice knot tying and handling the instruments. Trusts C and D had purchased skin pads and perineal trainers which encouraged students to learn to suture in three dimensions. Funding for training equipment remained problematic in 4 Trusts. Opportunities for students to have a perineal repair skills up-date in Trust B was provided where I am the link teacher. Students in this Trust valued this extra input with one-to-one instruction, reflection and small group discussion.

**Importance of threshold competency undertaking perineal repair**

26 (100%) students considered that achieving a threshold competency (level 2) in the assessment and repair of perineal trauma very important to their role before registration. Students reported that they often felt frustrated that they were unable to finish the ‘job’ and provide women continuity of care in the delivery suite (Q2005st/m p:3). Students undertaking the 18 month programme considered that the course was too demanding without the added anxiety to repair. Some of the students’ mentors were willing to instruct, but they felt undertaking repair was an unrealistic objective prior to registration (Trust A: Q2005 st/m 4 p:4). However, a greater number of students in phase 4 were keen to gain experience in repair, knowing that they had more opportunity with constant supervision before registration. Some students held strong views about gaining a basic level of competency and perceived that their experience also depended on the mentor they were allocated to:

‘I feel mentors should encourage students to be more involved with perineal repair. I was encouraged early on in my training and this has been extremely beneficial. If I work with a midwife who doesn’t suture then I will ask to observe midwives who do as observing a number of midwives suturing provided you with excellent experience and tips’.

Trust BI (Q2005) st/m 7 p:5
'I've felt that a students' learning has a lot to do with the mentor they have and the relationship between them. I've worked with many midwives where some like taking control and don't let the student do much and I've had others where they leave you to work on your own and pop in now and again to check on things/you. My two suturing opportunities only arose when a midwife I was with told [students' emphasis] me I was going to suture the lady I delivered. I wasn't pressured though and found the experience very positive, especially as the midwives' instruction was clear and precise. Suturing is a technique that is daunting to all students and this needs a lot of support.'

Trust EI (Q2005) st/m 26 p:5

Clearly, there were varying views amongst students, emphasising individual needs and priorities. The majority of students considered instruction in repair was part of their mentors' role.

Student midwives' views and attitudes towards sensitive perineal trauma management

The fourth part of the chapter now looks to the factors influencing the student's attitudes and views towards sensitive perineal care and considers whether their views were influenced by their mentors.

Model of midwifery care

There was no difference in the order of models of midwifery care adopted by all students in phases 2 and 4. 15 (57.7%) students adopted a radical over a conservative model in phase 4 followed by 3 (11.5%) and 4 (26.7%) students respectively adopting a liberal model. There were 2 (7.75) students who did not adopt any of these models specifically, but considered that they practised using a combination of care approaches appropriate to the women's needs at the time. These findings reflect the midwives' views towards models of care and are similar to those reported in phase 2. There was no significant difference between the students' and midwives' views of care.
Attitudes towards sensitive perineal care

Students were asked to indicate the strength of their views towards the seven attitude statements towards perineal care (appendix H:10). The attitude statements and scoring were described in chapter 9. The total view continuous scores for each item that made up the scale were 35. There was a skewed distribution of scores ranging from 24 to 35. A score of 24 indicated a positive or favourable view from the lowest score, to strong agreement. The mean score was 29.19 with a standard deviation of 2.593 indicating a favourable or positive view towards women's perineal management and care. There was a significant difference in the strength of attitude demonstrated in the scores between phases 2 and 4. Students' reported stronger positive feelings towards perineal care in the 2005 cohort (Mann-Whitney U 17.500 n 41 P < .000).

Combined, 25 (96.2%) students indicated positive or favourable views toward the seven attitude statements in the post-intervention questionnaire. 18 (69.3%) students felt very strongly positive towards the statements. 1 (3.8%) student was uncertain in her views, cross referencing data this student reported limited opportunities for practical experience or discussion with her mentor. All students (26, 100%) strongly agreed or agreed that undertaking repair was a normal part of midwifery practice. There was no difference in this view from the student cohorts in phase 2. 24 (92.3%) students considered that it was important to the woman who undertook her repair. These views are consistent with the views of midwives. There was no association with the model of midwifery care students had reported and their total attitude scores.

There was a moderate positive association between the students' view that repair is a normal part of midwifery practice and that competency was relevant to all midwives, not just those working in the delivery suite (Spearman's rho .399 n 28 P < .043). This association was not apparent in the 2003 cohorts. There was a stronger positive association in the students' views between the importance of clinical audit for perineal healing and women's choice in the suturing/non-suturing of their perineal tear (Spearman's rho .546 n 26 P < .004). Unlike the midwives' views, students did not associate the link between auditing perineal healing with
their role in perineal repair. This may be attributed to the students’ lack of experience in following up perineal care with their mentor.

It was apparent from the students’ discussion in the focus groups in 2005 that their mentors were much more flexible and amenable towards providing women with information and an informed choice in whether their trauma was repaired after they had undertaken a thorough assessment. Students perceived that the decisions to repair were made on the midwives’ observation and assessment of trauma. Some students considered that there were a degree of coercion from their mentors and quoted them as saying:

’If we bring this together it will heal, if you don’t want to have it done you don’t have to we could leave it as you don’t need sutures’
Trust DI (FG2005) st/m 3 p:4

’Some are given the implications for their sex life, but women are usually coerced into having it [the repair] ‘we’ll just pop a few stitches in’ but most are given the choice’
Trust Bl (FG2005) st/m 4 p:4

Attending the perineal repair workshop in the university and Trust, students reported in their focus group that it made them feel much more considerate of the woman’s perineal anatomy coming together normally, fearful of undertaking a poor repair and more aware of correctly inserting sutures. Some students identified that auditing perineal healing in practice was lacking by a number of midwives. This they perceived was attributed to the practicalities of time and limited community visiting. Sensitivity towards women’s sexuality and faecal incontinence were perceived to be areas which were more regularly discussed by midwives than by women themselves. This is an area which has improved noticeably from the 2003 student cohorts.

Summary and conclusions

The effectiveness of a work-base module and the provision of in-service perineal repair workshops for midwives were evaluated in light of whether this provision
enabled greater student participation in perineal repair through instruction and supervision by their mentoring midwife. Data revealed that a significantly greater number of students were assessing and undertaking perineal repair under the direct supervision of their mentoring midwife compared to similar cohorts during phase 2 thus meeting the requirements of the EU Directives and midwifery curriculum. Data confirms that when midwives' themselves perceived they were supported by competent and confident colleagues in the delivery suite they were able to offer a greater number of students' instruction and supervision despite organisational difficulties. These findings support the fourth subsidiary research question.

There was a significant difference in the numbers of students who were encouraged by their mentors to attend midwives' in-service perineal repair workshops during phase 4. However limited numbers of students were unable to attend due to the priority given to midwives and availability of places. Students perceived that the workshops had influenced their mentors' attitudes towards providing consistent instruction, supervision and support in trauma assessment and repair. Students were less inclined to ask for instruction and supervision if they perceived that their mentor lacked current knowledge, confidence or competence in the skill. Impromptu teaching on a one-to-one was more prevalent during phase 4. Lack of time and shortage of staff were significant factors in preventing students accessing repair instruction and supervision. There was no significant difference in the model of midwifery care students had adopted between phases 2 and 4. 57.7% students mirrored their mentors' model of radical midwifery care. Students' total attitude scores were significantly higher during phase 4 providing stronger positive views towards sensitive perineal care.

There were fewer midwives mentoring students during phase 4 though not significantly different from phase 2. Certified midwives remained the largest group mentoring students. There were more midwives who had voluntarily offered instruction and supervision to their students in phase 4. Difficulties offering instruction were similar to those stated by students. Midwives' increased level of confidence was positively associated with the increased frequency of which they offered students instruction.
Discussion amongst students in focus group interviews revealed that working with a competent and confident mentor made a significant difference to their level of confidence when requesting instruction and supervision in perineal repair. Support and encouragement from mentors instilled feelings of elation amongst students who had experienced the procedure. Attending an in-service perineal repair workshop with their mentor or knowing that their mentor had been on the module or an up-date provided students with further confidence in their mentors' ability to repair using the continuous and subcuticular repair techniques discussed and used in the skills lab setting at the university.

The student cohort in phase 4 were more likely to perceive that their mentors were more flexible and amenable to women's choices towards the management of their perineal trauma following their attendance at a workshop. A greater number of students in phase 4 revealed that sexual activity was more likely to be discussed with women and their mentor, with more students having a heightened awareness of problems associated with natural healing such as dysparenuia and urinary or faecal incontinence. There was a notable awareness of students' knowledge relating to the importance of good approximation of perineal muscles for good healing with a small number referring to the use of the perineal trauma proforma for assessment.

Student-mentor relationship through feedback in instruction and supervision was a significant factor influencing whether students were able to repair at the point of registration. Lack of training equipment in some Trusts inhibited one-to-one learning for some students. A small number of students considered that the introduction of a formative OSCE for both midwives and students would improve the numbers of midwives competent to repair and instruct.

Chapter 13 will now discuss the main research findings which have generated a new body of specialist knowledge surrounding the midwives' and students' perceived competency placing this in context with current midwifery education and practice.
Introduction

The outcomes of this study make an original contribution towards a new body of expert knowledge in pre- and post-registration midwifery education surrounding the midwives' and students' confidence, and perceived levels of competency and clinical decision making associated with the assessment and management of perineal trauma. It has provided a greater understanding and insight into the complex nature of workplace learning and the multiple factors associated with competency development and assessment.

Four specific areas have emerged from this study which have not been acknowledged fully in previous literature and are presented here for the first time. The discussion will focus on the key findings. Firstly, the development of a new assessment tool for the assessment of the midwives' competency undertaking perineal repair combining competency levels descriptors, an Objective Structured Clinical Examination (OSCE) and a perineal repair trauma proforma in the delivery suite. Secondly, the integration of the midwives' professional expertise, cue taking, compliance with guidelines and women's choice offers new insights into the complex process of clinical decision making in perineal trauma management. Thirdly, a postmodern approach to gender sensitive care recognises childbearing women as a unique and distinct group requiring a different and specialised approach to perineal trauma management. Integrating the philosophies of radical feminism and poststructuralism has enabled the voices and subjectivity of the midwives' experiences to expose new discourses around the women's experience of perineal trauma. Finally, the study highlights the importance of the midwives' competency in perineal repair in promoting the student midwives' confidence and threshold competency undertaking simple perineal repairs at the point of registration. The findings from this study have important implications for midwives and other health professionals and the approaches they take when addressing women's physical and psychosexual...
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experiences. This new body of knowledge will provide valuable insights for future midwifery education and practice, recognising the need for a paradigm shift towards a postmodern model of midwifery care. The strengths, limitations of the study and recommendations for future research, education and practice conclude the discussion.

The midwives' assessment, acquisition and maintenance of standards and competency managing perineal trauma

This study represents a small sample of midwives employed in six NHS consultant/midwifery led units in S.E. England. It is the first study of its kind to evaluate both the midwives' and students' perceived level of competency in perineal repair using the DACUM competency levels descriptors in conjunction with the OSCE and a newly developed perineal trauma proforma. The purpose of a measurable assessment tool was three-fold: firstly, to enable midwives to self-assess the level of competency they associated with their performance of perineal repair; secondly, as a measurement tool in the pre-and post-intervention questionnaires to compare the midwives' perceived level of competency prior to and following the perineal repair programme; and thirdly, as a reproducible assessment tool to assess the midwives' level of competency formatively and summatively on completion of the work-based module and in-service perineal repair workshops in the workplace.

To date, there have been no reported levels of competency identified for the midwives' assessment of perineal trauma adopting levels descriptors such as the combined DACUM (Herman & Kenyon 1987) and Benner's (1984) novice to expert levels descriptors. This document was instrumental in informing this study of the increased numbers of midwives who could implement perineal repair at higher levels of competency (levels 4 and 6) following an intervention educational programme in perineal repair. The levels descriptors have been successfully integrated into the OSCE assessment in the skills lab and in the delivery suite since 2004, validated by the examination board at the University of Surrey. Currently, there are no national competency frameworks to assist midwives in this process. On reflection, the level's descriptors need to replicate more closely with the National Institute of Health's (NIH 2009) proficiency scale which provide
clearer descriptions of the ability to demonstrate competency on the job. The scale captures a wide range of ability levels which are graded into five steps: 'not demonstrated' to 'master'. This would be a more useful tool to aid midwives' understanding in expected proficiency when comparing their current level of proficiency with experts. A more comprehensive analysis of competency assessment will therefore embrace knowledge, skills, attitudes and capability which is a more holistic approach to assessment with practitioners being able to deal effectively with the turbulent environment of working practice (Gardner et al 2007). It is important therefore to provide a proper measure of job performance set against the standard for the development of a national accreditation of competency. The DACUM levels descriptors provided an effective measure by which midwives were able to assess their own perceived level of competency in the pre- and post-intervention questionnaires. Adopting a structured and objective measure of the midwives' competency in perineal repair has been an important breakthrough for midwifery education and practice. It has brought to light the numbers of midwives in this study who claimed to undertake repair but on closer analysis were unable to practice perineal repair without some level of supervision, thus providing a more accurate estimate of the numbers of midwives competent to repair.

The integration of the levels descriptors into the OSCE at the bedside in the delivery suite improved the numbers of midwives who were receiving formal assessment in perineal repair. During phase 2, just over a third of midwives reported that the senior labour ward midwife was the most frequently reported person undertaking perineal repair assessment adopting the traditional "see two, do one, and now you are on your own" approach. Another third of the midwives practiced perineal repair without any formal assessment with the remaining using medical, self or peer assessment. During the same period less than a third of midwives across the six Trusts considered they were at a level of competency which enabled them to instruct, supervise and assess their colleagues in perineal repair. This trend improved during phase 4 when over 50% midwives had been formally assessed in the delivery suite by an OSCE instructing midwife. Despite this positive change in the assessment process there were still a third of midwives who continued to use self or peer assessment. The number of midwives was disappointing low, reflecting the small numbers of expert midwives
who were available in the Trusts to undertake the midwives' assessment using the OSCE. Midwives in focus group interviews expressed whether it was necessary to adopt such a comprehensive procedure to assess competency. Other midwives reported the positive aspects of the OSCE for setting standards and safe, competent practice in perineal repair. It was acknowledged that midwives needed the appropriate knowledge, skills and familiarity with the OSCE process to support their colleagues. It was recognised that this process was time consuming and resource intensive particularly at the bedside. Brosnan (2006) emphasises how the educational benefits of the OSCE outweigh its financial and opportunity costs and should be considered as a method of clinical assessment. In a critical review of the evidence in health care performance assessment (Hamilton et al 2007), OSCEs were not cited as an assessment strategy in clinical practice. However, part of the practitioner's assessment of clinical performance included a combination of supervision and observation by trained assessors. Assessment included the use of rating scales and inter-rater reliability for validity of the assessment which included action plans for unmet competencies and structured opportunities for development. Recommendations for mandatory training for qualified staff in some instances resulted from this assessment process. OSCEs have been used widely for the assessment of venepuncture, cannulation and radiography in Chelsea and Westminster Healthcare Trusts (Collins et al 2006) enabling practitioners to demonstrate clear evidence of their competency using a similar competency levels framework developed by the Vascular Access Network team (2005). Building on the success of the OSCEs in this study, this process could easily be expanded nationally in midwifery practice with more OSCE trainers and assessors if funds are made available in the Trusts for specialist training.

The development of the midwives' competency in perineal repair was highly correlated with their perceived level of confidence. Confidence was a key contributor in the midwives' ability to perform the skill independently. The largest contributing factor in this study identified by midwives' in their development of their continuum of expertise was the frequency and opportunity they were able to observe and participate with expert midwives undertaking the assessment and repair of perineal trauma in the delivery suite. These findings are consistent with Vygotsky's (1987) theory discussed in chapter five that individual thought and
expertise has its origins in the combined life of the culture and life of the individual and zones of proximal development. Lave and Wenger (1991) explain how learning and the development of expertise takes place as the practitioner gains greater knowledge, understanding and mastery in the communities of practice in which they work. The correlation between experience and confidence found in this study is further supported by Dahlen and Homer (2008) whereby the midwives' experience was measured in years in respect to three levels of experience in perineal repair: inexperienced (none-1 year); 2. moderate experience (1-9 years); and very experienced (10 or more years). Experience, in Dahlen and Homer's (2008) study was gauged on the numbers of repairs performed a year ranging from 1-9, 10-20 and 20 years respectively, demonstrating that the more years the midwives had performed repair the more confident they felt. These findings are consistent with Benner's (1984) skills acquisition model and the development of professional expertise discussed in chapter four.

There was a clear differentiation in this study between how novice midwives were able to achieve their expertise in comparison to experienced midwives up-dating their competence. Less experienced midwives perceived that continued support and feedback from the expert in the delivery suite contributed significantly to the move along the continuum from novice, advanced beginner through to competent and proficient practitioner. Alternatively, proficient midwives were able to move to expert instructors as a result of the reciprocal and supportive relationship developed with their OSCE supervisor. Peer expertise and craft knowledge was also shared reflectively between colleagues in the module, workshops and delivery suite providing high challenge and joint support. These findings are supported by the model of the critical companion in the learning journey by Titchen (2003) and Gribben et al (2006). Higgs and Titchen (2001) describe a framework consisting of three components in the critical companionship which facilitate expertise: skilled companionship or being patient centred; being able to critique, review and contextually use professional craft knowledge; and being self-critical and self evaluative. Expert midwives who were able to access the module perceived that by instructing and supervising colleagues in the delivery suite they were able to confirm their own learning, further developing their teaching skills. These findings are supported further in Field's (2004:561) view
that ‘experts’ communicate and demonstrate their craft knowledge using rules to guide the performance of novices, linking both ‘conceptual and procedural knowledge for effective action’. Thus, professional expertise and specialised craft knowledge were captured through a broad, complex and dynamic nature of knowledge accrued through experiential midwifery practice. The midwives’ experience was further linked to the extended and uninterrupted rotation to the delivery suite and unrestricted access to an expert/OSCE midwife for one-to-one instruction. However, staff shortages and inadequate numbers of OSCE midwives restricted this process bringing into question the preparation of expert midwives for assessment. The current Perineal Assessment and Repair Longitudinal Study (PEARLS, RCM 2006) initiated a nation wide study of training and assessment in perineal repair for midwives in 2007. Skilled trainers and an Objective Structured Assessment of Technical Skills (OSATS) in perineal repair are being implemented in this programme. This project has yet to be evaluated.

While the percentage of midwives in this study (86.2%) were competent to practice perineal repair without supervision, 13.7% midwives were practising perineal repair below the standard level. Focus group discussions and visits in intervention and comparison Trusts elicited an urgent need to facilitate mandatory perineal repair workshops, introducing a formalised assessment of competency with accreditation in order to encourage consistency and standards in perineal trauma management. Mandatory workshops were already implemented into two Trusts supporting risk management, CNST and the KSF recommendations, constituting part of the midwives’ mandatory annual up-date. However there were conflicting opinions between practice development midwives (PDM) as to the urgency of mandatory training in perineal repair associated with time constraints and an overstretched timetable and budget. Currently, only midwives undertaking the perineal repair module continue to undertake the OSCE through the universities examination process. This study has identified that implementing a formalised assessment of competency in perineal repair through the university examination system requires a dedicated team of OSCE midwives with additional specialist training. It has also shown that by implementing a known structured and validated assessment process, midwives have been able to achieve higher levels of perceived competency at a faster rate whilst undertaking the module with accreditation on completion. This brings into
question the current position in professional accountability, self-regulation and accreditation of competence in perineal repair nationally.

Professional accountability and self-regulation is the cornerstone of best practice and can only be achieved through evidence-based care and up-dating, enabling skilled midwives to act as an advocate for women in their care (Gould 2009 & NMC 2007). Colyer (2004), Mutema (2007), Cowin (2008) and the DoH (2008c) have recognised how competency frameworks which provide measurable standards against practitioner's performances assist in setting standards in practice. The recommendations in High Quality Care for all (DoH 2008a:8) have strengthened arrangements to ensure staff have consistent and equitable opportunities to up-date and develop their skills. Gould (2009) stresses that midwives have a responsibility towards professional accountability in accordance with the NMC code of conduct (NMC 2008) bringing with it advocacy and assertion. In this respect accountability works in the best interests of women. Midwives are in powerful positions to improve the quality of care in the maternity services and play a significant role in improving women's health outcomes (DoH 2008a). Midwives are also responsible for providing quality care in the NHS, reaching standards of excellence to which the profession aspires and which every woman expects of her care. The challenge is how to get midwives to engage with their accountability is a positive way. It is arguable whether professional self-regulation (NMC 2004) can help to improve women's perineal morbidity unless midwives become more competent in the skill, receiving assisted or guided regulation.

Setting national standards and accreditation for perineal repair competency the Royal College of Midwives and the Royal College of Obstetrics and Gynaecology would be an excellent starting point. A regulatory framework is only one means of ensuring quality within the maternity services, the other, is relying on the professional integrity of individual midwives to ensure they provide a safe and high quality service, acting as the woman's advocate. Attendance at study days and workshops do not in themselves demonstrate competence in practice. Similarly, professional regulators do not hold a monopoly of protecting the public. The final responsibility lies with practitioners themselves in accessing specialist education and practice, with educational support and leadership from managers.
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and supervisors of midwives. PDMs and labour ward co-ordinators are ideally placed to facilitate instruction, supervision and assessment. Indeed, the majority of midwives attending the instructor's study day were such midwives, undertaking the OSCE themselves in order to facilitate learning in practice. It was evident from the midwives' experiences in this study that those in leadership roles also require support to undertake their roles effectively (DoH 2008b.) The next section discusses the factors which were found to influence the midwives clinical decision making process in this study.

Factors affecting the midwives' clinical decision making process in the assessment and repair of perineal trauma

Four main categories emerged from the midwives' qualitative data demonstrating the extent to which experience, clinical guidelines, the new perineal trauma proforma and education influenced their judgement and clinical decision making skills when performing a repair or no repair. This is the first study to incorporate multiple factors in the decision process prior to performing perineal repair. The first and most frequently reported activity midwives reported towards making a decision when managing perineal trauma was their professional judgement following the initial assessment of the tear. 98.2% midwives across all Trusts considered that an accurate initial assessment of the trauma was a vital part of the decision making process. Decisions for repair were dependent on judging the characteristics of the trauma sustained; ie bleeding, depth of trauma in three anatomical dimensions, and apposition of tissues. The midwives' decision to undertake a repair was based on both the visual and the digital assessment of perineal trauma. Thus, the initial assessment was the over-riding factor in deciding the appropriateness of repair/non-repair and appropriate repair technique. These findings were similar to those presented by Spendlove (2005) in a two stage process of: assessing the clinical scenario; and the contemplating and knowing phase which was informed by the midwives' experience and knowledge. This supports the theory that both the information processing and intuitive-humanist decision making models comes into play in the decision making process (Banning 2007). Assisting midwives in this process was the perineal trauma proforma.
A large percentage of midwives in the intervention Trusts referred to the new perineal trauma proforma to assist in a more accurate and comprehensive assessment and measurement of perineal trauma, consistent with the findings of Lundquist (2004) and Metcalfe et al (2002, 2004). A smaller percentage of midwives in the comparison Trust adopted a similar proforma designed by Metcalfe et al (2004). The proforma had been instrumental in assisting some midwives to identify a greater number of third degree tears after they had undertaken a bi-digital assessment of the anal sphincter muscle prior to performing the repair. These findings concur with those of Groom and Patterson (2004) and Andrews, Thakar and Sultan (2006), in the positive identification of obstetric anal sphincter injuries (OASIS) following hands on training workshops.

Using a trauma proforma and check list assisted midwives in their hypothetico-deductive approach to decision making through cue recognition. Midwives in this study used various levels of their clinical expertise and cues prompted by the criteria in the trauma proforma. The proforma acted as a guide enabling midwives to judge the severity of bleeding and trauma, by digitally measuring the trauma. Cioffi and Arundell (2009) report on a validated assessment criteria of necessity and sufficiency using Bausell’s (1986) content validity criteria. This is used to identify cues and related factors sourced from midwives’ descriptions of cases in suturing and non-suturing. Cues were grouped into bleeding and birth trauma. These are similar to the criteria and cues described in the trauma proforma in this study (appendix EE). A high percentage of midwives identified that bleeding, depth of trauma to the vaginal wall, apex, perineal body and third degree tear were highly important to their decisions in repair. This is consistent with Cioffi and Arundell’s (2009) findings where bleeding and the ‘amount of blood loss’ was the main cue category for repair. Sub-cues attributed to various types of bleeding. Birth trauma was used as a secondary cue including the severity and depth in measurement of the tear determined the repair.

Novice and expert midwives described difference performances in the decision making process, with less experienced midwives calling upon more experienced colleagues to confirm the depth of trauma. These midwives were more likely to refer to the newly developed trauma proforma for guidance. Novice midwives with little or no experience or clinical context in which to apply facts relied on
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expert colleagues for guidance. Experts on the other hand, were able to draw on their extensive repertoire of specialist knowledge, professional experience, and the heuristics of explanatory sufficiency, intuition and reflection.

Midwives explained that some women expected them to make the decision based on their expertise. The midwives' lack of confidence in repair was perceived by student midwives to influence their decision, persuading women to allow their perineum to heal naturally if it was a small tear. Cioffi and Arundell (2009) identified similar factors influencing decision making alongside cue recognition and classified these as woman-centred and midwife centred factors.

In this study most midwives provided women with an informed choice about their trauma management. The complexity of the decision making process in clinical practice is clear and recognises a third theoretical model identified by Banning (2007). This is the multidimensional computerised model developed by O'Neill (2005) which encompasses the educational, experiential, situational and client needs as key triggers in the decision-making process, contending that each of these components enter into the final decision. However, O'Neill's theoretical model is limited due to the small scale of the project and studying inexperienced nurses in a pseudo-clinical setting. However, based on the multiple factors midwives' take into account in the decision making process in this study the multidimensional approach to decision making described by Banning (2007) O'Neill's model could be developed as a useful teaching tool.

Both propositional and procedural knowledge supported the midwives' decision making process. Negative experiences and personal 'knowing' of poorly repaired perinea influenced some midwives in their decision to repair all second degree tears. Midwives, who had not been able to access the workshops or module, stated that their repair techniques were guided by habit and the technique adopted in the Trust. The change in practice from an interrupted to continuous repair technique was largely based on the midwives' self-confidence and the effectiveness of the technique on perineal healing supported by feedback from women themselves.
Trust guidelines incorporating the RCOG (2004) recommendations and classifications of perineal trauma were the second most frequently reported documents supporting the midwives' clinical decision making process in the management of perineal trauma. This document influenced 98.6% midwives' decisions, to a large extent, following the initial assessment of trauma. Midwives across all Trusts were more aware of the current RCOG recommendations for the repair of second degree tears and bi-digital anal sphincter assessment following the educational programme. Currently, the Royal College of Midwives provide information and practice points related to perineal care but no guidelines. The National Institute of Health and Clinical Excellence (NICE) (2007) have made clear recommendations for a continuous, non-locking repair to the vaginal wall and muscle completing the skin repair with a continuous subcuticular technique, only omitting to leave the skin if skin edges are well opposed. In this study significantly more midwives had adopted these repair techniques, performing a bi-digital rectal examination as recommended by NICE (2007). CNST was considered to be a driving force for training in only two of the Trusts in this study, influencing the midwives’ ability and subsequently their decision to repair. The CNST NHS Litigation Authority (2008) stipulates clearly risk assessment strategies in their standards. These pertain to leadership, staffing, guideline development, perineal repair and systematic approaches to training. Standard 3: perineal repair refers to approved documentation for the management of all classifications of trauma. Auditable standards are key to monitoring midwifery care and actions. A training needs analysis is a further recommendation for a systematic approach to training. Perineal repair is a welcomed standard but was not incorporated into CNST at the inception of this study. The extent to which clinical guidelines are implemented and influence the practitioners' decision making are largely determined by the value placed on the evidence to support them. Richens (2007:417) claims that implementation of guidelines continues to be a major challenge and that clinical audit plays an essential role in guideline implementation. Essentially, guidelines are tools to guide practice and not govern them. The following discussion demonstrates further how midwives attitudes and beliefs influence their management of perineal trauma.
Locating gender sensitive care, radical feminism and poststructuralism in midwifery education and practice

This study has identified for the first time how an educational programme in perineal repair underpinned by a radical feminist and postmodern approach to teaching and learning has enabled a small group of midwives to develop new insights and a greater understanding of the individual and different needs of women experiencing perineal birth trauma. While women’s psychological experiences of perineal trauma have been reported in feminist and midwifery literature there have been no references as to how these issues can be effectively addressed with midwives in their pre-and post-registration midwifery programmes. This discussion identifies how midwives and students identified with women’s experiences of perineal trauma and sexuality, shaping new gender sensitive discourses which can now occupy a place of authoritative power within midwifery education and clinical practice. New discourses developed through the verbal and written texts of the midwives’ encounter with women provide a new voice which speaks out for, and represents, the physical and psychosocial needs of childbearing women.

Focus group interviews provided a forum through which midwives and students could disclose their views and attitudes towards women’s experiences of perineal trauma. The dominant view held by midwives was to undertake the repair confidently and competently, enabling them to provide continuity of holistic care. These findings are concurred with Dahlen and Homer (2008:27) who found that the provision of continuity of care was a major motivator for midwives’ learning perineal repair. The midwives’ sensitivity to care management in both phases of the study was based on: providing informed choice in repair options; good perineal infiltration for analgesia; assessing the extent of the trauma and identification of the anatomical structures; identification of haemostasis and healing with repair/non-repair. In both phases midwives prioritised perineal pain relief, perineal healing and control of infection. They were also mindful of the women’s fears of repair and particularly with respect to resuming sexual intercourse. Some midwives were concerned about gaining the women’s trust but identified that women valued their personal experience and professional expertise acting as their advocate. While some midwives identified the women’s
concern over sexual issues I perceived that there was a distinct lack of knowledge and understanding in both workshops and module associating poor or no perineal repair and the function of specific perineal muscles with the longer term consequences of resuming sexual intercourse, dyspareunia, bladder and bowel control. When prompted about discussing sexual activity with women, I found that it was apparent that some midwives had never bought the subject up and some confessing that they wouldn’t know what to say. Webb (1988) asserts that the practitioner’s lack of knowledge relating to sexuality has been linked to their attitudes towards sexual issues, which often leaves them ill-equipped to discuss sexual issues with their patients. This may be due to immaturity of the nurse, an assumption that sexual issues were not part of their role or an inability to communicate effectively on intimate and sensitive matters.

Following the educational intervention, a significant number of midwives were implementing the continuous non-locking, subcuticular repair technique in the knowledge that this technique was less painful for women. Considerably more midwives were performing a bi-digital anal sphincter assessment to exclude anal sphincter damage and the consequent morbidity of faecal and urinary incontinence. A notable finding during the focus groups in phase two was a new discourse surrounding the midwives’ heightened awareness towards women’s sexuality, body image and body awareness. Although some midwives offered women a mirror to view their repaired perinei there was still an apparent reluctance to discuss the resumption of sexual intimacy. This omission could be attributed to the priority afforded to initial physical care. Midwives stressed the lack of time for discussion of contraception and sexual activity, considering this to be more appropriate for the community midwife. Guthrie (1999) reported similar findings in her study of nurses and their discussion of sexuality and patient care, reporting that talk with their patients was limited due to routine care, which was invariably influenced by workload. However, embarrassment was the main barrier to discussions of sexuality for both nurses and their patients, which appeared to be a common emotion and likely to be associated with the practitioners socialisation at home and at work with sexuality. Embarrassment was not evident in this study and has not been identified in the midwifery literature to date. Perhaps this is because women’s gendered anatomy is a normal part of midwifery practice where intimate vaginal examinations are
undertaken, alternative delivery positions are adopted and birth is shared with women and midwives with respect and privacy.

Midwives acknowledged altered body image and body reality more readily with women, valuing their self dignity and cultural diversity. This is especially important as midwives associate with the subjectiveness of the women’s experiences of trauma, understanding the concept of the biological body and their perceptual experience of the mind body concept through embodiment. In midwifery practice women are more concerned initially with their body image and the internal picture they have of their appearance. Axe (2000:627) reiterates that it is the woman’s interpretation of the injury that is traumatising rather than the physical damage itself. Carter and Green (2007) stress the importance of practitioners’ acknowledgment of revealed and concealed body disfigurement, and the negative effects an altered body image has on the woman’s self esteem. Further to this, Segal (1992) found that women and midwives have been reluctant to discuss sexuality in health care due to the lack of integration with the physical act of sex and the emotional and relationship contexts of how physical sensations are experienced. In this s, midwives acknowledged that lack of time, early discharge home and restricted postnatal visiting minimised their ability to listen attentively, debrief and counsel women adequately. These are important skills for midwives in order to be able to gather new narratives and discourses about gender sensitive care and the ways in which these can be addressed in education and practice (Madden 2002, Kitzinger et al 2007).

In deconstructing the midwives’ experience further it was evident that the tradition and culture of the delivery suite influenced their care pathways despite the views they held about their model of care as described in chapter 12. Midwives’ views towards a conservative model of care were representative of the increasing conflicts such as a pervasive climate of clinical governance, risk management, new midwifery managerialism, government policy and the necessity to provide women with informed choices. Under these circumstances, some midwives perceived that they were often influenced by the medical model, regulatory requirements and oppressive relationships within the organisation. A minority of midwives reported that their care provision was often in conflict with their views or own personal philosophy of care and perceived that their practice was invariably
dictated by the continuous pressure to get jobs done, heavy workloads and staff-to-women ratio on specific shifts. A busy work environment therefore lent itself to a conservative or paternalistic model of care leaving little or no time for discussion with women about their perineal management. These findings are consistent with those of Kirkham (1999 & 2003) who suggests that midwives begin to adapt to an 'industrialised' model of care, influenced by a medically and managerially dominated culture where there remain clear hierarchical divisions between all levels of staff in the organisation. Although the recommendations from the NSF (2004) point towards a less paternalistic approach to the midwife-mother encounter where there is shared power, in this study 31% of midwives perceived that they work within a patriarchal ideology akin to the paternalistic model of childbirth. I perceived that midwives often found it difficult to share the control of care with women within the current framework of 'new professionalism' or what is known as 'new midwifery' (Porter 2007) amidst the increasing need to comply with explicit standards and measures of performance reflecting the changes in healthcare. New midwifery has been associated with feminism and postmodernism and the duality of modernist patriarchy (Campbell & Porter 1997), examples associated with choice, continuity, control and autonomy for women. Midwifery-led units, consultant midwifery, and the midwives' concern for women's health have become the focus of midwifery care. This is not to say that new midwifery should be oppositional to biomedicine. Indeed, in the area of obstetrics, there has been a great move in identifying women's perineal physical morbidity associated with urinary and faecal incontinence (Sultan 1994, 1995, 1999, Andrews & Sultan 2006). In this respect modernist biomedical approaches to reproduction and feminist philosophy may be combined and strengthened. Maternity care in the UK recognises the individuality of women, diversity amongst specific groups and gender equality in health care provision (Maternity Matters 2007, CEMACH 2007). While the midwifery profession has seen the breakdown of the paternalistic model of medical hierarchy through 'new midwifery' there has been a steady move towards managerialism which Colyer (2004) attributes to the NHS organisation's shift from a paternalistic-professional to managerial organisation, threatening professional power resulting in communication problems even between autonomous groups of professionals. Over the last two decades maternity care policy has placed a strong emphasis on good communication and woman-centred care opposed to women-centred care.
in opposition to the needs of the institution or professional (RCM 2001, DoH 2007b HCC 2008, Leap 2009).

Postmodernism now acknowledges that the female gendered body has been created through the subjectivity of the subject through the voices of midwives and students providing a powerful discourse through which all forms of communication; oral, written and visual offers us a way of avoiding biological materialism which disregards the effects of culture and corporeal body (Davis 2008:6). Allan (2005) contents that a greater interest in gender sensitive caring stems from the expectations of women from midwives and asserts that gender continues to influence caring which is present in the situatedness of clinical practice.

Radical feminism and postructuralism are interlinked because the approach to the investigation of midwives’ and students’ experiences gets to the root of what influences midwifery practice and has helped to shape new discourses around sexuality and body image so that perineal trauma management can be approached from a woman-centred perspective. Acknowledging that women encounter different perineal problems recognises gender differences, which has been the legacy of radical feminism to the feminist movement affecting women across all societies and cultures (Guerrina 2005:25). Identity politics have also played a significant role in difference feminism emphasising the unique identity of women as a group celebrating essential female characteristics which make women different and opposite to men advocating a different voice and a different ethic of care (Gilligan 1988). Postmodern theory recognises that the subjective social position of women needs to be recognised as a factor influencing the production of knowledge. Focus groups provided the forum through which the voices of midwives and students and the meaning derived through language, have constructed new multiple realities and powerful discourses thus constructing the midwives' subjectivity (Foucault 1977). In doing so midwives are able to speak out and represent women and the midwifery profession. New discourses do not propose to dominate or override current discourses but strengthen and improve current theories of gender equality and differences in healthcare. New discourses aim to close the gap in our thinking between the gendered acceptance of ‘knowing that’ associated with biomedical male superior
knowledge to ‘knowing how’ which is gendered knowledge which feminists believe supports female subjective knowledge (Dalmyia & Alcock 1992). Themes and sub-categories formed from the midwives narratives discussed earlier can be objectified as reality and communicated in written texts and gendered talk within midwifery education and practice representing difference as one of the defining conditions of women’s positionality (Alcock 1988, Mauthner & Hey 1999). Hence, the subjectivity of the midwives’ knowledge is valued because it originates from two experts, the women disclosing the experience and midwives reporting their own views and experiences. In this way discourses represent a special kind of knowledge at a given time which can be reproduced in institutions, practices and modes of thought thus material power is exercised and power relations established (Wallace 2001). This is what Foucault (1997) refers to as a hierarchy of knowledge and in this respect training in perineal repair may be ranked along a continuum of importance and position within pre-and post registration midwifery curricula. The final discussion identifies how the midwives’ knowledge, skills, attitudes and values associated with perineal trauma management influenced the student midwives’ experience in their threshold competency on registration.

The student midwives’ experience of their instruction and supervision in perineal repair by their mentor.

While there has been a paucity of literature referring to the role of the mentor and the students’ experience as mentee, this is the first time an evaluation has been conducted to investigate the experience of student midwives performing perineal repair under the supervision of a mentor. There were four main categories to emerge from the students’ qualitative data which influenced their level of expertise in perineal repair: perceived confidence and competency in perineal repair; mentor support and positive feedback; instruction and supervision; and the students’ perception of their mentor’s confidence and competency in perineal repair. The study identified that there were a greater number of student midwives who were able to undertake perineal repair under direct or minimal supervision (levels 1 & 2) of their mentor post-intervention. Students perceived that their increased level of self-confidence was largely attributed to working with mentors who themselves were confident and competent undertaking the procedure and familiar with recommended techniques. This was the most important factor reported by all
students. Jordan & Farley (2008) and Butler et al (2008) have identified that students need to be enabled to develop a strong sense of self-efficacy for specific skills development, which can only really be achieved through skills performance because it is based on authentic experience. Jordan & Farley (2008) noted that a particular pre-requisite for self-efficacy and the achievement of a specific behaviour is outcome expectancy and contend that the mentor's behaviour influence the students' confidence in their performance of midwifery skills. The majority of students in my study expected to be able to achieve a threshold competency undertaking a simple perineal repair prior to registration. Gaining threshold competency in perineal repair was considered by the majority of students to be an important skill in developing their role as midwives and providing continuity of care for women. This supports the midwives' views. When the student's mentor had attended the instructors' up-date, module or workshop they were able to gain their self-confidence in starting out in perineal repair particularly when this was accompanied by the skilful instruction and demonstration of the trauma assessment and the continuous repair technique by their mentor. Students who perceived that their relationship with their mentor was positive and supportive reported effective learning and higher levels of confidence in their repair skills.

Students perceived that the majority of mentors were supportive, patient and informative, and willing to discuss the procedure. Students who perceived that their mentor lacked confidence or were unable to undertake an episiotomy or perineal repair were less likely to request instruction or supervision. Bluff & Holloway (2008) contend that as students generally tend to emulate the role of their mentors it is important that mentors possess the necessary skills and display the techniques that the student lacks which can be learnt through observation and comparison with their own performance. In findings from Bluff & Holloway's (2008) study, students emulated the role according to which midwife they had worked with. Some students in this study reported that there was positive change in the midwives' attitudes towards repair, confirming that midwives who had attended workshops and were confident to implement the continuous technique were more eager to instruct and supervise them using the new perineal trauma proforma. However, some students perceived that the midwives who lacked teaching skills were less likely to volunteer to instruct their students.
The recommendations set out in earlier *Standards for the Preparation of Teachers in Nurses, Midwives and Specialist Community Public Health Nurses* (NMC 2004) emphasise the pivotal role of mentors in the students' development of knowledge and skills in clinical practice. These are supported further by the *Standards to Support Learning and Assessment in Practice* (NMC 2008). The standards are clear about the competency of the 'sign off' mentor and their responsibility to make judgements regarding the students' required standards of proficiency and accountability for safe and effective practice before entry to the register. This requires that mentors have developed their own knowledge, skills and competency beyond that of registration through CPD be it formal or experiential as appropriate to their support role (NMC 2998:16). The NMC UK Wide QA Framework (2008/9) also states quite clearly that essential midwifery skills should be in place from September 2008. All students in this study agreed that their mentors should be in a position to facilitate their learning using up-to-date perineal repair techniques. This further emphasises the significant role that mentors play in contributing to the development of the students' ability to practice as competent and accountable practitioners, fit for practice and purpose at the point of registration (NMC 2006). These findings highlight the need for teachers in institutes of higher education and practitioners in clinical practice to support mentors in their role so they may practice effectively in a constantly changing environment.

Despite good student preparation in university some students were unable to undertake perineal repair due to their mentor's inability to undertake the procedure. Some students perceived that there was a divide between midwives who were competent and those who were not, with the 'older ones' and part time staff unable to repair or resorting to outdated techniques. Two students identified that their mentor would 'not allow' them to suture until they were qualified and perceived that these midwives were out-of-date in their repair skills.

While I am not advocating that students should be fully proficient in perineal repair beyond their basic skills for registration, I do consider that attaining threshold competency in simple perineal repair under the direct supervision of a mentor supports the essential competencies set out by the national guidelines prepared
by the NMC (2004), the International Confederation of Midwives (ICM) global statement in 2006 and conforms with the recommendations for perineal repair by the EU Council Directives (1989). Attaining a certain level of practical capability and an adequate range of skills at registration also promotes a reasonable level of self-sufficiency for students (Butler, Frazer & Murphy 2008).

Jordan & Farley (2008) stress that the process of instructing students, changes the midwives' role because they need to step back and allow the student to take on the midwives' role. I perceived from the students' focus group discussion that the more assertive student would seek out an alternative mentor when they perceived them to be competent and available to supervise them. Often, students perceived that time constraints were offered as an excuse by their mentor if they lacked confidence or teaching skills themselves. These findings are confirmed by Bluff & Holloway (2008) who found that their students would seek out another experienced midwife for their labour ward experience. The level of the students' satisfaction in their clinical experience in this study was clearly associated with their level of involvement in perineal repair and the mentors' own knowledge, self-confidence and teaching skills. Students perceived that the lack of support provided for their mentors in the delivery suite in two Trusts affected their own experience. Absence of the trauma proforma on the delivery suite, the inconsistency in perineal trauma management and the out-dated techniques some midwives adopted to repair often left them feeling confused, frustrated and disheartened, especially after they had attended the workshop in the university and Trust.

Students identified that the learning culture of the delivery suite varied as the delivery suite co-ordinator changed from shift to shift affecting their learning. This demonstrates how co-ordinating labour ward midwives play a key role in creating a supportive and positive learning environment and work culture (Frazer 2006:202) demonstrating how power games are played out in the delivery suite which vary according to the person in charge which in turn can affect the level of teaching and learning (Miles 2008). The learning environment in a busy delivery suite is invariably a source of stress and anxiety for all staff including pre- and post registration students. From an organisational perspective, skill mix, shortage of staff and heavy workloads only sought to increase the pressures midwives and
students already experience. What students need is a truly accountable midwife who is a proactive and effective mentor.

The midwives' view of their role mentoring students in perineal repair was similar to those of the students. Midwives identified that the increased numbers of students who were able to repair during phase four was attributed to the increase in the higher profile and provision of perineal repair workshops provided for midwives in their Trusts. Mentoring midwives perceived that the students who had followed their pattern of work consistently were more likely to ask for instruction and supervision. Students and midwives reported similar frequencies in the extent instruction and supervision was provided. However, only a third of midwives reported to volunteer to instruct and supervise their students. This infrequency was attributed in part to the midwives' lack of time and self-confidence in repair skills. The majority of midwives were positive towards instructing and supervising their students. However, some midwives identified their students' fear of suturing and therefore considered it inappropriate to push them until they were ready. Midwives who had attended an up-date workshop or module considered that the information and opportunity to practise new repair techniques enabled them to be more proactive in pushing their students forward to repair small tears. Some midwives were very aware that they were required to maintain their competency in their repair skills and were reluctant to provide students instruction if they had not attended an up-date.

Midwives identified a number of positive factors associated with their students' ability to gain threshold competency prior to registration which are reported in chapter eleven. The majority of midwives considered that perineal repair was part of the midwives' role and should be taught in the pre-registration programme. These views were influenced by the midwives' own experience of instruction and supervision by their mentors as students, claiming how early introduction into the skill with constant support contributed significantly to their own confidence and competence. Dahlen and Homer (2008:33) reiterate these findings stating that learning perineal repair as a student made perineal repair seem a part of midwifery practice rather than an advanced skill. A minority of midwives did not consider that instruction was appropriate during the pre-registration programme due to the heavy workload already incumbent on students. Reflecting on their
own experience some midwives considered that students were often under pressure to gain their statutory NMC proficiencies advocating that repair was a skill that could be integrated into the preceptorship programme on qualification. It would appear that the midwives' confidence in their knowledge and repair techniques played a pivotal role in the students' experience. It was evident that mentors themselves require their own 'space' for development and require support for their own learning both from practice colleagues and university lecturers in order to facilitate their students' learning. Miles (2008:710) stresses that mentors require valuable training and support from management and university tutors. Proactive and innovative supervisors of midwives and midwifery managers are required in clinical practice who can act as effective role models in leading and demonstrating innovative midwifery which can enable mentors to provide reassurance and encouragement when planning the students' learning programme.

This study has demonstrated that students are able to achieve a threshold competency in perineal repair with competent instruction and supervision of their mentor. The last section discusses the strengths and limitations of the thesis and research draws the thesis together with a conclusion and recommendations for education and practice.

**Strengths and limitations of the research and thesis**

One of the major strengths which have evolved from undertaking this doctorate is the original contribution the study has made to the development of a new epistemology around professional midwifery practice and workplace learning in pre-and post-registration midwifery education.

Action evaluation was a pivotal approach in which to evaluate the complexities of the four phases of the research, driving the study forward. Action evaluation differs from the traditional end product evaluation in that it enabled me to look more broadly at the process and the development of the study initiatives involving members of the perineal repair working group (PRWG), midwives and students immersed contextually in everyday working practice. Members of the PRWG were instrumental in the design, implementation and facilitation of the newly
designed documentation and the formative and summative assessment of midwives' competency in perineal repair using the objective structured clinical examination (OSCE). Members of the working group contributed significantly to the project's synthesis and development forming the nucleus of the change team. Ownership, collaboration and partnership with PDMs, OSCE instructors and supervisors of midwives (SoMs) helped support positive emancipatory practice development and change. As members of the PRWG left the Trust new members took over avoiding loss of sustainability.

The integrated quasi-experimental multiple case study approach enabled me to embrace the breadth and complexities of midwifery competency in the context of differing organisational structures and levels of workplace learning in six separate Trusts. Strengths of the multiple case study approach were reflected in the diversity and similarities of the maternity units represented in both continuing education and practice in a relatively small geographical location in S. E. England. However, the design was too flexible for a number of reasons. Firstly, it was difficult to avoid contamination between participating and none-participating midwives in the five intervention practice settings due to the preparation of delivery suite staff and initiation of the perineal trauma proforma, evidence-based guidelines and OSCE assessment documentation. Secondly, each Trust had similar and contrasting organisational structures and culture, offering inconsistent levels of management and leadership. However, midwives in the Trusts were matched demographically by following similar patterns of midwifery/consultant led care. The unexpected but much needed intervention of a perineal repair programme in the comparison Trust in December 2004, made it difficult to make valid comparisons between intervention and comparison Trusts post-intervention. Despite this unexpected intervention there were both non-significant and significant differences in the midwives' perceived levels of knowledge, repair techniques adopted and positive attitudes to perineal care post-intervention supporting the effectiveness of an educational intervention. In hindsight the differences and the multiple factors influencing outcomes between pre-and post-intervention Trusts provided equally compelling evidence to support the effectiveness of the educational programme.
Chapter Thirteen

Discussion

The limited numbers of midwives representing the six Trusts in S.E England during phase 4 was disappointingly low in comparison to the numbers of midwives employed and practising locally and nationally. This may be representative of interested parties only, but also reflects the competing demands and priorities in the Trusts at that time. Despite this limitation, there is a new body of knowledge surrounding the midwives’ competency, decision-making, power play and attitudes towards sensitive perineal management to offer new theories and scope which can be transferable to other NHS Trusts and midwifery educational institutions in the United Kingdom. Similarly, new knowledge surrounding the students’ and midwives’ views of their experiences of instruction and supervision will help to inform future pre-registration midwifery curricula. The omission of student midwives in the study from the comparison Trust was a further limitation. It would have been useful to compare mentor instruction and supervision between the deliveries of two midwifery pre-registration programmes.

A multi-methods approach drawing from the positivist and interpretative paradigms strengthened the research by providing multiple perspectives of the midwives’ and students’ ways of knowing and the development of new midwifery craft knowledge. Realism offered a middle ground whereby the very nature of the maternity services and the complex interrelationship between individual practitioner’s competency, their working structures, internal politics and the sociocultural issues could be studied. Deductive theory supported the basis for change while inductive theory was developed in an area of midwifery practice and education which has not been previously investigated, identifying new theories about the nature of reality in perineal trauma management.

The four contributing subsidiary research questions enabled me to investigate in depth the nuances of workplace learning and professional competency, decision-making, power structures, and perineal management within the context of six complex and busy NHS organisations. The triangulation of data from the semi-structured questionnaires, focus group interviews and participant observation provided a fuller and richer picture of the multiple realities relating to the educational, organisational and working practices of midwives and students within the context of workplace learning. Investigating and evaluating the midwives’ and students’ experience provided similarities and differences in both
learning and the multiplicity of factors influencing levels of confidence and competence further validating the data.

Positive change in clinical practice was attributed to a number of key factors. Firstly, by establishing an expert group of OSCE instructors over the five intervention Trusts who were able to make a significant contribution to the support, instruction, supervision and assessment of competency in perineal repair for midwives undertaking the module and workshops. The involvement of expert practitioners in the OSCE process enhanced the relationship between education and practice thus reducing the theory-practice gap and widening the pool of expert assessors in perineal repair. Weaknesses in the OSCE assessment was attributed to the time it required for completion at the woman's bedside and the reliance on the OSCE midwives' duty rota. Similarly, the 'simulated' OSCE for the instructor's assessment in the university setting was resource intensive both for staff and tutors, thus making the assessment process more appropriate at the woman's bedside. This would subsequently increase the pool of expert midwives for assessment.

A two-sided check list perineal trauma proforma designed by the members of the PRWG was a positive contribution to the midwives' change towards the comprehensive assessment and management of perineal trauma. It was unfortunate however that the Peri-Rule for the objective measurement of trauma was not available at the commencement of the study to introduce into the intervention Trusts. The integration of the trauma and OSCE proformas added reliability and validity to the assessment of perineal trauma and the midwives' perceived competency.

The adapted DACUM model and six levels descriptors in the pre-and post-intervention questionnaires and formative assessment enabled midwives to assess their own perceived levels of competency alongside descriptors which generated measurable mean levels of perceived competency for comparison pre- and post intervention. The levels descriptors were also used successfully for both formative and summative assessment at the bedside. However, on reflection this model requires further modification with clearer delineations and descriptions for practitioners with which to identify between each level. This is currently under
review and has already been adapted for student midwives’ formative assessment in their last module.

Comparing the effectiveness of the work-based module and single two hour perineal repair workshop, it was evident that the extra time in the post-registration module made a significant difference to the midwives’ achievement of competency. Multiple educational approaches integrated with workplace learning and the commitment of the OSCE supervisors demonstrated clear behavioural changes achieved over a six month period for a greater number of midwives. Time, opportunity and support were key factors in enabling midwives transfer new behaviours to the workplace. Managers therefore need to balance the extra costs of training programmes (module and workshops), with service needs and skills acquisition, providing adequate time for expert supported practise.

My role as an academic researcher and Director of Studies in post-registration midwifery education enabled me to acquire an overview of the midwives’ individual educational and practice needs. I was also able to observe the power play between key PDMs and delivery suite managers in five intervention Trusts on a regular basis. My role as action researcher was discussed previously in chapter six.

There were a number of strengths in this thesis which contributed significantly to answering the main and subsidiary research questions from a practical perspective. These were: the philosophical and theoretical frameworks guiding the study which included critical social theory (CST), radical feminism, post-structuralism, workplace learning and competency. The additional theoretical framework which was required to support the subsidiary research questions although adding to the thoroughness of the study also extended the length of the thesis. This was necessary however, to provide a greater insight into the multiplicity of factors associated with the acquisition of competency and expertise, the decision making process and power structures influencing the midwives’ and students’ perceived level of competency. I believe that the integration of critical social theory (CST) (Freire 1972 and Habermas 1974) as a contributory framework enabled me to embrace liberating and emancipatory educational ideologies which were facilitated during the module and workshops.
These ideologies were facilitated by engaging practitioners to challenge their practices through action and self-directed learning and critical reflection which enabled midwives to become more empowered practitioners and in turn empowering the women in their care. Integrating radical feminism and poststructuralism as complementary paradigms in midwifery education within the new module and workshops served two purposes: identifying, describing and valuing the midwives’ views and experiences in perineal trauma management and in turn enabling them to value women’s experiences of perineal trauma, becoming more aware and sensitive to their needs and improving women-centred care. Integrating a feminist perspective acknowledges the midwives’ and women’s role in midwifery care and the influence of political and social structures. Competency as a complex concept discussed in chapter 4 provided the clarity and focus of the phenomena and defined the concept in order to measure competency levels integrating the DACUM model descriptors. Similarly, the theoretical framework supporting workplace learning helped to identify early on in the study the strengths and limitations of organisational learning for practitioners and the importance of accessing experts throughout the learning process. This thesis covered a wide range of literature which on reflection could have been confined to exploring the midwives’ competency alone. However, such a narrow focus would not have provided such a broad picture of the many factors influencing the context of midwifery practice and workplace learning.

**Recommendations for practice development and midwifery education**

The research and thesis have identified key areas in both midwifery practice and education which require further review. These are as follows:

- Allocation of funds for the *Perineal Repair module* through CPD and recognised ‘time out’ for mandatory training and annual up-dates for midwives in all NHS Trusts to gain and maintain accredited competency in perineal repair (chapter 11)
- A named perineal repair training facilitator in each Trust responsible for training and monitoring levels of expertise (chapters 11, 12 and 13)
- National guidelines recommending the formal assessment of competency in perineal repair using a structured OSCE or similar (chapter 11)
Completion of a perineal trauma proforma by all midwives and doctors to accompany the women's case notes and Trusts' computer system for good record keeping and audit of perineal management (chapter 11).

Increased training workshops and support for OSCE instructors/assessors in each Trust in collaboration with the university (chapter 10 table 3).

Improved training and practice for student midwives in university and clinical practice (chapter 12).

Formative assessment (objective structured clinical assessment OSCA) for student midwives' threshold competency/proficiency prior to registration (implemented in 2007)

A perineal repair module accessible through Distance/E.learn or OU learning in partnerships with the Strategic Health Authority (chapter 11)

Development of a local multidisciplinary perineal trauma clinic integrated with specialist psychosexual counselling.

Future research development

It is anticipated that the results of the Perineal Assessment and Repair Longitudinal Study (PEARLS 2006) will provide recommendations for the formal assessment and accreditation of competency in perineal repair for all midwives and doctors on a national level. In the interim, competency remains the responsibility of individual practitioners and Trust managers within the clinical governance and knowledge and skills frameworks. Currently, final year student midwives are required by the University of Surrey to undertake a formative OSCA in perineal repair with their mentors. A funded prospective study at the university is required to evaluate the effectiveness of the OSCA for students in gaining threshold competency in perineal repair at the point of registration.

The women's perception of the midwives' sensitivity towards perineal trauma management and the extent sexuality and body image is addressed in midwifery practice and education is an area of qualitative research which would add strength to this research. There is also an urgent need to provide a multidisciplinary perineal trauma clinic in conjunction with the urogynae clinic already established locally. This area together with psychosexual counselling will be explored in post doctoral studies to provide women postnatal support in this
developing area. The outcomes of this research will be disseminated through published work in professional and academic journals. A multidisciplinary conference will be organised to include other specialists in the field of perineal trauma management and care.

My contribution as a member of the PEARLS steering group will, I hope, assist in the development of national standards and guidelines through professional bodies for the accreditation of competency in perineal repair for all midwives in the near future.

Conclusion

Success of the educational programme overall can be attributed to a combination of factors. The most important of which relies on sufficient numbers of expert practitioners who play a pivotal role in enabling midwives and students achieve competency and confidence in their perineal trauma management. Similarly, senior midwives in positions of power and leadership have a responsibility for ensuring that midwives working in the delivery suite are enabled to improve and maintain their skills and standards of practice by facilitating an environment in which excellence in clinical care may flourish.

We must not be complacent about the urgent need to facilitate perineal training amongst the large numbers of midwives who still do not undertake the skill without expert supervision. This reflects on the instruction and supervision student midwives receive through their mentors. In addition, educational programmes such as the one reported here are unlikely to succeed in the future if adequate funding and professional support with specialist OSCE instructors are not encouraged. In this endeavour, professional bodies and institutes of higher education need to set national standards and guidelines for the assessment and accreditation of the midwives' competency in perineal trauma management.

This study has revealed the complexities of experiential learning in the context of the midwives' and students' cultural learning environment, highlighting the strengths and weaknesses of workplace learning. Continued support in a positive culture of lifelong learning needs to be acknowledged by all levels of
professionals if workplace learning is to offer a highly competent and skilled workforce in accordance with current maternity service recommendations and midwifery educational policy.

Successful change can only be considered when the contextual features of an NHS organisation are taken into consideration which includes the historical, political and demographic influences impacting on clinical practice. Where high levels of expertise in midwifery practice are required, appropriate funding for training programmes in perineal repair is fundamental for the sustainability of future practice development.
GLOSSARY

Aerovagina: air trapping in the vagina

Anal Incontinence: the involuntary loss of flatus, liquid or solid stool (Sultan 1997:320)

Classifications of perineal trauma:

First degree perineal trauma: involves the skin and subcutaneous tissue of the perineum/vagina

Second degree perineal trauma: involves the skin of the fourchette, superficial and often deep perineal muscles. Anterior perineal trauma involves the labia, anterior vagina, urethra or clitoris and is associated with minimal morbidity. Posterior perineal trauma involves injury to the posterior vaginal wall, superficial and deep perineal muscles or the anal sphincter muscle.

Third degree trauma: involves partial or complete disruption of the anal sphincter complex:
3a: less than 50% of the external anal sphincter (EAS) thickness torn
3b: more than 50% of the EAS torn
3c: Internal anal sphincter (IAS) torn

Fourth degree trauma: injury to the perineum involving the anal sphincter complex (EAS and IAS) and anal epithelium (RCOG 2004:1)

Clinical negligence Scheme for Trusts (CNST) a process which provides a means for NHS Trusts to fund the cost of clinical negligence litigation and to encourage and support effective management of claims and risks (www.nhsia.com/claims/Schemes/CNST)

Dyspareunia Painful or difficult intercourse experienced by the woman (Frazer & Cooper 2003:1032)

Episiotomy 1. An episiotomy is a surgical incision which is made into the perineal skin, muscles and vagina during childbirth to enlarge the vaginal opening (Cameron & Anderson 2001:137)
2. A surgical incision into the perineum to expedite delivery in the second stage of labour (Walker 1990:18).
Mentor: An experienced midwife with an understanding of the context and focus of the midwife’s role and who meets the NMC Standards to support learning and assessment in practice (NMC 2008:18)

Obstetric anal sphincter injury: see classifications of perineal trauma; third degree tear.

The perineum: Anatomically, the female perineum extends from the pubic arch to the coccyx and is divided into the anterior and posterior anal triangle (RCOG 2004:1).

Perineal trauma: is defined as any damage to the genitalia during childbirth that occurs spontaneously or intentionally by surgical incision (episiotomy) to increase the diameter of the vulval outlet and facilitate delivery (Kettle 2004: 29).

Stress incontinence: an involuntary leakage of small amounts of urine from the bladder when coughing, sneezing, laughing running or when lifting heavy objects (Jones 2000).

Urinary incontinence: the involuntary leakage of urine from the bladder (Wright 2004).

Vulvodynia: discomfort or pain characterised by burning, stinging, irritation or rawness of the vagina.
THE PRINCIPLES AND PRACTICE OF PERINEAL REPAIR FOR THE MIDWIFE

Module Handbook

Level 3
Theoretical and practice assessment : 10 Credits

Commencement Date: September 7th 2005

Module Organiser: Angie Wilson, Midwifery Studies
6.2.1 Title:
The Principles and Practice of Perineal Repair for the Midwife

6.2.2 Level
Level 3

6.2.3 Number of credits:
10 credits

6.2.4 Overall Student Workload:
Overall 100 hours:
24 contact hours (8 in classroom, 16 taught/ALS hrs in Trust setting)
20 hours practice-based learning
56 hours self-directed learning with recognised release time from practice negotiated with manager

6.2.5 Module Organiser:
Angie Wilson

6.2.6 Other Contributors:
Clinical Practice Development Midwives, Practitioners, specialists speakers: physiotherapy, urogynaecology, lawyer when available, user perspective.

6.2.7 Aims and Learning Outcomes:

Aims

This module is aimed for the midwife practising primarily in the delivery suite, either as a core midwife or on rotation. It is practice focused enabling the midwife to develop a minimum competence at level 4 in the knowledge and skill of recognising and assessing perineal trauma, with the implementation of perineal repair independently. The midwife will also be encouraged to take responsibility for the evaluation and audit of their own practice in perineal repair, monitoring subsequent healing where possible.

Learning Outcomes

By the end of the module the student should be able to:

Subject knowledge and understanding

- discuss critically the history and trends of perineal repair, materials and techniques
- discuss the anatomy and physiology of the pelvic floor and anorectum, relating these structures to the prevention and recognition of perineal trauma and repair in midwifery practice.
- have a focused understanding of the women's physical and psychosocial experiences related to perineal trauma, repair and healing.
- consider research surrounding women's issues with a focus on the culture of midwifery and models of feminism related to midwifery practice in order to develop a feminist midwifery paradigm in clinical practice.
- develop a critical understanding of how best practice is underpinned by significant research evidence during pregnancy, labour and the puerperium in relation to perineal trauma, assessment, repair and wound healing.
- develop an in-depth understanding of the importance of clinical guidelines/policies and National EEC Directives, considering how these influence midwifery practice, client and professional informed choice and decision making in perineal repair.
- develop an in-depth understanding of the medico-legal aspects of perineal trauma, repair, healing and maternal morbidity.
consider the importance of the multi-professional and multidisciplinary team and their input in medico-legal matters, urogynaecology and relational issues.

**Cognitive skills**

- critically evaluate the relevant research papers to underpin best practice in the prevention of perineal trauma, during pregnancy, intrapartum and postnatal care.
- critically evaluate the relevant research papers to underpin best practice in the recognition, assessment and subsequent management of the four degrees of perineal trauma.
- critically evaluate the relevant research papers to ensure appropriate materials and methods are selected when undertaking perineal repair of uncomplicated episiotomies and second degree tears by the midwife.
- critically evaluate the relevant research papers to integrate the evidence into clinical audit during postnatal care of the perineum.
- critically evaluate and reflect on own learning and how this is integrated into best practice.

**Key transferable skills**

- facilitate a partnership in care where the woman is involved in the process of informed choices and decision making to maximise perineal integrity, and minimise trauma and repair morbidity.
- implement evidence based practice to support the principles of clinical governance and risk management.
- facilitate a critical awareness and analysis of best practice, using the research evidence to discuss and debate contemporary and controversial issues amongst other members of the multi-professional team in the workplace.
- supervise and teach the skill of perineal repair to other midwives and students when reaching a maximum level of competence.
- Facilitate as appropriate, referral to other members of the multidisciplinary team ie: physiotherapy, urogynaecology and organisations such as Relate.

**6.2.8 Required Pre-requisite Study:**

Qualified midwife, ideally currently working or rotating into the delivery suite
Level 2 study if undertaking BSc (Hons) Midwifery Practice programme.

**6.2.9 Brief indication of Content:**

- history of perineal trauma and repair
- anatomy and physiology of the pelvic floor and anorectum
- a critical evaluation of the role of the midwife in the prevention of perineal trauma
- current rationale for performing an episiotomy
- definitions of trauma sustained to the pelvic floor that require repair
- recognition and accurate assessment of all degrees of perineal trauma using new perineal trauma assessment proforma
- current recommendations for undertaking perineal repair, methods and materials for repair
- perineal repair 'hands on' workshops
- perineal infiltration, epidural top-up prior to repair
- safety with regard to universal precautions
- principles of wound healing, postnatal care and audit of perineal healing
- record keeping, risk management and clinical governance
- ‘Evidence for Best Practice’ guidelines /policies and EEC Directives
- women's issues related to childbirth, perineal trauma, repair and subsequent morbidity rethinking a new midwifery 'paradigm' for practice and research in feminism and gender sensitive issues
- FGM and role of the midwife
- medico-legal issues
- collaboration with physiotherapy, urogynaecology and support organisations
- knowledge and change theory - responsibility for continued professional development and lifelong learning
6.2.10 Delivery of Module:
Key theoretical lectures and workshops
Work-based learning
Reflection, research analysis and critique
Discussions
Action Learning set
Self-directed learning

Supervised practice

Due to the importance attached to observing and implementing perineal repair in clinical practice, and the need for formative and summative assessment in perineal repair, it is essential that the module provides a structure for supervised practice. Each student will be required to 'shadow' a skilled instructor/assessor who will be responsible for the assessment of perineal repair in practice in collaboration with the module organiser. Each student will be responsible for their own learning and implementation of perineal repair negotiated with their assessor. Where there is a short rotation into the delivery suite, negotiation needs to be made with student and delivery suite staff to ensure perineal repair can continue to be both observed and implemented to meet the required assessment criteria. *Allocation to the delivery suite needs to be planned well in advance of commencing module. Observation of perineal trauma assessment and repair is recommended as soon as practicable prior to module to enable the midwife to gain optimum experience prior to assessment.

6.2.11 Method of Assessment:
A. A reflective essay to demonstrate a critical evaluation of the care and management provided to one woman who has sustained perineal trauma which has necessitated repair/non-repair.

The student must demonstrate:
• rationale for reflective model used in essay
• an integration of the theoretical aspects of the module which have influenced practice and clinical decision making
• evidence of appropriate reading to support reflection
• recommendations for future practice

words 1500 – 50%

B. Clinical summative assessment through an OSCE by instructing midwife. Students will be expected to recognize, assess and implement perineal repair in the delivery suite, demonstrating cognitive, interpersonal and psychomotor skills, necessary for the competent repair of the perineum. Achievement of competency at minimum of level 4.

50%

Date of Submission:
Reflective case study assignment 1.3.06

Date of Publication of Results: Refer to exams schedule

Date of Re-submission: Refer to exams schedule

Date of Publication of Results:

TEACHERS CONTACT DETAILS

Name: Angie Wilson Phone number: 01483 684620 e-mail address: A.Wilson@surrey
<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Venue</th>
<th>Content</th>
<th>Tutor/Speaker</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Wed</td>
<td>7.9.05 0900-1100</td>
<td>Introduction to module, assessment, teaching and learning strategies, self directed learning and action learning sets (ALS). Discuss ALS, presentations and visit to urogynae clinic. Provision of trigger and debate. Introduction and history of perineal trauma and repair. Revision of the anatomy and physiology of the pelvic floor and anorectum.</td>
<td>Angie Wilson</td>
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<td></td>
<td>1200-1300</td>
<td>12DK00</td>
<td>Computer login</td>
<td>John Osborne</td>
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<tr>
<td></td>
<td>1400-1600</td>
<td>12DK00</td>
<td>Introduction to the perineal trauma assessment proforma, areas and levels of competency for the midwife to undertake perineal repair in practice. Discuss new Peri-Rule. ‘Hands on’ perineal repair as required Discussion of OSCE assessment proforma</td>
<td>Angie Wilson</td>
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<td>2</td>
<td>Wed</td>
<td>14.9.05 1300-1400</td>
<td>ALS – Discuss trigger topics A critical analysis of the midwives role in the prevention of 2nd, 3rd and 4th degree trauma. Recognition and current management of 3rd and 4th trauma.</td>
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<td>1400-1600</td>
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<td>Angie Wilson</td>
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<td>3</td>
<td>Wed</td>
<td>21.9.05 1300-1400</td>
<td>ALS – prep for debate presentation Debate – to repair or not to repair second degree perineal trauma? What is the evidence to support current trends in practice?</td>
<td>Group only</td>
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<td>1400-1600</td>
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<td>Angie Wilson</td>
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<td>4</td>
<td>Wed</td>
<td>28.9.05 1300-1500</td>
<td>Psychosocial issues related to perineal trauma. An analysis of gender sensitive issues and the provision of gender sensitive care. The culture of midwifery. Introducing the concept of radical feminism into midwifery care. Experiences from the woman's perspective - third degree trauma.</td>
<td>Angie Wilson</td>
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<td>1500-1600</td>
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<td>User perspective</td>
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<td>5</td>
<td>Tues</td>
<td>4.10.05 1300-1400</td>
<td>Long term physical problems related to perineal trauma. Urinary and faecal frequency and incontinence. Perineal wound healing -post partum perineal care. Audit of perineal healing? Reflections from practice, how well are we doing?</td>
<td>Obs Physiotherapist Shernaz Screwvala RSCH Angie Wilson</td>
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<td>6</td>
<td>Wed</td>
<td>In Trust</td>
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**The Principles and Practice of Perineal Repair for the Midwife**
<table>
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<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Workshop Description</th>
<th>Facilitator</th>
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</thead>
<tbody>
<tr>
<td>2.10.05</td>
<td>1300-</td>
<td>ASPH Seminar</td>
<td>Medico-legal aspects of perineal trauma and risk management</td>
<td>Obstetrician</td>
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<tr>
<td></td>
<td>1500-</td>
<td>Room 2</td>
<td>ALS – Reflections and feedback from urogenital clinic.</td>
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<tr>
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<td>1600</td>
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<td>Making Links to medico-legal aspects of perineal trauma.</td>
<td>Angie Wilson</td>
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<td>1500-</td>
<td>1600</td>
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<tr>
<td>7 Wed 19.10.05</td>
<td>1300-</td>
<td>UNIS</td>
<td>ALS - prep for presentation of trigger topics</td>
<td>Group only</td>
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<td>1400</td>
<td>13DK03</td>
<td>Presentation – Feedback from trigger – Managing postnatal perineal pain</td>
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<td></td>
<td>1400-</td>
<td></td>
<td>Module evaluation.</td>
<td>Angie Wilson</td>
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</table>

Each midwife to organise their own visit to the urogynae clinic at ASPH or RSCH
Contacts are: Dawn Mc Williams - ASPH dawn.mcwilliams@asph.nhs.uk
Alison Seall – RSCH aseall@roversurrey.nhs.uk

The module aims to draw on specialists in their field and times will be fixed for these speakers. Changes may occur to venue's depending on suitability to group.
6.2.12 Required reading:

Baston H, 2004 Perineal repair *The Practising Midwife* 7 (9) :12-15


Clement S, Reed B 1999 To stitch or not to stitch? *The Practising Midwife* 2 (4) :20-28

Dolman, M 1992 Incontinence and childbirth: understanding the link *Professional Care of Mother and Child* July/August pp 208-210


Ethicon 1998 *Perineal Repair* Johnson and Johnson Company, Edinburgh, UK


Gomme C, Yiannouzis K 2001 Developing a tool to assess perineal trauma *British Journal of Midwifery* 9 (9): 538-544


Kenyon S, 2004 How can we improve post birth perineal health? *MIDIRS Midwifery Digest* 14 (1) :7-12


Harris, M 1992 The impact on research findings in relieving postpartum perineal pain in a large district hospital *Midwifery* 8: 125-131

Hartley J 1999 Save the perineum *The Practising Midwife* 2 (l):14-15

Head, M 1993 Dropping stitches *Nursing Times* 89:33

Jackson K 2000 The bottom line: care of the perineum must be improved *British Journal of Midwifery* 8 (10):509-614


www.thelancet.com

Kirkman S 2000 The midwife and pelvic floor dysfunction *The Practising Midwife* 3 (8)20-22

Layton S 2004 The effect of perineal trauma on women’s health *British Journal of Midwifery* 12 (4):231-236

Lavin, J 1996 Pelvic floor damage *Modern Midwife* May, p 14-15

Lee B 2002 Are you sitting comfortably? Issues around perineal repair *RCM Midwives Journal* 5 (9)298-301

Lewis, L 1996 Extending the midwives’ role in perineal management *Nursing Times* 92 (11): 39-41

Lundquist M, Olsson A Nissen E, 2000 Is it necessary to suture all lacerations after a vaginal delivery? *Birth* B27 (2): 79-85


Metcalf A, Tohill S, Williams, A 2002 A pragmatic tool for the measurement of perineal tears *British Journal of Midwifery* 10 (7):412-417

Metcalf A, 2004 Improving the assessment of perineal tears: the Peri-Rule *British Journal of Midwifery* 12 (10) :618-620


Odibo, L 1997 Suturing of perineal trauma: how well are we doing - an audit *British Journal of Midwifery* 5 (11) : 690-692

Olah, K. 1994 Subcuticular perineal repair using a new, continuous technique *British Journal of Midwifery* February, 2 (2)


Premkumar G, 2005 Perineal trauma: reducing associated postnatal maternal morbidity *Midwives* 8 (1) :30-32


RCOG 2004 Methods and Materials used in perineal repair Guideline No. 23 www.rcog.org.uk

Salmon D 2000 A feminist analysis of women’s experiences of perineal trauma in the immediate postnatal delivery period *MIDIRS Midwifery Digest* 10 (2)2119-25

Sampselle CM, Hines S 1999 Spontaneous pushing during birth - Relationship to perineal outcomes


Access to many journal on line with Athens password, logged on with university.

Journals

Birth
British Journal of Midwifery
British Journal of Obstetrics and Gynaecology
British medical Journal
GUT
International Journal of Gynaecology and Obstetrics
JOGNN
Journal of Wound Care
Journal of Midwifery and Women’s Health
MIDIRS Midwifery Digest
Midwifery
The Lancet
The Practising Midwife

Web sites:
www.rcog.org.uk/guidelines
www.emap

• Perineal Repair Handbook provided with additional references.

NB. Student here denotes the midwife in post-registration education.
PERINEAL REPAIR WORKSHOPS FOR MIDWIVES

FACILITATOR - Angie Wilson
University of Surrey

AIMS AND OBJECTIVES FOR THE SESSION
This session is designed to update your skills in perineal repair.
- Discuss current experiences, trends and evidence-based practice relating to the assessment, repair and evaluation of perineal trauma.
- NICE 2007 Intrapartum clinical guidelines 55.

AIMS AND OBJECTIVES CONT:
- Provide an overview of the anatomy and physiology of the pelvic floor and anorectum; relating this specifically to the recognition of varying degrees of perineal trauma.
- Discuss the rationale behind repair/non repair. Repair techniques and material.
- Discuss the importance of the assessment and repair of perineal trauma.

AIMS AND OBJECTIVES CONT:
- 'Hands on' as required.

OVERVIEW OF THE ANATOMY AND PHYSIOLOGY OF THE PELVIC FLOOR AND ANORECTUM

PERINEAL REPAIR BY THE MIDWIFE - Introduction
- It is widely reported that women suffer from perineal trauma following delivery and repair. This may cause long term physical and psychological morbidity (Olah 1994, Draper 1996, Kettles and Johanson 2001 and Kettle et al 2002).
- Approx 350,000 women will require perineal repair in the UK following a normal delivery. In essence 85% endure perineal trauma and 69% require repair (Kettle 2002).
- Trends require review and robust RCTs are needed to evaluate current practices: repair/non repair.
ANATOMY OF THE ANORECTUM

Identification of superficial and deep muscles involved in different degrees of perineal trauma. Consider labial and clitoral tears.

Identification of structures and points of insertion of muscles which require correct alignment and repair.

Functions of pelvic floor and anorectum, prior to and following delivery.

RELEVANCE OF ANATOMY AND PHYSIOLOGY TO PRACTICE.....

RCOG CLASSIFICATIONS OF TRAUMA

1st degree - skin of fourchette only
2nd degree tear/episiotomy - skin, superficial perineal muscles (sometimes deep)
3rd degree - as above +
  a. partial tear of ex anal sphincter less than 50% thickness
  b. complete tear of external anal sphincter
  c. internal sphincter also torn
4th degree - complete disruption to whole sphincter muscle and mucosa.

(Shitan 2004)

THIRD AND FOURTH DEGREE PERINEAL TRAUMA - Identification

TYPICAL SITE OF OBSTETRIC SPINCTOR DAMAGE

6 months following primary sphincter repair for 3rd degree tear

Arrows indicate an external sphincter defect.

Internal sphincter also damaged, and is incomplete interiorly.

ANAL ENDOSONOGRAPHY

Normal internal and external anal sphincters

P - posterior
L - left
V - vagina
Bright ring: reflections of cone
S - sub mucosa
I - internal anal sphincter
E - external sphincter
REVIEW OF CURRENT PRACTICE

- Trends in perineal repair....
- Review of current research to support evidence-based midwifery practice.

Consider....
- Does suturing make a difference?
- Continuous versus interrupted repair
- To stitch or not to stitch - women’s views
- Three stage versus two stage technique.

KEY EVIDENCE TO-DATE

- Continuous repair technique as opposed to interrupted technique recommended.
- Pain less at 10 days in women with continuous technique. No difference using Vicryl or Vicryl Rapide.
- Women reported no difference in dyspareunia at 3 months using either technique.
- Removal of sutures using Vicryl Rapide and continuous technique less than standard Vicryl.
- Large RCT using 1542 women with spontaneous VD with 2nd degree tear or episiotomy.
  Recommendation - training for midwives and doctors in new technique (Kettle 2002)

EVIDENCE CONT:

To stitch or not to stitch?....
- Clement and Reed (1999) found in their study of 232 women over 6 months to 7 years that no women reported any complications from un-sutured tears. When compared with a previously sutured tear, pain levels lower and sexual intercourse resumed earlier in non sutured group.

Problems ... study was small, memory recall and size of trauma not identified. Materials and methods have changed. Useful..

Qualitative study using women’s views.

EVIDENCE CONTINUED

Is it necessary to suture all lacerations after a vaginal delivery? (Lundquist et al 2000)
- 80 women - RCT Sutured v non sutured group. 2nd degree trauma 2cm X 2cms repaired.
- No significant difference in the healing process. Discomfort the same but type of pain different. Women’s choice. Await large RCT...

EVIDENCE CONT:

Does suturing make a difference?
- Fleming et al (2003) studied 1,300 primiparous women following a spontaneous ND, and with 1st and 2nd degree lacerations. 74 women randomised into suturing and non suturing groups respectively.
- Perineal pain measured at 1,10 days and 6 wks P/N. PD assessed at 10 days and 6 wks.
- Results: No difference in groups with regard to pain or depression. Significant differences in healing. At 6 wks poor wound approximation and closure.
- Small sample size but important findings in terms of wound closure.

EVIDENCE CONT:

Two stage repair..... A reliable compromise
- Follow-up of Ipswich Childbirth Study (Grant et al 2001) 793 women in original study comparing a two and three stage perineal repair technique, using Vicryl v Catgut.
- Results showed that fewer women allocated the two stage technique (sutures to vaginal wall and muscle only) leaving skin unsutured reported that the perineum felt different.
- Women allocated Vicryl were less likely to have dyspareunia initially and long term.

Why are we not adopting this approach?
IMPROVING THE DIAGNOSIS OF 3RD AND 4TH DEGREE TRAUMA

Can we improve our diagnosis of 3rd and 4th degree trauma?...YES

- Rectal examination for assessment of anal sphincter damage prior to perineal repair found to improve diagnosis of 3rd and 4th degree trauma from a rate of 2.5 to 9.3% during a study by Groom (2002). Can also occur with an intact perineum with OP position and prolonged labour.

Recommended practice by NICE (2007).

THE RATIONALE FOR REPAIR

- To control bleeding.
- To maintain function of the pelvic floor.
- To aid first intention healing of wound - healing is more rapid with less scaring if no infection present.
- Wound will heal by secondary intention if left un-repaired. Granulation tissue formed which contracts to form scar tissue.
- To prevent infection.

ASSESSMENT OF PERINEAL TRAUMA

How are midwives assessing perineal trauma?

REPAIR OF THE VAGINAL MUCOSA

Identify apex, knot, using continuous non locking stitch, this provides even tension on the posterior vaginal wall.

REPAIR TO PERINEAL MUSCLE

Continue into muscle with continuous stitch. Re-align muscle to ensure skin edges are bought together without tension. Less material used in contrast to interrupted.

REPAIR TO PERINEAL SKIN

Continuous subcuticular sutures commenced at the distal end of perineum and inserted below skin surface to avoid the profusion of nerve endings. End just within introitus.
INTERRUPTED REPAIR

• Interrupted sutures - required for ragged tears or as deemed necessary by midwife.
• Less pain at 10 days with subcuticular technique.
• Long term outcomes at 3 months - showed no significant difference in dyspareunia between subcuticular and interrupted repair (Kettle 2002).

POSTNATAL CARE AND AUDIT OF PERINEAL HEALING

• Postnatal examination of the perineum - how and when undertaken
• Analgesia for perineal pain - pharmacological and non-pharmacological
• Audit of perineal healing - how and when undertaken
• Follow-up care of 2nd, 3rd and 4th degree trauma

RECOMMENDATIONS FOR BEST PRACTICE

• Mandatory clinical update for all midwives and doctors
• Assessment of perineal trauma using an assessment proforma
• Use of recommended repair techniques and materials (NICE 2007)
• Rectal examination prior to and following delivery (NICE 2007).
• Trained instructors to assess midwives undertaking perineal repair using OSCEs format.

A HAPPY PAIN FREE MUM!
QUESTIONNAIRE

AN EVALUATION OF MIDWIVES’ AND STUDENTS’ EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

I would be grateful if you would complete the following questionnaire, which should take approximately 20 minutes. The questions are coded to enable me to classify your information, and the questionnaire is coded according to NHS Trust. All personal data relating to volunteers is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998).

Section 1.

For the purpose of analysis it would be helpful for me to know something about the pattern of your work.

1. Where is your practice allocation at the present time? Please tick one box only.

A  Antenatal Clinic
B  Antenatal ward
C  AN/PN ward
D  Postnatal ward
E  Delivery suite
F  Community
G  Other, please state

2. Please would you indicate your pattern of work. Please tick one box only.

A  Internal rotation
B  Core midwife
C  Community only
D  Community team in and out of unit
E  Team midwife
F  Permanent night duty
G  Bank midwife
H  Other, please state

3. Please would you indicate the approximate hours you work per week. Please tick one box only.

A  37.5 hours
B  18.75 hours – 37.4 hours
C  Less than 18.75 hours
D  Other, please state
4. Please would you indicate approximately how many weeks you have worked in the delivery suite during the last 12 month period.

<table>
<thead>
<tr>
<th>A</th>
<th>Weeks worked on delivery suite</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>I have not worked on the delivery suite during the last 12 month period</td>
</tr>
</tbody>
</table>

Section 2.

Guidelines, policies and evidence for best practice relating to perineal repair by the midwife in your hospital.

5. Are you aware of any of the following documents in the delivery suite relating to the role of the midwife undertaking perineal repair? Please tick appropriate box/s.

<table>
<thead>
<tr>
<th>A</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Protocol</td>
</tr>
<tr>
<td>C</td>
<td>Policies</td>
</tr>
<tr>
<td>D</td>
<td>Evidence for best practice – a guide</td>
</tr>
<tr>
<td>E</td>
<td>None</td>
</tr>
<tr>
<td>F</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

6. To what extent does the content of the document(s) influence your practice?

<table>
<thead>
<tr>
<th>A</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
<tr>
<td>F</td>
<td>None available</td>
</tr>
</tbody>
</table>

If not at all, would you please explain why this is not possible.

7. To what extent are you familiar with the European Union Directives regarding the role and training of the midwife undertaking perineal repair?

<table>
<thead>
<tr>
<th>A</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>
8. To what extent are you familiar with any literature regarding perineal repair techniques and suture materials.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
</tr>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>

Please comment on any of the current evidence regarding repair techniques and suture materials?


9. If you are familiar with the literature, to what extent have you been able to apply this to your practice?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
</tr>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>

If not at all, please would you tell me what has prevented you from applying this knowledge in your practice?


Section 3.

Would you please provide some information about your own practice experience regarding perineal repair instruction.

10. Did you receive any instruction in perineal repair during your midwifery training?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
</tr>
<tr>
<td>C</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

If yes, can you please describe the instruction you received?


8. To what extent are you familiar with any literature regarding perineal repair techniques and suture materials.

A | Not at all  
B | To some extent  
C | Moderately  
D | To quite an extent  
E | To a large extent

Please comment on any of the current evidence regarding repair techniques and suture materials?

9. If you are familiar with the literature, to what extent have you been able to apply this to your practice?

A | Not at all  
B | To some extent  
C | Moderately  
D | To quite an extent  
E | To a large extent

If not at all, please would you tell me what has prevented you from applying this knowledge in your practice?

Section 3.

Would you please provide some information about your own practice experience regarding perineal repair instruction.

10. Did you receive any instruction in perineal repair during your midwifery training?

A | Yes  
B | No  
C | Not sure

If yes, can you please describe the instruction you received?
11. Please would you indicate by ticking the appropriate box, which describes the extent to which this information was useful.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
</tr>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>

If useful, can you describe in what way?

12. Does the hospital in which you currently work, provide any instruction in perineal repair?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
</tr>
<tr>
<td>C</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

13. If yes, have you attended any of the following sessions? Please tick the appropriate box/s.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Initial instruction</td>
</tr>
<tr>
<td>B</td>
<td>Up-date</td>
</tr>
<tr>
<td>C</td>
<td>Initial instruction and up-date</td>
</tr>
</tbody>
</table>

14. If you have not been able to attend the sessions provided can you tell me why this has not been possible?

If you have not had any instruction in perineal repair in this unit please move to question 18.
15. Please indicate the level of usefulness an in-service perineal repair programme has been to your clinical competence undertaking perineal repair. Please insert the number which closely relates to the level of usefulness in each box.

1 = Not at all  2 = To some extent  3 = Moderately  4 = To quite an extent  5 = To a large extent  6 = Not provided in unit.

A. Perineal repair workshop  
B. One-to-one instruction at the bedside  
C. Combined workshop and one-to-one at the bedside  
D. Annual perineal repair workshop up-date  
E. Accredited perineal repair module

16. If you have attended instruction in perineal repair, who provides the instruction in your hospital?

Please would you tick the appropriate box/s.

<table>
<thead>
<tr>
<th></th>
<th>Initial instruction</th>
<th>Up-date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Senior labour ward midwife</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Midwife</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Doctor</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Midwifery teacher</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Suturing representative</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Other, please state</td>
<td></td>
</tr>
</tbody>
</table>

17. Please indicate by ticking the appropriate boxes which of the following areas are included in a perineal repair workshop in your hospital.

A | Overview of the anatomy and physiology of the pelvic floor and anorectum |         |
B | Perineal repair handbook |         |
C | Levels of competency for undertaking repair |         |
D | Criteria for assessing and undertaking perineal repair |         |
E | Instruction in perineal infiltration |         |
F | Instruction in perineal repair techniques |         |
G | ‘Hands on perineal repair’ |         |
H | Discussion of current evidence to support repair techniques and materials |         |
I | Non, no workshop provided |         |
J | I Don’t know |         |
Section 4.

This section relates to your clinical skills undertaking perineal repair.

18. Do you undertake perineal repair?

A Yes
B No

If the answer to this question is no, please proceed to question 22

19. How frequently do you undertake perineal repair?

A Very frequently
B Frequently
C Infrequently
D Very infrequently

20. To what extent do you feel confident when carrying out perineal repair?
   Please tick the box, representing the closest to how you feel.

A Not confident
B Not very confident
C Quite confident
D Very confident

If you do not feel confident, please would you explain what help could be provided to improve your level of confidence.

21. To what extent do you feel confident carrying out perineal infiltration prior to perineal repair?

A Not confident
B Not very confident
C Quite confident
D Very confident

If you do not feel confident, please would you explain what help could be provided to improve your level of confidence.
22. How often do you carry out an episiotomy?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Very frequently</td>
</tr>
<tr>
<td>B</td>
<td>Frequently</td>
</tr>
<tr>
<td>C</td>
<td>Infrequently</td>
</tr>
<tr>
<td>D</td>
<td>Very infrequently</td>
</tr>
<tr>
<td>E</td>
<td>Never</td>
</tr>
</tbody>
</table>

23. To what extent do you feel confident undertaking an episiotomy?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Not confident</td>
</tr>
<tr>
<td>B</td>
<td>Not very confident</td>
</tr>
<tr>
<td>C</td>
<td>Quite confident</td>
</tr>
<tr>
<td>D</td>
<td>Very confident</td>
</tr>
</tbody>
</table>

If not confident, please would you explain the reasons for this.

24. To what extent do you feel confident undertaking perineal infiltration for an episiotomy?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Not confident</td>
</tr>
<tr>
<td>B</td>
<td>Not very confident</td>
</tr>
<tr>
<td>C</td>
<td>Quite confident</td>
</tr>
<tr>
<td>D</td>
<td>Very confident</td>
</tr>
</tbody>
</table>

If not confident, please would you explain how your confidence can be improved.
25. Have you at any time been formally assessed whilst undertaking perineal repair?

|   |   
|---|---
| A | Yes |
| B | No  |

26. If yes, please would you indicate the perceived level of competency you were awarded by ticking the appropriate box.

<table>
<thead>
<tr>
<th>Level</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Cannot perform this activity satisfactorily to participate within the clinical environment</td>
</tr>
<tr>
<td>1</td>
<td>Can perform the activity but not without constant supervision, assistance and/or guidance</td>
</tr>
<tr>
<td>2</td>
<td>Can perform this activity satisfactorily but requires some supervision and assistance and/or minimal guidance</td>
</tr>
<tr>
<td>3</td>
<td>Can perform this activity satisfactorily when instructed to do so without further supervision, assistance and/or guidance</td>
</tr>
<tr>
<td>4</td>
<td>Can perform this activity satisfactorily without supervision, assistance or guidance with acceptable promptness and quality of work with understanding and appropriate application</td>
</tr>
<tr>
<td>5</td>
<td>Can, independently perform this activity, satisfactorily with more than acceptable promptness and quality of work and with initiative and adaptability to specific problems as appropriate</td>
</tr>
<tr>
<td>6</td>
<td>Can perform this activity satisfactorily with more than acceptable promptness and quality and with initiative and adaptability. Can lead/instruct/assess other practitioners in performing this activity.</td>
</tr>
</tbody>
</table>

27. Please would you indicate who undertook this assessment.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Peer assessment at the bedside</td>
</tr>
<tr>
<td>B</td>
<td>Senior labour ward midwife</td>
</tr>
<tr>
<td>C</td>
<td>Formal assessment with supervising midwife</td>
</tr>
<tr>
<td>D</td>
<td>Doctor</td>
</tr>
<tr>
<td>E</td>
<td>Other, please state</td>
</tr>
</tbody>
</table>
28. Please rate 1, 2, or 3 for the level of importance you consider each of the following criteria, when assessing for perineal trauma and repair following delivery.

Please place the relevant number in each box.

1 = very important  2 = important  3 = unimportant

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Bleeding</td>
</tr>
<tr>
<td>B</td>
<td>Length of tear/incision down the perineum</td>
</tr>
<tr>
<td>C</td>
<td>Depth into the vagina (apex)</td>
</tr>
<tr>
<td>D</td>
<td>Depth into the perineal muscle</td>
</tr>
<tr>
<td>E</td>
<td>Alignment/ apposition</td>
</tr>
<tr>
<td>F</td>
<td>Third or fourth degree tear</td>
</tr>
<tr>
<td>G</td>
<td>Tear gaping</td>
</tr>
<tr>
<td>H</td>
<td>Tear jagged</td>
</tr>
<tr>
<td>I</td>
<td>Direction of tear</td>
</tr>
</tbody>
</table>

29. Please indicate which suture material you use for perineal repair

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Vicryl Rapide</td>
</tr>
<tr>
<td>B</td>
<td>Vicryl</td>
</tr>
<tr>
<td>C</td>
<td>Dexon</td>
</tr>
<tr>
<td>D</td>
<td>Other, please state</td>
</tr>
</tbody>
</table>

30. What suturing technique do you use to repair the vaginal mucosa?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A continuous locking stitch</td>
</tr>
<tr>
<td>B</td>
<td>A continuous non-locking stitch</td>
</tr>
</tbody>
</table>

Would you please tell me what influences your choice in this technique?

31. What suturing technique do you use to repair the perineal muscles?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Interrupted</td>
</tr>
<tr>
<td>B</td>
<td>Continuous</td>
</tr>
<tr>
<td>C</td>
<td>Combination of both techniques</td>
</tr>
</tbody>
</table>

What influences your choice in this technique?
32. What suturing technique do you use to repair the perineal skin?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Interrupted</td>
</tr>
<tr>
<td>B</td>
<td>Continuous subcuticular</td>
</tr>
<tr>
<td>C</td>
<td>Combination of interrupted and subcuticular</td>
</tr>
<tr>
<td>D</td>
<td>No sutures inserted</td>
</tr>
<tr>
<td>E</td>
<td>No sutures inserted some of the time</td>
</tr>
</tbody>
</table>

What influences your choice in a particular repair technique?

33. How frequently are you able to assess perineal healing of the women that you have repaired?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Very frequently</td>
</tr>
<tr>
<td>B</td>
<td>Frequently</td>
</tr>
<tr>
<td>C</td>
<td>Infrequently</td>
</tr>
<tr>
<td>D</td>
<td>Very infrequently</td>
</tr>
<tr>
<td>E</td>
<td>Never</td>
</tr>
</tbody>
</table>

If very infrequently, or never can you explain why this has not been possible.

34. Please indicate how long a woman would need to wait for another midwife or doctor to undertake her perineal repair if you were unable to carry out this procedure yourself.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Under 30 minutes</td>
</tr>
<tr>
<td>B</td>
<td>31 minutes to 60 mins</td>
</tr>
<tr>
<td>C</td>
<td>61 minutes to 90 minutes</td>
</tr>
<tr>
<td>D</td>
<td>91 minutes to 120 minutes</td>
</tr>
<tr>
<td>E</td>
<td>If longer, please state</td>
</tr>
</tbody>
</table>
### Your views on perineal repair in clinical practice.

35. Please tick one box, for each statement which indicates the extent of your views or feelings.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Undertaking perineal repair is a normal part of midwifery practice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Competency to undertake perineal repair is only relevant to midwives working in the delivery suite.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>If all midwives were instructed in the assessment of perineal trauma, more third and fourth degree tears would be identified.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>All women should have their perineum checked at least once by the midwife undertaking their perineal repair.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Clinical audit of perineal healing is important for the evaluation of all perineal repairs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The woman should be provided with a choice regarding the suturing or non suturing of a small second degree tear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>It is <strong>not</strong> important to the woman as to who undertakes the repair of her perineum.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please feel free to add any comments regarding the above statements.

................................................................................................................................................
................................................................................................................................................

11
36. Some of the literature surrounding women’s childbirth experiences has identified that their views concerning perineal trauma have been largely unheard, or frequently ignored.

Please indicate which statement of care represents your own views. Please tick one box only.

1. The midwife is an autonomous practitioner, free to practise to her/his capabilities, responding to the needs of the woman and her family, and acting as the woman’s advocate. □

2. The midwife often practises under the constraints of a dominant medical model of care, which reduces the woman’s autonomy in midwifery care. □

3. The experiences and views of women are considered equally by the midwife and doctor, thus providing a choice for the woman to make her own decisions, whereby creating a relationship of reciprocity between carers. □

4. None of these. □

Section 6.

These questions relate to your role as a mentor, and how together we can improve the student's experience in perineal repair.

37. Please indicate the frequency of which you mentor a student midwife?

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Very frequently</td>
</tr>
<tr>
<td>B</td>
<td>Frequently</td>
</tr>
<tr>
<td>C</td>
<td>Infrequently</td>
</tr>
<tr>
<td>D</td>
<td>Very infrequently</td>
</tr>
<tr>
<td>E</td>
<td>Never</td>
</tr>
</tbody>
</table>

If the answer is very infrequently or never, please explain the reasons that prevent you undertaking this role regularly.

........................................................................................................................................................................

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If never, please move to question 44.

38. How frequently has any student midwife that you have mentored requested instruction in perineal repair?
39. How frequently has your student midwife requested supervision in perineal repair if it has been required at delivery?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never

40. If you do undertake perineal repair, how often would you instruct your senior student midwife how to undertake this procedure at delivery if it is required?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never

41. If never or very infrequently, why are you unable to undertake this role? Please indicate by ticking the appropriate boxes.

A Time constraints
B Lack of confidence to teach the student perineal repair
C Considered inappropriate at stage in midwifery programme
D Other, please state

42. To what extent are senior student midwives generally encouraged to repair uncomplicated second degree tears or episiotomies as required, following their delivery, in your hospital?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never

43. How important do you consider perineal repair instruction is for the senior student midwife in clinical practice?
APPENDIX

| A | Very important |
| B | Important      |
| C | Unimportant    |
| D | Very unimportant |

Please provide reasons for your choice


Section 7.

Would you please share some information with me, about you and your professional career.

44. Please indicate your age (optional).

| A | Under 30 yrs |
| B | 31-45 yrs   |
| C | 46-60 yrs   |
| D | 61+ yrs     |

45. How many years have you been practising as a midwife?

| A | 1-5 yrs |
| B | 6-10 yrs |
| C | 11-15 yrs |
| D | 16-20 yrs |
| E | 21-25 yrs |
| F | 26-30 yrs |
| G | 31-35 yrs |
| H | More than 36 yrs |

44. If you have been practising less than one year, please state how long...
47. Have you returned to midwifery practice within the last year?

<p>| | |</p>
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<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
</tr>
</tbody>
</table>

48. Would you please indicate your highest academic qualifications since leaving secondary school.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>A</td>
<td>GCSE O' Levels</td>
</tr>
<tr>
<td>B</td>
<td>GCSC A' Levels</td>
</tr>
<tr>
<td>C</td>
<td>Access</td>
</tr>
<tr>
<td>D</td>
<td>Diploma</td>
</tr>
<tr>
<td>E</td>
<td>Degree</td>
</tr>
<tr>
<td>F</td>
<td>MSc</td>
</tr>
<tr>
<td>G</td>
<td>PhD</td>
</tr>
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</table>
| H | Other  
   Please state |

49. Would you please indicate your professional qualifications by ticking the appropriate boxes.

<p>| | |</p>
<table>
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<th></th>
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<tbody>
<tr>
<td>A</td>
<td>RN, RM</td>
</tr>
<tr>
<td>B</td>
<td>DHE Midwifery</td>
</tr>
</tbody>
</table>
| C | BSc (Ord)  
   Midwifery |
| D | BSc (Hons)  
   Midwifery |
| E | ADM |
| F | DPSM |
| G | MSc |
| H | HV |
| J | Other, please state |
50. Please indicate if you have any of the following teaching qualifications.

<p>| | |</p>
<table>
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<th></th>
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<tbody>
<tr>
<td>A</td>
<td>997</td>
</tr>
<tr>
<td>B</td>
<td>998</td>
</tr>
<tr>
<td>C</td>
<td>Cert. Ed</td>
</tr>
<tr>
<td>D</td>
<td>City and Guilds</td>
</tr>
<tr>
<td>E</td>
<td>PGCEA</td>
</tr>
<tr>
<td>F</td>
<td>MSc/PG Diploma in Teaching and Learning</td>
</tr>
<tr>
<td>G</td>
<td>Other, please state</td>
</tr>
</tbody>
</table>

51. Would you please indicate your occupational Grade.

<p>| | |</p>
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<tr>
<td>A</td>
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<td>F</td>
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<td>C</td>
<td>G</td>
</tr>
<tr>
<td>D</td>
<td>H</td>
</tr>
<tr>
<td>E</td>
<td>I</td>
</tr>
<tr>
<td>F</td>
<td>Other, please state</td>
</tr>
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</table>

Section 8.
These questions relate to your continuing professional development.

52. How often are you able to attend a professional study day/course away from the unit?

<p>| | |</p>
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<tbody>
<tr>
<td>A</td>
<td>1-3 monthly</td>
</tr>
<tr>
<td>B</td>
<td>4-6 monthly</td>
</tr>
<tr>
<td>C</td>
<td>7-9 monthly</td>
</tr>
<tr>
<td>D</td>
<td>10-12 monthly</td>
</tr>
<tr>
<td>E</td>
<td>Other, please state</td>
</tr>
</tbody>
</table>
53. Have you attended any study days on perineal repair outside the hospital?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>No</td>
</tr>
</tbody>
</table>

If yes, would you please tell me the name of the study day and where the study day was held?


54. Are you undertaking any continuing professional studies at this time?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
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</thead>
<tbody>
<tr>
<td>B</td>
<td>No</td>
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</table>

If yes, please would you tell me which studies these are?


55. Please indicate the frequency of which you have been able to discuss your continuing professional development with your supervisor of midwives.

<table>
<thead>
<tr>
<th></th>
<th>Less than six months</th>
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<tbody>
<tr>
<td>B</td>
<td>Six monthly</td>
</tr>
<tr>
<td>C</td>
<td>Annually</td>
</tr>
<tr>
<td>D</td>
<td>Longer than a year</td>
</tr>
<tr>
<td>E</td>
<td>Not discussed</td>
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</table>
56. To what extent has your supervisor of midwives been helpful in meeting your educational needs?

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<tbody>
<tr>
<td>A</td>
<td>Extremely helpful</td>
</tr>
<tr>
<td>B</td>
<td>Very helpful</td>
</tr>
<tr>
<td>C</td>
<td>Helpful</td>
</tr>
<tr>
<td>D</td>
<td>Unhelpful</td>
</tr>
<tr>
<td>E</td>
<td>Very unhelpful</td>
</tr>
<tr>
<td>F</td>
<td>Extremely unhelpful</td>
</tr>
</tbody>
</table>

If you have found that your supervisor of midwives has not met your educational needs, please could you explain in what way they could be of more help to you.

57. How important do you consider continuing professional development is to your midwifery practice?

<p>| | |</p>
<table>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Very important</td>
</tr>
<tr>
<td>B</td>
<td>Important</td>
</tr>
<tr>
<td>C</td>
<td>Unimportant</td>
</tr>
<tr>
<td>D</td>
<td>Very unimportant</td>
</tr>
</tbody>
</table>

Comments

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Section 9.

Helpful information you may wish contribute to the Perineal Repair Working Group in facilitating further education in perineal repair for the midwife as part of your continuing professional development and lifelong learning.

58. What would you consider to be the most useful resources for teaching perineal repair and up-date in your hospital? Please tick the appropriate box.

A Regular in-service perineal repair workshops
B One-to-one instruction at the bedside
C Combination of A and B
D An accredited work-based module on perineal repair for midwives to include A & B
E No teaching necessary
F Other, please state

59. How can we, together, further improve the student's experience in receiving instruction and supervision in perineal repair in clinical practice?

It would be useful if you would share your ideas with me.

........................................................................................................................
........................................................................................................................
........................................................................................................................

I would like to thank you for taking the time to complete this questionnaire. Your contribution is important and will be very helpful for you, your colleagues and the student midwives who wish to undertake perineal repair. It will also be beneficial for the women in your care.

Should you wish to add any further comments about the midwife, student or issues related to perineal repair, please use the space provided.
Would you like to help this project further?

As some of the open questions in this questionnaire will generate some valuable data, I would like to discuss some of the comments you have made in greater depth. Should you be willing to undertake a personal interview, please indicate by completing the attached consent form and return this with the questionnaire. This interview will be strictly confidential and your name will not be used in any subsequent reports.

Angie Wilson
PhD student and Midwife Teacher
University of Surrey.
5.5.04

Re: AN EVALUATION OF THE MIDWIVES’ AND STUDENTS’ EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

Dear Colleague

Enclosed is an information sheet clearly explaining the above research study which will be undertaken in six NHS Consultant/midwifery led units in South East England. I would be grateful if you could take a few minutes out of your busy work schedule to read the information sheet. Should you wish to participate in the study, please sign the consent form and return it to me together with the enclosed questionnaire by 30th September in the S.A.E. provided.

All returned questionnaires will be entered into a prize draw, which includes a £50 Marks and Spencer gift voucher.

Thank you in anticipation of your contribution.

Angie Wilson.
PhD student and Midwife Teacher.
MIDWIVES INFORMATION SHEET AND CONSENT FORM

INTERVENTION GROUP

AN EVALUATION OF MIDWIVES EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

You are being invited to take part in a midwifery research study. Before you decide to participate, it is important for you to understand why the research is being undertaken and what it will involve. Please take the time to read the following information carefully and discuss it with your colleagues if you wish. If you require any further information or clarification please contact me on 01483 684620 or a.wilson@surrey.ac.uk . Thank you for taking the time to read this information.

What Is the purpose of this study?

Midwives are practicing in an environment where there is constant change and greater expectations from the childbearing woman. This involves both new and changing roles and responsibilities for the midwife. Expanding research evidence for midwifery practice requires the midwife to develop and maintain clinical competence and knowledge to meet these new demands within the NHS clinical governance framework. Continuing professional development is one means of maintaining professional competence.

The study will gather data from our five maternity units and a comparison maternity unit in another part of South East England. The comparison maternity unit will not be receiving a work-based module or newly designed in-service training programme in perineal repair.

Aims and objectives

The aims and objectives of this research study therefore are to:

1. Evaluate the effectiveness of a post-registration work-based module and in-service training programme on the midwife's level of competency to undertake perineal repair in clinical practice.

2. Evaluate whether student midwives consider themselves adequately prepared in their preparatory programme to undertake perineal repair under supervision at the point of registration.
Proposed outcome of the study

By implementing a post-registration work-based module and in-service training programme in five NHS Trusts, I anticipate that the number of midwives who are competent to undertake perineal repair will be increased over time. I also anticipate that the increased number of midwives who are competent to undertake perineal repair will be confident to instruct and supervise student midwives; and therefore increase the number of students who are competent to undertake perineal repair under supervision at the point of registration.

Why have I been chosen?

All midwives and senior student midwives in six NHS consultant/midwifery led units in South East England will be invited to voluntarily participate in this study, because every woman in labour needs the continuity of her midwife to repair an uncomplicated tear or episiotomy. Every midwife should be provided the opportunity to gain experience in perineal repair both during pre-and post-registration education.

Do I have to take part?

No, it is your choice, participation is entirely voluntary. If you do decide to take part, this information sheet should be kept by you and you are asked to sign a consent form which you will find at the end of this document. If you decide to take part you are still free to withdraw at any time and without providing a reason.

What will happen if I take part?

You will form part of the experimental group of midwives from our five NHS maternity units. The comparison group will be taken from the sixth maternity unit. You will be asked to complete a pre-intervention semi-structured questionnaire, which has nine sections, each one explaining the reasons for inclusion. This questionnaire aims to investigate your views and current practice experience in perineal repair. You will also be asked about your contribution towards student midwives instruction in repair. This questionnaire allows you to write your own comments so it will generate both quantitative and qualitative data. It will take approximately 20 minutes to complete and will be sent to an identified area in your workplace. You will have four weeks in which to complete this questionnaire which you will need to return to me in a S.A.E.

You are also provided with a further opportunity to voluntarily participate in a focus group interview to discuss comments and issues you may wish to expand upon from completing the questionnaire. This interview will take up to forty five minutes. It will take place at a mutually agreed venue. I shall be using an audio tape to record our discussion, to enable me to listen to your views carefully and transcribe the discussion at a later date. You will be able to read this transcription to ensure it is a true representation of our discussion.

As part of your normal continuing professional development you will be offered two options to enable you to develop and maintain your existing skills in the assessment of perineal trauma and implementation of perineal repair. This will be the experimental intervention part of the study.

There are two options:

1. An accredited work-based module at level three (10 credits); *The Principles and Practice of Perineal Repair for the Midwife* which will be delivered in the workplace to provide greater flexibility for you as a practitioner. This will involve an assessment in both theory and practice.
2. An in-service education programme which includes both theory and a practical workshop with a further opportunity for you to develop clinical competence in perineal repair at the bedside. Once you have been assessed to be clinically competent in perineal repair you will receive a certificate for your professional portfolio. This training will be provided in all maternity units.

*Please note, this will be available to all midwives irrespective of whether you participate in this study or not.

Approximately six months following the experimental intervention programme you will be asked to complete an identical post-intervention questionnaire to evaluate whether the in-service workshops or work-based module has been effective in helping you to increase your level of competence and confidence to undertake perineal repair. You will have four weeks to complete the questionnaire. It is important that you complete both questionnaires as this will provide valuable information as to the effectiveness and continued need for this work-based module and in-service education. Again you will be offered a further opportunity to participate in a focus group interview to reflect on your practice in perineal assessment and repair.

What are the benefits of taking part?

Providing you with an opportunity to develop and maintain your professional practice and competency through a work-based module or in-service education programme in perineal repair, you will be providing an optimum standard of care within the clinical governance framework in the best interests of all your childbearing clients.

What happens when the research study stops?

The work-based module and in-service workshops in perineal repair will continue if this has been evaluated as effective for midwives and students in midwifery practice.

Will my taking part in this study be kept confidential?

All information which is collected about you during the course of this research will be kept strictly confidential. All documentation will be coded according to your maternity unit and will not bear your name. All questionnaires, tapes and transcripts will be stored securely and incinerated following the completion of the study. All personal data relating to volunteers is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998).

What will happen to the results of the research study?

On completion of the research, all maternity units will be provided with an opportunity to attend a presentation on the evaluation of the study. A study day will be provided on key issues developed from the research together with other experts in the field. A written thesis will be available in the university library following completion of my PhD studies. Articles will be available in due course in midwifery journals conveying the research findings. You will not be identified in any report or publication.

Who is organizing and funding the research?

At the present time the University of Surrey is sponsoring this study.

Who had reviewed this study?

This study has been approved by the Metropolitan MREC, one of 13 national research ethics committees, the Local Research Ethics Committees in Each Trust
and the University of Surrey. It is supported by each Head of Midwifery and my research supervisor at the University of Surrey.

Contact for further information.

You can contact me, on 01483 684620 or a.wilson@surrey.ac.uk or Professor Peter Jarvis, my supervisor on 01483 300600 or P.Jarvis@surrey.ac.uk.

Thank you for taking the trouble to read this information and I hope you will consider participation in the study. You will be able to retain a copy of this information sheet together with signed consent form to keep.
CONSENT FORM

AN EVALUATION OF MIDWIVES EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

Name of researcher: Angie Wilson, Midwife Teacher.

1. I confirm that I have read and understand the information sheet dated 5.8.03 (version 1) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving reason.

3. I understand that the only person with access to the information in my questionnaires, interview tapes and transcripts will be the named researcher only.

4. I agree to take part in this study.
Name of Midwife ___________________________ Date ___________ Signature ___________________________

Researcher _______________________________ Date ___________ Signature ___________________________

1 for midwife; 1 for Angie Wilson
MIDWIVES INFORMATION SHEET AND CONSENT FORM

COMPARISON GROUP- ST MARY'S HOSPITAL PORTSMOUTH

AN EVALUATION OF MIDWIVES EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

You are being invited to take part in the evaluation phase of a midwifery research study. Before you decide to participate, it is important for you to understand why the research is being undertaken and what it will involve. Please take the time to read the following information carefully and discuss it with your colleagues if you wish. If you require any further information or clarification please contact me on 01483 684620 or a.wilson@surrey.ac.uk. Thank you for taking the time to read this information.

What is the purpose of this study?

Midwives are practicing in an environment where there is constant change and greater expectations from the childbearing woman. This involves both new and changing roles and responsibilities for the midwife. Expanding research evidence for midwifery practice requires the midwife to develop and maintain clinical competence and knowledge to meet these new demands within the NHS clinical governance framework. Continuing professional development is one means of maintaining professional competence in perineal repair.

The study will continue to gather data from six separate consultant/midwifery led maternity units in South East England. Five will comprise the experimental sites. St Mary’s Hospital Portsmouth, is the comparison unit. Midwives from the experimental maternity units will be able to access a post-registration work-based module and newly designed in-service training programme in perineal repair. The comparison unit, St Mary’s will not be receiving the new post-registration module but is being offered an in-service training programme in perineal repair.

Aims and objectives

The aims and objectives of this research study therefore are to:

1. Evaluate the effectiveness of an in-service education programme on the midwife’s perceived level of competency to undertake perineal repair in clinical practice.

2. To determine whether there is a difference in the perceived level of competency for midwives to undertake perineal repair between experimental and comparison sites.

3. Evaluate whether student midwives consider themselves adequately prepared in their preparatory programme to undertake perineal repair under supervision at the point of registration.

Proposed outcome of the study

By implementing an in-service training programme for midwives in perineal repair, I anticipate that the number of midwives who are competent to assess perineal trauma and undertake perineal repair will be increased over time. I also anticipate that the
increased number of midwives who are competent to undertake perineal repair will have an increased level of confidence to instruct and supervise student midwives, and therefore increase the number of students who are threshold competent to undertake perineal repair under supervision at the point of registration.

Why have I been chosen?

All midwives in 6 NHS consultant/midwifery led units and senior student midwives in the experimental Trusts in South East England will be invited to voluntarily participate in this study, because every woman in labour needs the continuity of her midwife to repair an uncomplicated tear or episiotomy. Every midwife should be provided the opportunity to gain experience in perineal repair both during pre-and post-registration education.

Do I have to take part?

No, it is your choice, participation is entirely voluntary. If you do decide to take part, this information sheet should be kept by you and you are asked to sign a consent form which you will find at the end of this document. If you decide to take part you are still free to withdraw at any time and without providing a reason.

What will happen if I take part?

You will form part of the comparison group of midwives from the six NHS maternity units. You will be asked to complete a post-intervention semi-structured questionnaire, which has nine sections, each one explaining the reasons for inclusion. A pre-intervention questionnaire was distributed to midwives at St Mary's Hospital in April 2004. This questionnaire aims to investigate your views and current practice experience in perineal repair. You will also be asked about your contribution towards student midwives instruction in repair. This questionnaire allows you to write your own comments so it will generate both quantitative and qualitative data. It will take approximately 20 minutes to complete and will be sent to an identified area in your workplace. You will have four weeks in which to complete this questionnaire which you will need to return to me in the S.A.E. enclosed.

You are also provided with a further opportunity to voluntarily participate in a focus group interview to discuss your views, experiences and needs in clinical practice re perineal repair. Flyers will be distributed for volunteers in due course.

What are the benefits of taking part?

By participating in this study, I will be able to determine whether midwives will benefit from an in-service education programme in perineal repair in order to increase their perceived level of competency to undertake this skill. You will also be contributing valuable information to evidence-based midwifery education.

What happens when the research study discontinues?

Depending on the effectiveness of the in-service training programme on midwives and students competency in practice, this will either continue and be promoted nation wide or discontinued.

Will my taking part in this study be kept confidential?

All information which is collected about you during the course of this research will be kept strictly confidential. All documentation will be coded according to your maternity unit and will not bear your name. All questionnaires, tapes and transcripts will be stored securely and
incinerated following the completion of the study. All personal data relating to volunteers is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998).

**What will happen to the results of the research study?**

On completion of the research, all maternity units will be provided with an opportunity to attend a presentation on the evaluation of the study. A study day at the University of Surrey will be provided on key issues developed from the research together with other experts in the field. A written thesis will be available in the University of Surrey library following completion of my Ph.D. studies. Articles will be available in due course in midwifery journals conveying the research findings. You will not be identified in any report or publication.

**Who is organizing and funding the research?**

At the present time the University of Surrey is sponsoring this study.

**Who had reviewed this study?**

This study has been approved by the Metropolitan MREC, one of 13 national research ethics committees, the Local Research Ethics Committees in Each Trust and the University of Surrey. It is supported by each Head of Midwifery and my research supervisor at the University of Surrey.

**Contact for further information.**

You can contact me, on 01483 684620 or a.wilson@surrey.ac.uk or Professor Peter Jarvis, my supervisor on 01483 300600
QUESTIONNAIRE

STUDENT MIDWIVES EXPERIENCE OF INSTRUCTION AND PRACTICE IN

UNDERTAKING PERNEAL REPAIR

This questionnaire is designed to investigate your experience of perineal repair both in theory and in clinical practice. I would be grateful if you would complete the following questions as accurately and honestly as possible. The information you provide in this questionnaire will enable me to facilitate a comprehensive educational programme for subsequent students and midwives in theory and practice. All personal data relating to volunteers is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998).

Section1.

Midwifery programme and practice allocation details.

1. Please indicate which midwifery programme you are undertaking. Please tick the appropriate box.

A BSc (Hons) Shortened Midwifery
B BSc (Hons) Health Sciences
C DHE / BSc (Ord) Fitness for Practice
D Other, please state.

2. Please indicate your cohort, by ticking the appropriate box.

A 2001
B 2002
C 2003
D 2004

3. Please indicate your NHS Trust Hospital.

A St Peter’s and Ashford Hospital
B The Royal Surrey County Hospital
C Frimley Park Hospital
D East Surrey Hospital
E St Richard’s Hospital
F St Mary’s Hospital, Portsmouth
Section 2.

Information relating to your theoretical and practical input regarding perineal repair during your midwifery programme.

4. Have you received any theory in the university related to perineal repair during your midwifery programme to-date? Please tick appropriate box.

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<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
</tr>
</tbody>
</table>

5. If the answer is yes, to what extent has this information been useful for undertaking this skill in clinical practice?

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<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
</tr>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>

Please explain how this information has been useful.

........................................................................................................................................

........................................................................................................................................

6. Please indicate by ticking the appropriate boxes which of the following information is included in a perineal repair teaching session in your midwifery programme within the university.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Overview of the anatomy and physiology of the pelvic floor and anorectum</td>
</tr>
<tr>
<td>B</td>
<td>Provision of a Perineal repair workbook</td>
</tr>
<tr>
<td>C</td>
<td>Levels of competency for undertaking repair</td>
</tr>
<tr>
<td>D</td>
<td>Criteria for assessing and undertaking perineal repair</td>
</tr>
<tr>
<td>E</td>
<td>Instruction in perineal infiltration</td>
</tr>
<tr>
<td>F</td>
<td>Instruction in perineal repair techniques</td>
</tr>
<tr>
<td>G</td>
<td>'Hands on' perineal repair workshop</td>
</tr>
<tr>
<td>H</td>
<td>Discussion of current evidence to support repair techniques and materials</td>
</tr>
<tr>
<td>I</td>
<td>None, no information provided</td>
</tr>
<tr>
<td>J</td>
<td>Don't know</td>
</tr>
</tbody>
</table>
7. Have you attended a perineal repair workshop in the university during your midwifery programme to-date?

A Yes  
B No

8. If the answer is yes, to what extent has this practical activity been useful for undertaking this skill in clinical practice?

A Not at all  
B To some extent  
C Moderately  
D To quite an extent  
E To a large extent

If this information was useful, please explain how it was useful.

........................................................................................................................................................................................................

........................................................................................................................................................................................................

9. Have you been instructed how to undertake an episiotomy in University?

A Yes  
B No

10. To what extent has this prepared you for carrying out an episiotomy in clinical practice?

A Not at all  
B To some extent  
C Moderately  
D To quite an extent  
E To a large extent
11. Have you been instructed how to carry out perineal infiltration for episiotomy in University?

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<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
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</tbody>
</table>

12. To what extent has this prepared you for carrying out perineal infiltration for episiotomy in clinical practice?

<p>| | |</p>
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<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
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<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>

13. How often do you carry out an episiotomy?

<p>| | |</p>
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<th></th>
<th></th>
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<tbody>
<tr>
<td>A</td>
<td>Very frequently</td>
</tr>
<tr>
<td>B</td>
<td>Frequently</td>
</tr>
<tr>
<td>C</td>
<td>Infrequently</td>
</tr>
<tr>
<td>D</td>
<td>Very infrequently</td>
</tr>
<tr>
<td>E</td>
<td>Never</td>
</tr>
</tbody>
</table>

14. To what extent do you feel confident undertaking an episiotomy?

<p>| | |</p>
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<th></th>
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<tbody>
<tr>
<td>A</td>
<td>Not confident</td>
</tr>
<tr>
<td>B</td>
<td>Not very confident</td>
</tr>
<tr>
<td>C</td>
<td>Quite confident</td>
</tr>
<tr>
<td>D</td>
<td>Very confident</td>
</tr>
</tbody>
</table>

If not confident, please could you explain the reasons for this.


15. To what extent do you feel confident undertaking perineal infiltration for an episiotomy?

<p>| | |</p>
<table>
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<th></th>
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<tbody>
<tr>
<td>A</td>
<td>Not confident</td>
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<tr>
<td>B</td>
<td>Not very confident</td>
</tr>
<tr>
<td>C</td>
<td>Quite confident</td>
</tr>
<tr>
<td>D</td>
<td>Very confident</td>
</tr>
</tbody>
</table>
If not confident, please could you explain how your confidence can be improved.

Section 3.

Your experience of instruction and supervision in perineal repair in clinical practice.

16. Does the hospital in which you currently work, provide any instruction in perineal repair?
   A Yes
   B No
   C Not sure

17. If yes, have you attended any of the following sessions? Please tick appropriate boxes.
   A Initial instruction
   B Midwives' up-date
   C Other, please state.

18. To what extent was this information helpful in enabling you to ask to carry out perineal repair under supervision in practice?
   A Not at all
   B To some extent
   C Moderately
   D To quite an extent
   E To a large extent
19. As a student midwife, how frequently have you been encouraged to attend any in-service training in perineal repair?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never

20. To what extent are senior student midwives generally encouraged to repair uncomplicated second degree tears or episiotomies under supervision following a normal delivery, in your hospital?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never

21. How frequently have you requested instruction in perineal repair when working on the delivery suite with your mentor?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never

Please describe the response you have had from the midwife with this request.

...........................................................................................................................................................
...........................................................................................................................................................

22. How frequently have you requested supervision in perineal repair, if it has been required by the woman at delivery?

A Very frequently
B Frequently
C Infrequently
D Very infrequently
E Never
Please describe the response you have had from the midwife with this request.

23. How frequently would the midwife you are working with on delivery suite volunteer to instruct you in an uncomplicated perineal repair if it was required?

<p>| | |</p>
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<tr>
<th></th>
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<tbody>
<tr>
<td>A</td>
<td>Very frequently</td>
</tr>
<tr>
<td>B</td>
<td>Frequently</td>
</tr>
<tr>
<td>C</td>
<td>Infrequently</td>
</tr>
<tr>
<td>D</td>
<td>Very infrequently</td>
</tr>
<tr>
<td>E</td>
<td>Never</td>
</tr>
</tbody>
</table>

24. Do you undertake perineal repair under supervision in clinical practice?

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
</tr>
</tbody>
</table>

If the answer is no, please move to question 26.

24. If you are able to undertake perineal repair, how would you rate your perceived level of competency to undertake this skill at the current time? Please tick the appropriate box.

<table>
<thead>
<tr>
<th></th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Cannot perform this activity satisfactorily to participate within the clinical environment.</td>
</tr>
<tr>
<td>1</td>
<td>Can perform the activity but not without constant supervision, assistance and/or guidance.</td>
</tr>
<tr>
<td>2</td>
<td>Can perform this activity satisfactorily but requires some supervision and assistance and/or minimal guidance.</td>
</tr>
<tr>
<td>3</td>
<td>Can perform this activity satisfactorily when instructed to do so without further supervision, assistance and/or guidance (if qualified).</td>
</tr>
</tbody>
</table>
25. To what extent do you feel confident undertaking perineal repair under supervision?

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<tbody>
<tr>
<td>A</td>
<td>Not confident</td>
</tr>
<tr>
<td>B</td>
<td>Not very confident</td>
</tr>
<tr>
<td>C</td>
<td>Quite confident</td>
</tr>
<tr>
<td>D</td>
<td>Very confident</td>
</tr>
</tbody>
</table>

If not confident, how can we help to improve your confidence?

26. If never or very infrequently, why are you unable to undertake this skill? Please indicate by ticking the appropriate boxes.

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>A</td>
<td>Time constraints</td>
</tr>
<tr>
<td>B</td>
<td>The midwife lacks confidence teaching perineal repair</td>
</tr>
<tr>
<td>C</td>
<td>Considered inappropriate at stage in midwifery programme</td>
</tr>
<tr>
<td>D</td>
<td>Other, please state</td>
</tr>
</tbody>
</table>

27. Have you seen any policies or guidelines for best practice regarding the midwife and perineal repair, on the delivery suite?

<p>| | |</p>
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<tbody>
<tr>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
</tr>
</tbody>
</table>

28. If there is hospital documentation in the delivery suite relating to the role of the midwife undertaking perineal repair, to what extent do you consider these influence midwifery practice?

<p>| | |</p>
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<tr>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
</tr>
<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
</tr>
</tbody>
</table>

29. To what extent are you familiar with the European Union Directives regarding the role and training of the midwife undertaking perineal repair?

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<tbody>
<tr>
<td>A</td>
<td>Not at all</td>
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<tr>
<td>B</td>
<td>To some extent</td>
</tr>
<tr>
<td>C</td>
<td>Moderately</td>
</tr>
<tr>
<td>D</td>
<td>To quite an extent</td>
</tr>
<tr>
<td>E</td>
<td>To a large extent</td>
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</tbody>
</table>
### Section 3.

Your views on the role of the midwife and perineal repair in clinical practice.

30. Please tick one box, for each statement which indicates the extent of your views or feelings.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Undertaking perineal repair is a normal part of midwifery practice.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Competency to undertake perineal repair is only relevant to midwives working in the delivery suite.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. If all midwives were instructed in the assessment of perineal trauma, more third and fourth degree tears would be identified.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. All women should have their perineum checked at least once by the midwife who undertook their perineal repair.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Clinical audit of perineal healing is important for the evaluation of all perineal repairs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Women should be provided with a choice regarding the suturing or none suturing of a small second degree tear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. It is not important to the woman as to who undertakes the repair of her perineum.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please feel free to add any comments regarding the above statements.

31. Some of the literature surrounding women's childbirth experiences has identified that their views surrounding perineal trauma have been largely unheard, or frequently ignored.

Please indicate which statement of care represents your own views. Please tick one box only.

1. The midwife is an autonomous practitioner, free to practise to her/his capabilities, responding to the needs of the woman and her family, and acting as the woman’s advocate. □

2. The midwife often practises under the constraints of a dominant medical model of care, which reduces the woman’s autonomy in midwifery care. □

3. The experiences and views of women are considered equally by the midwife and doctor, thus providing a choice for the woman to make her own decisions, whereby creating a relationship of reciprocity between carers □

4. None of these □

Section 4.

Helpful information you could contribute to our Perineal Repair Working Group in facilitating further education in perineal repair for you, and the midwife as part of their continuing professional development and lifelong learning.

32. What would you consider to be the most useful resource, for teaching perineal repair and up-date in your hospital? Please tick appropriate boxes.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Regular in-service perineal repair workshops</td>
</tr>
<tr>
<td>B</td>
<td>One-to-one instruction at the bedside</td>
</tr>
<tr>
<td>C</td>
<td>Combination of A and B</td>
</tr>
<tr>
<td>D</td>
<td>An accredited work-based module in perineal repair for midwives to include A and B</td>
</tr>
<tr>
<td>E</td>
<td>No teaching necessary</td>
</tr>
<tr>
<td>F</td>
<td>Other, please state</td>
</tr>
</tbody>
</table>
Thank you for taking the time to complete this questionnaire. Your contribution is important and the information will be helpful for developing your future practice experience, and optimum care for the childbearing women.

Should you wish to add any further comments about your role as a student undertaking perineal repair or issues related to the topic, please use the space below.

Would you like to help this project further?

As some of the open questions in this questionnaire will generate some valuable data, I would like to discuss some of the comments you have made in greater depth. Should you be willing to undertake a personal interview, please indicate by completing the attached consent form and return with the questionnaire. This interview will be strictly confidential and your name will not be used in any subsequent reports.

Angie Wilson
PhD student and Midwife Teacher
University of Surrey, Guildford, Surrey.
Re: AN EVALUATION OF MIDWIVES EXPERIENCE UNDERTAKING PERINEAL REPAIR

Dear Student midwife

Enclosed is an information sheet clearly explaining the above research study which will be undertaken in six NHS Consultant/midwifery led units in South East England. I would be grateful if you could take a few minutes out of your busy programme to read the information sheet. Should you wish to participate in the study, please sign the consent form and return it to me together with the enclosed questionnaire by 23rd November 2003 in the S.A.E. provided. Each returned questionnaire will be entered into a prize draw. Prizes include a £25.00 gift voucher for Marks and Spencer.

Thank you in anticipation of your contribution.

Angie Wilson.
PhD student and Midwife Teacher.
AN EVALUATION OF STUDENTS' AND MIDWIVES' EXPERIENCE
UNDERTAKING PERINEAL REPAIR

You are being invited to take part in a midwifery research study. Before you decide to participate, it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully and discuss it with your colleagues if you wish. If you require any further information or clarification please contact me on 01483 684620 or a.wilson@surrey.ac.uk. Thank you for taking the time to read this information.

What Is the purpose of this study?

Midwives are practicing in an environment where there is constant change and greater expectations from the childbearing woman. This involves both new and changing roles and responsibilities for the midwife. Expanding research evidence for midwifery practice requires the midwife to develop and maintain clinical competence and knowledge to meet these new demands within the NHS clinical governance framework. Continuing professional development is one means of maintaining professional competence for midwives.

This study will gather data from midwives and students from our five maternity units and a comparison maternity unit in another part of South East England. The comparison maternity unit will not be receiving a work-based module or newly designed in-service training programme in perineal repair.

Aims and objectives

The aims and objectives of this research study therefore are to:

1. Evaluate the effectiveness of a post-registration work-based module and in-service training programme on the midwife's perceived level of competency to undertake perineal repair in clinical practice.
2. Evaluate whether student midwives consider themselves adequately prepared in their preparatory programme to undertake perineal repair under supervision at the point of registration.

Proposed outcome of the study

By implementing a post-registration work-based module and in-service training programme in five NHS Trusts, I anticipate that the number of midwives who are competent to undertake perineal repair will be increased over time. I also anticipate that the increased number of midwives who are competent to undertake perineal repair will be confident to instruct and supervise student midwives, and therefore
increase the number of students who are competent to undertake perineal repair under supervision at the point of registration.

**Why have I been chosen?**

All midwives and student midwives undertaking the final year of their midwifery programme in six NHS Consultant/midwifery led units will be invited to voluntarily participate in this study. This is because every woman in labour needs the continuity of her midwife to repair an uncomplicated tear or episiotomy. Every midwife and student should be provided the opportunity to gain experience in perineal repair both during pre-and post-registration education.

**Do I have to take part?**

No, it is your choice, participation is entirely voluntary. Your theory and practice will not be jeopardized by this study. If you do decide to take part, this information sheet should be kept by you and you are asked to sign a consent form which you will find at the end of this document. If you decide to take part you are still free to withdraw at any time and without providing a reason.

**What will happen if I take part?**

You will form part of the experimental group of students and midwives from our five NHS maternity units. You will be asked to complete a semi-structured questionnaire, which has four sections, each one explaining the reasons for inclusion. This is a pre-intervention questionnaire which will investigate your views and current practice experience in perineal repair. You will also be asked about your instruction in perineal repair in clinical practice. This questionnaire allows you to write your own comments so it will generate both quantitative and qualitative data. It will take approximately 15 minutes to complete and will be sent to your residence. You will have four weeks in which to complete this questionnaire which you will need to return to me in a S.A.E.

You are also provided an opportunity to participate in a Focus Group to discuss comments and issues you may wish to expand upon from completing the questionnaire. This discussion will take up to half an hour. It will take place at a mutually agreed venue. I shall be using an audio tape to record our discussion, to enable me to listen to your views carefully and transcribe the discussion at a later date. You will be able to read this transcription to ensure it is a true representation of our discussion.

Before completion of your programme, and following the experimental intervention programme for midwives, you will be asked to complete an identical post-intervention questionnaire. This aims to evaluate whether in-service perineal repair workshops or a level 3 post-registration module in perineal repair has been effective in assisting midwives to help you increase your level of competence and confidence to undertake perineal repair under supervision in clinical practice.

It is important that you complete both questionnaires as this will provide valuable information as to the effectiveness and continued need for this work-based module and in-service training.

**What are the benefits of taking part?**

Providing midwives with an opportunity to develop and maintain their professional practice through a comprehensive programme of perineal repair, you will benefit
during your future practice, and other student midwives will be provided the opportunity to receive instruction and supervision in the assessment of perineal trauma and repair.

What happens when the research study stops?

The work-based module and in-service training in perineal repair will continue if this has been evaluated as being successful for midwives and students in midwifery practice.

Will my taking part in this study be kept confidential?

All information which is collected about you during the course of this research will be kept strictly confidential. All documentation will be coded according to your maternity unit and will not bear your name. All questionnaires, tapes and transcripts will be stored securely and incinerated following the completion of the study. All personal data relating to volunteers is held and processed in the strictest confidence, and in accordance with the Data Protection Act (1998).

What will happen to the results of the research study?

On completion of the research, all maternity units will be provided with an opportunity to attend a presentation on the evaluation of the study. A study day will be provided on key issues developed from the research together with other experts in the field. A written thesis will be available in the university library following completion of my PhD. Articles will be available in due course in midwifery journals conveying the research findings. You will not be identified in any report or publication.

Who is organising and funding the research?

At the present time the University of Surrey is sponsoring this study.

Who had reviewed this study?

This study has been approved by the Metropolitan MREC, one of 13 national research ethics committees, Local Research Ethics Committees in each Trust and the University of Surrey. It is supported by each Head of Midwifery and reviewed by my research supervisor at the University of Surrey

Contact for further information.

You can contact me, on 01483 684620 or a.wilson@surrey.ac.uk or Professor Peter Jarvis, my supervisor on 01483 300600 or P.Jarvis@surrey.ac.uk.

Thank you for taking the trouble to read this information and I hope you will consider participation in this study. You will be able to retain a copy of this information sheet together with a signed consent form to keep.
APPENDIX K

CONSENT FORM

AN EVALUATION OF STUDENT MIDWIVES EXPERIENCE UNDERTAKING PERINEAL REPAIR

Name of researcher: Angie Wilson, Midwife Teacher. Please initial box

1. I confirm that I have read and understand the information sheet dated 5.8.03 (version 2) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving reason.

3. I understand that the only person with access to the information in my questionnaires, interview tapes and transcripts with be the named researcher only.

4. I agree to take part in this study.

________________________  __________________________  __________________________
Name of student midwife     Date                  Signature

________________________  __________________________  __________________________
Researcher                 Date                  Signature

1 for student midwife       1 for Angie Wilson
RE: AN EVALUATION OF THE MIDWIVES’ AND STUDENTS’ EXPERIENCE UNDERTAKING PERINEAL REPAIR – FOCUS GROUP INTERVIEW - MIDWIVES

Dear Colleague

Thank you for agreeing to participate in a Focus Group interview. Enclosed are two information sheets. One information sheet explains the Perineal Repair study, and the second the purpose of the focus group as a research method. I would be grateful if you could read this information and complete the consent form if you are still happy to participate.

I look forward to meeting you for approximately 45 minutes at ..............................................Venue: ............................ Please contact ..............................................to confirm attendance. Light refreshments will be provided.

Thank you in anticipation of your contribution to this study.

Regards

Angie Wilson
Director of Studies for BSc (Hons) Midwifery Practice and midwifery researcher.
INFORMATION SHEET AND CONSENT FORM

AN EVALUATION OF THE MIDWIVES' AND STUDENTS' EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

FOCUS GROUP INTERVIEW

Thank you for agreeing, and taking the time to participate in a focus group interview which aims to gain information related to the above study. Included in this envelope is a further information sheet clearly outlining the study.

What is a focus group?

This focus group will comprise a small group of midwives (approximately 8). You have been asked to participate in a group discussion to comment on your experiences relating to educational issues surrounding perineal trauma and repair. The aim is to share in a discussion, your attitudes, feelings, views and experiences relating to the topic under discussion. Using a focus group discussion enables group members to elicit a multiplicity of views in a safe environment. There are no right or wrong answers. It is your perceptions that are important.

Purpose of the focus group

The purpose of the focus group discussion is to build on the information that I have already collected from midwives in the questionnaires distributed during July and October 2005. Some of you will have already returned questionnaires with comments. This focus group aims to validate some of these comments.

What is the format for the focus group?

You will be asked to gather in a small private room where I will be facilitating the discussion around key areas relating to perineal repair. I will be joined by a colleague who will be taking notes, so that I can listen carefully to your comments. The discussion will be taped, to enable me to transcribe the discussion accurately. You will each receive a copy of the transcript at a later date if you request this.

Confidentiality will be assured at all times, you or your Trust will not be identified in any way and your names will not be used in any part of the study. All audio tapes and transcripts will be destroyed at the completion of the study. The only persons to have access to the data are myself and Anna Brown (research assistant). All data is held in safe keeping in accordance with the Data Protection Act 1998.
Where will it take place?

This will be in a pre arranged venue. You will need to check with your labour ward manager or practice development midwife.

How long will the interview take?

Approximately 45 minutes, and will include light refreshments. You will be provided with a small token of appreciation at the end of the discussion.

Where will I find information relating to the study outcomes?

There will be a presentation of the research findings in each Trust on completion of the study. A thesis will also be available in the University of Surrey library.

Consent form

I would be grateful if you could complete the enclosed consent form and hand it to me on the day.

Contact for further information

You can contact me on, 01483 684620 or a.wilson@surrey.ac.uk

Thank you.

Angie Wilson

Director of Studies for BSc (Hons) Midwifery Practice and midwifery researcher.
CONSENT FORM

AN EVALUATION OF THE MIDWIVES' AND STUDENTS' EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE – FOCUS GROUP INTERVIEW

Name of researcher: Angie Wilson, Midwife Teacher.

Please initial box

1. I confirm that I have read and understand the information sheet dated 5.8.03 (version 2) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving reason.

3. I understand that the only person with access to the information in my questionnaires, interview tapes and transcripts will be the named researcher only.

4. I agree to take part in this study.

Name of Midwife Date Signature

Researcher Date Signature

1 for midwife; 1 for Angie Wilson
FOCUS GROUP INTERVIEW - MIDWIVES

TRUST.......................................................... DATE..............................

NAMES OF PARTICIPANTS.................................................................

.................................................................................................

GRADES (ascertain before discussion)
.................................................................................................

AREAS OF PRACTICE........................................................................

INTRODUCTION – 5 minutes

Good morning/afternoon. For those of you who do not know me my name is Angie Wilson and this is my colleague Anna Brown who will be taking notes, as a backup for the tape recorder which is being used for accuracy. Thank you for coming to this focus group session. I appreciate you giving your time up as I know how busy you are. This is aimed to be a relaxed session where I would like you to share your views and experiences regarding the role of the midwife undertaking perineal repair.

Purpose of the focus group

The purpose of this focus group is to build on the information from midwives that I have already collected in the questionnaires sent out to all the Trusts. Some of you will already have written your comments. This focus group helps to validate some of these comments. The focus group provides you with an opportunity to share and discuss your ideas, thoughts, feelings and experiences about perineal repair in your unit. I will set some broad questions around 5 areas relating to perineal repair, and I will rely on your input to provide me with your thoughts on the subject. I am not here to share information or give you my opinions. Your perceptions are what matter. There are no right and wrong answers. You are free to disagree with each other and change your mind! I want you to feel comfortable saying what you think and how you really feel.

Ethical considerations

➢ For the purpose of this focus group discussion, I would like to use your name for addressing you in the discussion. However your name will not be used in the transcription, you will be referred to as A,B,C, respondent.
This discussion is confidential and no further discussion involving members of staff should take place outside this room.

The only persons with access to the tape recorded discussion and transcribed data are Anna and myself. All data is held in safe keeping in accordance with the Data Protection Act of 1998 and will be destroyed following the completion of the study. No names will be used in the study or reference to named Trusts. You will not be identified in any way.

**Explain procedure**

Anna my colleague, will be taking notes, and I will be recording the session, so that I do not miss anything you have to say. Everything is confidential. No one will know who said what. I would like this to be a group discussion, so please feel free to respond to me and others in the group without me calling on you. I would appreciate it if only one person speaks at a time. The discussion will take place for approximately 45 minutes. There is a fair bit I would like to discuss, so I will be moving the discussion along at about 10 minute intervals.

**Participant introduction**

Please can we start by sharing names and area of work.

**Rapport building**

Thank you, I would like each of you to think around your experiences generally regarding perineal repair, your own instruction, confidence, knowledge and skills. I would also like you to think about the senior student midwife undertaking repair under supervision. I would also like you to think of the experience form the woman's perspective. I will start by asking you about instruction provision for perineal repair in your unit

**THEMES RELATING TO RESEARCH QUESTIONS**

R.Q. Does a work-based educational programme enable midwives to effectively increase their perceived level of competency to undertake perineal repair?

10 minutes

These questions relate to the provision of in-service training in perineal repair.
APPENDIX

What provisions are made available at present for instructing perineal repair in this unit?

Probes: Can you expand further please? What do they entail?

Probes: How many of you have been able to attend in-service education in perineal repair to date?

Nos....................

Probes: If yes, To what extent have they been useful in enabling you acquire knowledge, skills and positive attitudes towards perineal repair?

Probes: What technique for repair do you use generally?

Probes: If no, why not and have you been able to pursue instruction?

Probes: Do you think the in-service training in perineal repair needs changing in any way?

How do you think we should assess midwives competency undertaking perineal repair?

Probes: What are your thoughts on formal assessment at the bedside?

Can I just ask how many of you undertake perineal repair?

Nos..............................

R.Q. Is the NHS organization (Trust) a supportive learning environment?

5 minutes

These questions relate to support for continuing professional development

How supportive is your supervisor of midwives when requesting continuing professional development generally?
Probes: Would you consider that your educational and practice needs are met within the Trust, specifically related to perineal repair?

Probes: If no, can you outline the issues for me?

R.Q To what extent do individual practices, policies/protocols and guidelines influence the midwives’ perceived ability to undertake perineal repair?

5 minutes

These questions relate to the existence of policies/guidelines related to perineal repair.

Are you aware of a policy or guidelines available on the delivery suite relating to the role of the midwife undertaking perineal repair?

Nos. a Yes............. No.............

Probes: Can you just outline if you can the general contents?

Probes: Are you aware of any other recommendations for midwives undertaking perineal repair?

Do you consider the presence of these in any way influences your practice in undertaking perineal assessment and repair? HOW?

Probes: What are your thoughts on having guidelines/a policy?

R.Q. To what extent are midwives enabled to instruct and supervise senior student midwives in perineal repair?

5 minutes

These questions relate to student midwives and perineal repair

What are your thoughts on instructing and supervising senior student midwives to assess and undertake perineal repair?
Probes: Are senior student midwives generally encouraged to undertake perineal repair in this unit?

Probes: Are there any reasons that prevent you instructing a student if you mentor one?

R.Q Does the midwife take into account the sensitivity associated with perineal trauma and repair?

10 minutes

These questions relate to your experience of perineal trauma and repair with your women

Can you highlight for me the information you give to women to enable them to make an informed choice as to whether their perineum is repaired or not repaired?

Probes: Are there any obstacles/problems when discussing the issues related to perineal repair/non repair?

What would you consider to be the main concerns of women suffering from perineal trauma and repair?

Probes: Do you feel you are able to meet the needs of your women?

Closure

We need to close the discussion now. We have identified a number of issues here for discussion, and I feel we have covered a lot of information. Does anyone wish to make any final comments? If there have been issues which you need to discuss further about perineal repair, please feel free to talk to me following the focus group.

May I thank every one for contributing to the focus group. I know how valuable you time is and your comments have been very useful. Please accept a small token of my appreciation. GIFT.
Dear Student Midwife (name)

Thank you for agreeing to participate in a Focus Group discussion to investigate the experience of student midwives undertaking perineal repair in clinical practice. Please find the enclosed information sheet explaining the aims of the Focus Group and a reminder of the research study.

Date and time: Tuesday 6th July at 13.00 – 13.30. Light refreshments will be provided. Plus a token gift of thanks!

Venue 10DK05

Any further information, please do not hesitate in contacting me.

Many thanks in anticipation of your contribution.

Kind Regards

Angie Wilson
Director of Studies for Post-registration Midwifery Education.
INFORMATION SHEET AND CONSENT FORM

AN EVALUATION OF THE MIDWIVES’ AND STUDENTS’ EXPERIENCE UNDERTAKING PERINEAL REPAIR IN CLINICAL PRACTICE

FOCUS GROUP INTERVIEW – STUDENT MIDWIVES

Thank you for agreeing, and taking the time to participate in a focus group interview which aims to gain information related to the final phase of the above study. Included in this envelope is a further information sheet clearly outlining the study.

What is a focus group?

This focus group will comprise a small group of student midwives (approximately 8). You have been asked to participate in a group discussion to comment on your practice experience related to trauma and repair. The aim is to share in a discussion, your attitudes, feelings, views and experiences relating to the topic under discussion. Using a focus group discussion enables group members to elicit a multiplicity of views in a safe environment. There are no right or wrong answers. It is your perceptions that are important.

Purpose of the focus group

The purpose of the focus group discussion is to build on the information that I have already collected from students and midwives in the questionnaires distributed to all Trusts in 2003 and 2005. Some of you will have already returned questionnaires with comments. This focus group aims to validate some of these comments.

What is the format for the focus group?

You will asked to gather in a small private room where I will be facilitating the discussion around key areas relating to perineal repair. I will be joined by a colleague who will be taking notes, so that I can listen carefully to your comments. The discussion will be taped, to enable me to transcribe the discussion accurately. You will each receive a copy of the transcript at a later date.

Confidentiality will be assured at all times, you or your Trust will not be identified in any way and your names will not be used in any part of the study. All audio tapes and transcripts will be destroyed at the completion of the study. The only persons to have access to the data are myself and research assistant. All data is held in safe keeping in accordance with the Data Protection Act 1998.
Where will it take place?

This will be in a pre arranged venue.

How long will the interview take?

Approximately 30 minutes, and will include light refreshments. You will be provided with a small token of appreciation at the end of the discussion.

Where will I find information relating to the study outcomes?

There will be a presentation of the research findings in each Trust on completion of the study. A thesis will also be available in the University of Surrey library.

Consent form

If you would like to participate in the study, please could you complete the enclosed consent form and hand it to me on the day.

Contact for further information

You can contact me on, 01483 684620 or a.wilson@surrey.ac.uk

Thank you in anticipation of your support.

Angie Wilson

Director of Studies for BSc (Hons) Midwifery Practice.
APPENDIX K

Midwifery Unit Number:

Student midwife Identification Number for this study:

CONSENT FORM

AN EVALUATION OF THE MIDWIVES' AND STUDENTS' EXPERIENCE UNDERTAKING PERINEAL REPAIR

Name of researcher: Angie Wilson, Midwife Teacher.
Please initial box

1. I confirm that I have read and understand the information sheet dated 5.8.03 (version 2) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving reason.

3. I understand that the only person with access to the information in my questionnaires, interview tapes and transcripts with be the named researcher only.

4. I agree to take part in this study.

Name of student midwife __________________________ Date _______________ Signature _______________

Researcher __________________________ Date _______________ Signature _______________

1 for student midwife 1 for Angie Wilson
FOCUS GROUP INTERVIEW – STUDENT MIDWIVES

INTRODUCTION – 5 minutes

Good morning/afternoon. For those of you who do not know me my name is Angie Wilson and this is my colleague Anna Brown who will be taking notes, as a backup for the tape recorder which is being used for accuracy. Thank you for coming to this focus group session. I appreciate you giving your time up as I know how busy you are. This is aimed to be a relaxed session where I would like you to share your views and experiences of perineal instruction and repair as a student midwife.

Purpose of the focus group

The purpose of this focus group is to build on the information and comments provided in the questionnaires that I have already collected from you. This focus groups helps to validate some of these comments. The focus group provides you with an opportunity to share and discuss your ideas, thoughts, feelings and experiences about the opportunity to undertake perineal repair under instruction in your unit. I will be setting some broad questions relating to education and practice surrounding perineal repair. I will rely on your input to provide me with your thoughts on the subject. I am not here to share information or give you my opinions. Your perceptions are what matter. There are no right and wrong answers. You are free to disagree with each other and change your mind! I want you to feel comfortable saying what you think and how you really feel.

Ethical considerations

➤ For the purpose of this focus group discussion, I would like to use your name for addressing you in the discussion. However your name will not be used in the transcription, you will be referred to as A,B,C, respondent.
➤ This discussion is confidential and no further discussion involving members of staff should take place outside this room.
The only persons with access to the tape recorded discussion and transcribed data are Anna and myself. All data is held in safe keeping in accordance with the Data Protection Act of 1998 and will be destroyed following the completion of the study. No names will be used in the study or reference to named Trusts. You will not be identified in any way.

**Explain procedure**

Anna my colleague, will be taking notes, and I will be recording the session, so that I do not miss anything you have to say. Everything is confidential. No one will know who said what. I would like this to be a group discussion, so please feel free to respond to me and others in the group without me calling on you. I would appreciate it if only one person speaks at a time. The discussion will take place for approximately 25 minutes. There is a fair bit I would like to discuss, so I will be moving the discussion along at about 5-10 minute intervals.

**Participant introduction**

Please can we start by sharing names.

**Rapport building**

Thank you, I would like each of you to think around your experiences generally regarding perineal repair, your own instruction, confidence, knowledge and skills. I would also like you to think about the midwife’s role undertaking repair. I would also like you to think of the experience from the woman’s perspective. I will start by asking you about instruction provision for perineal repair in the university.

**THEMES RELATING TO RESEARCH QUESTIONS**

R.Q To what extent is a work-based module and in-service education programme in perineal repair, effective in facilitating greater student participation and level of competency to undertake this skill?

10 minutes

These questions relate to your theoretical and practical instruction in perineal repair at this university.

*How many of you have received theoretical and practical instruction during your midwifery programme?*

Nos......................
If yes, to what extent was this useful in preparing you to undertake this skill in clinical practice?

**Probe:** What would you consider to be most useful/least useful in preparation?

**Probe:** Are there any other ways in which the tutors in the university could prepare you for undertaking this skill?

**R.Q.** What is the students' experience of instruction and supervision in perineal repair in clinical practice.

How many of you are able to undertake perineal assessment and repair under supervision in practice?

**Nos**.................................

**Probe:** If yes, how do you feel undertaking this procedure?

**Probe:** If not, have you requested perineal repair instruction in your clinical practice?

**Nos**  
**Yes**.....  **No**......

**Probe:** If no.....why not?
How supportive is your mentor when requesting perineal repair instruction?

Probes: If not supportive, can you outline the issues for me? Why is she/he unable to do this?

Prior to this study, has the hospital you have been working at provided any in-service instruction in perineal repair?

Probe: Have you attended an in-service perineal repair workshop in your Trust?

Probe: If yes, how useful was this?

Probe: Did the workshop help you accessing perineal repair instruction from your mentor?

To what extent are you encouraged as senior students to undertake perineal repair of uncomplicated tears or episiotomies following your deliveries?

Probe: Has your midwife offered to instruct you?

Probe: Have you asked for instruction?
Probe: What was the response from the midwife?

* How important is it to you that you are able to assess and undertake perineal repair under supervision before completing your programme?

**R.Q Is the NHS organisation (Trust) a supportive learning environment?**

These questions relate to provision of in-service education in perineal repair for midwives in the Trusts.

What do you consider to be the most useful resource for enabling midwives to undertake perineal repair in clinical practice?

Probe: What information should be provided for midwives to enable them to undertake skilled perineal repair?

What are your thoughts on midwives being formally assessed before suturing unsupervised and becoming ‘instructing midwives’?
R.Q To what extent do individual practices, policies/protocols and guidelines influence the midwives' perceived ability to undertake perineal repair?

5 minutes

These questions relate to your knowledge of the existence of policies/guidelines related to perineal repair.

Are you aware of a policy or any guidelines available on the delivery suite relating to the role of the midwife undertaking perineal repair?

Nos. Yes......... No...........

Probes: Can you just outline if you can the general contents?

Probes: Are you aware of any other recommendations for student midwives undertaking perineal repair?

Do you perceive that the presence of these in any way influences your midwives' practice in undertaking perineal assessment and repair? HOW?

Probes: What are your thoughts on having guidelines/a policy?

R.Q To what extent are gender sensitive issues considered by students and midwives when undertaking perineal repair?

What information is given to the woman following delivery regarding the repair of her perineum if she has sustained perineal trauma?
What do you perceive to be the most important concerns relating to perineal trauma and repair that women voice?

Closure

We need to close the discussion now. We have identified a number of issues here for discussion, and I feel we have covered a lot of information. Does anyone wish to make any final comments? If there have been issues which you need to discuss further about perineal repair, please feel free to talk to me following the focus group.

May I thank every one for contributing to the focus group. I know how valuable your time is and your comments have been very useful. Please accept a small token of my appreciation. GIFT.
Dear Angie

Thank you for your letter dated 4th February 2002.

I would agree that it has become increasingly difficult for midwives to attain competence in suturing of the perineum, mainly due to the reduction in the number of episiotomies and the fact that many tears are now being left to heal naturally.

I am keen for our unit to help in any way which might enable student midwives to be competent at registration. To this end I am happy to agree to your research proposal, provided of course if gains full ethical approval. I have enclosed the signed approval form as requested.

If you have any queries, please do not hesitate to contact me and good luck with your PhD.

With best wishes.

Yours sincerely,

Eileen Nolan
General Manager
Women & Childrens Services
Head of Midwifery, Surrey and Sussex Health Care NHS Trust, have read the letter from Angie Wilson, outlining her rationale supporting an investigation into the experience of students and midwives undertaking perineal repair. I agree to the distribution of both pre and post test questionnaires to all midwives, and a personal interview with a small number of self selected midwives within the Trust. I understand this will not involve any client contact.

Signed..............................................

Date..............................................

Please return the approval form to Angie Wilson in the enclosed SAE by March 1st 2002.
18 March 2003

Mrs A Wilson, Director of Midwifery Studies
Level 5
Duke of Kent Building
University of Surrey
Guildford
Surrey
GU2 7TE

Dear Mrs Wilson

An investigation into the experience of students and midwives undertaking perineal repair in clinical practice

Firstly, please accept my apologies for the inordinate delay in sending you this letter.

The subject Research Proposal, which was submitted by yourself at the beginning of 2002, was discussed at the meeting of the Research & Development Committee held in March 2002, and I am pleased to say that it was approved. I believe that you have already obtained approval from the Local Research Ethics Committee.

Please note that the approval of the Research & Development Committee at Frimley Park Hospital is given on the basis that you will let us know when the study is finished, and also let us know the outcome.

With best regards

Yours sincerely

M r S tuart J M D avies M A F RCS
C onsultant O rthopaedic Surgeon

By signatory

INVESTOR IN PEOPLE
In partnership with the Ministry of Defence
Dear Mrs Wilson

MREC03/11/061 please quote this number on all correspondence

A quasi-experimental study to evaluate a work-based module and in-service training programme in perineal repair for midwives

The Chair of the Metropolitan MREC has considered the amendments submitted in response to the Committee’s earlier review of your application on 4th July 2003 as set out in our letter dated 15th July 2003 and your letter dated 6th August 2003. The documents reviewed were as follows:

MREC Application Form
Research Protocol
Diagram (flowchart) of protocol in non technical language
Chief Investigator’s CV
Research Supervisor’s VC
Letter from Sponsor
Letter from Supervisor
Comments from Statistician
Questionnaire (finalised)
Letters of invitation to research participants
Research participants information sheets and consent forms

Revised document:
Copy of student midwives questionnaire, finalised
Midwives information sheet and consent form
Student midwives information sheet and consent form
Work-based module handbook
In-service training outline
Topic guides for study

Further revised documents
Letter in response
Midwives information sheet and consent form
Student Midwives information sheets and consent form
Final Questionnaire

The members of the Committee agreed to delegate authority to the Chair to approve these amendments and that there is no objection on ethical grounds to the proposed
study. I am, therefore, happy to give chair's actions to approve these amendments on the understanding that you will follow the condition approval set out below. A full record of the review undertaken by the MREC is contained in the attached MREC Response Form. The project must be started within three years of the date on which MREC approval is given.

**Conditions of Approval**

- No research subject is to be admitted into the trial until agreement has been obtained from the appropriate local research ethics committees.

- You must follow the protocol agreed and any changes to the protocol will require prior MREC approval.

- If projects are approved before funding is received, the MREC must see, and approve, any major changes made by the funding body. The MREC would expect to see a copy of the final questionnaire before it is used.

- You must promptly inform the MREC and appropriate LRECs of:
  
  (i) deviations from or changes to the protocol which are made to eliminate immediate hazards to the research subjects;

  (ii) any changes that increase the risk of subjects and/or effect significantly the conduct of the research;

  (iii) all adverse drug reactions that are both serious and unexpected;

  (iv) new information that may affect adversely the safety of the subjects or the conduct of the trial.

- You must complete and return the standard progress report form to the MREC one-year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the MREC when your research is completed.

While the MREC has given approval for the study on ethical grounds, it is still necessary for you to obtain management approval from the relevant Clinical Directors and/or Chief Executive of the Trusts (or Health Boards/Has) in which the work will be done.

**Local Submissions**

It is your responsibility to ensure that any researcher seeks the approval of the relevant LREC before starting their research. To do this, you should submit the appropriate number of copies of the following to the relevant LRECs:

- This letter
- The MREC Application Form (including copies of any questionnaires)
- The attached MREC Response Form
- Annex D of the Application Form
- One copy of the protocol
- The final approved version of the Patient Information Sheet and Consent Form

**Local Sites**

Whilst the MREC would like as much information as possible about local sites at the time you apply for ethical approval it is understood that this is not always possible. You are asked, however, to send details of local sites as soon as a researcher has
27 January 2003

Ms Angie Wilson
Director of Midwifery Studies
EIHMS
University of Surrey

Dear Ms Wilson

An investigation into the experience of students and midwives undertaking perineal repair in clinical practice (ACE/2002/89/EIHMS)

I am writing to inform you that the Advisory Committee on Ethics has considered the above protocol (and the subsequent information supplied) and has approved it on the understanding that the Ethical Guidelines for Teaching and Research are observed. For your information, and future reference, these Guidelines can be downloaded from the Committee’s website at http://www.surrey.ac.uk/Surrey/ACE/.

This letter of approval relates only to the study specified in your research protocol (ACE/2002/89/EIHMS). The Committee should be notified of any changes to the proposal, any adverse reactions, and if the study is terminated earlier than expected, with reasons.

Date of approval by the Advisory Committee on Ethics: 27 January 2003
Date of expiry of approval by the Advisory Committee on Ethics: 26 January 2008

Please inform me when the research has been completed.

Yours sincerely

[Signature]
Catherine Ashbee (Mrs)
Secretary, University Advisory Committee on Ethics

cc: Chairman, ACE
    Prof P Jarvis, Supervisor, Educational Studies
been recruited. This is essential to enable the MREC to monitor the research it approves.

ICH GCP Compliance

The MRECs are fully compliant with the International Conference on Harmonisation/Good Clinical Practice ((ICH GCP) Guidelines for the Conduct of Trials Involving the Participation of Human Subjects as they relate to the responsibilities, composition, function, operations and records of an Independent Ethics Committee/Independent Review Board. To this end it undertakes to adhere as far as it consistent with its Constitution, to the relevant clauses of the ICH Harmonised Tripartite Guideline for Good Clinical Practice, adopted by the Commission of the European Union on 17 January 1997. The Standing Orders and a Statement of Compliance were included on the computer disk containing the guidelines and application form and are available on request or on the Internet at www.corec.org.uk.

Yours sincerely,

DR HAZEL BIGGS
CHAIR
METROPOLITAN MREC

Cc Sponsor

Enclosures MREC Response Form dated 10.9.03

List of members present and members who submitted written comments.
Thematic analysis of six focus group interviews in six NHS Trusts to evaluate the effectiveness of an intervention work-based module and in-service perineal repair training programme.

Theme 1. Midwives’ perceived competency when assessing and undertaking perineal repair following a work-based module and in-service workshop in perineal repair

| Theme 1 |
| FACTORS INFLUENCING THE MIDWIVES’ PERCEIVED COMPETENCY |
| Sub-theme: Factors identified influencing a change in perceived knowledge following an education programme for midwives | Sub-theme: Factors identified influencing a change in clinical skills following an education programme | Sub-theme: Factors identified which related to a change in the midwives’ sensitivity attitudes and values towards women’s perineal trauma following an education programme |
| KNOWLEDGE | SKILLS | ATTITUDES AND VALUES |
| Category | Post-registration education for midwives | ‘Hands on’ skills training | See theme 4. |
| Sub-categories | In-service perineal repair workshops | Category | Change in technique |
| | Up-dating knowledge and skills | Sub categories | Non-locking sutures to vaginal wall |
| | Level 3 module in perineal repair at University | | Continuous repair technique |
| | Module evidence based | | Subcuticular technique to skin |
| | Credible facilitator | | Handling instruments and tying knots |
| | One-to-one at bedside | | |
| | External intensive days on perineal repair | | |
| Category | Extent new knowledge influences practice | Up-date on the assessment of the depth of trauma |
| Sub-categories | Refine practice knowledge gap | Proforma enables a structured and objective assessment of trauma |
| | Pre-registration programme instruction | Flexibility in interrupted and subcuticular technique |
| | Module increased knowledge to inform women | Feeling of fulfilment and change in practice |
| | Research regarding repair/non repair | Continuity of mentors essential |
| | Continuous non locking technique with subcuticular to skin | Increased use of continuous subcuticular technique |
| | Use of material for repair – Vicryl rapide | Increased awareness of identifying 3rd degree tears |
| | Implementation of perineal trauma proforma and score | How to assess for degrees of sphincter damage |
| | Measurement of tears | Increased number of midwives undertaking repair |
| | Classifications of tears | Increased competency to repair following module |
| | Tying knots | |
| | Reflection on practice | Confidence to repair |
| | Positive feedback in trust from workshops | Confidence to teach assessment and repair |
| | | |

Appendix X
| Evidence-based knowledge to change repair techniques |
| Increased awareness of identifying 3rd degree tears |
| Anal sphincter examination |
| Combined vaginal and rectal examination |
| Earlier identification of third degree tears |

Greater awareness of women's need for analgesia for repair |

**Category**

**Organisational considerations**

**Sub-categories**

- Practice repair on models
- Preparation in pre-registration programme

**Category**

**Availability of equipment**

**Sub-categories**

- Adequate instruments and modes for practice on delivery
- Equipment and techniques

**Category**

**Self audit**

**Sub-categories**

**Category**

**Assessment for competency**

**Sub-categories**

- OSCE assessment for competency

**Sub-categories**

- Need for more OSCE instructors
- Assessment of midwives for level of expertise

**Perceived threat to practice**

- Resistance from some midwives

**Organisational support**

**Sub categories**

- Shortage of midwives for instruction and supervision
- Lack of time
- Financial constraints
- Work load - major constraint

**Opportunity**

- Role of practice development midwife
- Accommodating night staff
<table>
<thead>
<tr>
<th>Theme 2. Factors identified influencing a change in behaviour towards clinical decision making and implementation of perineal repair in practice</th>
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<tbody>
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<td><strong>Category</strong></td>
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<td>Education in perineal repair</td>
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<td>sub-categories</td>
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<tr>
<td>Monthly workshops</td>
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<tr>
<td>Evidence supports contemporary practice</td>
</tr>
<tr>
<td>annual module</td>
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<td>External study days on perineal repair</td>
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<tr>
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<td>Confidence</td>
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<td><strong>Category</strong></td>
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<tr>
<td>‘Trend’ from non-repair to repair all second degree tears</td>
</tr>
<tr>
<td>sub-categories</td>
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<tr>
<td>Research evidence in workshops</td>
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<tr>
<td>Theory in module</td>
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<td>research and evidence-based practice</td>
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<td><strong>Sub-category</strong></td>
</tr>
<tr>
<td>Experience</td>
</tr>
<tr>
<td>sub-category</td>
</tr>
<tr>
<td>Supportive expert colleague</td>
</tr>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Feedback on perineal healing – repair/non repair</td>
</tr>
<tr>
<td>sub-categories</td>
</tr>
<tr>
<td>Community midwives</td>
</tr>
<tr>
<td>Obstetricians</td>
</tr>
<tr>
<td>Labour ward staff</td>
</tr>
<tr>
<td>Self audit</td>
</tr>
<tr>
<td><strong>Organisational considerations</strong></td>
</tr>
<tr>
<td>sub-categories</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme 3. Factors identified influencing a change in the midwives’ ability to implement perineal repair in clinical practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Power of significant others in the workplace</td>
</tr>
<tr>
<td>sub-categories</td>
</tr>
<tr>
<td>Midwife with OSCE training</td>
</tr>
<tr>
<td>Support from instructing and supervising midwife</td>
</tr>
<tr>
<td>Support from senior labour ward midwives/managers</td>
</tr>
<tr>
<td>Consultant feedback</td>
</tr>
<tr>
<td>Consultant support</td>
</tr>
<tr>
<td><strong>Sub-category</strong></td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Opportunity</td>
</tr>
<tr>
<td>Availability of frequent workshops</td>
</tr>
<tr>
<td>Active Practice development midwife</td>
</tr>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Organisational considerations</td>
</tr>
<tr>
<td>sub-categories</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme 4. Factors influencing midwives’ changed sensitivity towards perineal trauma and repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors identified relating to midwives’ sensitivity to perineal trauma</td>
</tr>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Women’s care</td>
</tr>
<tr>
<td>sub-categories</td>
</tr>
<tr>
<td>Continuity</td>
</tr>
<tr>
<td>Consistency of perineal repair technique</td>
</tr>
<tr>
<td>Continuous subcuticular more comfortable</td>
</tr>
<tr>
<td>Act as woman’s advocate</td>
</tr>
<tr>
<td>Choice in repair/non repair</td>
</tr>
<tr>
<td>Pain</td>
</tr>
<tr>
<td>Infection</td>
</tr>
<tr>
<td>Vaginal/obstetrical</td>
</tr>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>sub-category</td>
</tr>
<tr>
<td>Perineal repair module</td>
</tr>
<tr>
<td>Evidence-based knowledge assisted in a more positive approach to women</td>
</tr>
<tr>
<td>Module highlighted problems women could encounter in long term</td>
</tr>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Women’s physical health</td>
</tr>
<tr>
<td>sub-categories</td>
</tr>
<tr>
<td>Local and good tissue</td>
</tr>
<tr>
<td>Consequences of bleeding</td>
</tr>
<tr>
<td>Healing of repair/non repair</td>
</tr>
<tr>
<td>Weakness to muscle with non repair</td>
</tr>
<tr>
<td>Non repair affect on sex lives</td>
</tr>
<tr>
<td>Poor alignment</td>
</tr>
<tr>
<td>Infection</td>
</tr>
<tr>
<td>Nerve damage</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Women's self assessment of healing with a mirror</td>
</tr>
<tr>
<td>Future physical health</td>
</tr>
<tr>
<td>Dyspareunia</td>
</tr>
<tr>
<td>Bladder control</td>
</tr>
<tr>
<td>Anal involvement</td>
</tr>
<tr>
<td>Future pregnancies and delivery</td>
</tr>
<tr>
<td>Pelvic floor exercises</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Sub-categories</td>
</tr>
<tr>
<td>Future functioning of the perineum</td>
</tr>
<tr>
<td>Long term effects of poor or no repair</td>
</tr>
<tr>
<td>Sexual intercourse</td>
</tr>
<tr>
<td>Urinary incontinence</td>
</tr>
<tr>
<td>Faecal incontinence</td>
</tr>
<tr>
<td>Cosmetic effects</td>
</tr>
<tr>
<td>Visit to gynae clinic</td>
</tr>
<tr>
<td>Increase in perineal trauma clinics</td>
</tr>
<tr>
<td>Use of panty liners</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Sub-categories</td>
</tr>
<tr>
<td>Regaining dignity</td>
</tr>
<tr>
<td>Cultural considerations and ethnic background</td>
</tr>
<tr>
<td>Feedback on healing - repair/non repair</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Sub-category</td>
</tr>
<tr>
<td>Sharing of information with women</td>
</tr>
</tbody>
</table>

Feedback on healing - repair/non repair
<table>
<thead>
<tr>
<th>Category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor for instruction and supervision</td>
<td></td>
</tr>
<tr>
<td>Sub-categories</td>
<td></td>
</tr>
<tr>
<td>Competent mentor</td>
<td></td>
</tr>
<tr>
<td>More time required for instruction and supervision</td>
<td></td>
</tr>
<tr>
<td>More confident on registration</td>
<td></td>
</tr>
<tr>
<td>More students undertaking perineal repair</td>
<td></td>
</tr>
</tbody>
</table>

| Category                                      |                     |
| Constraints on students learning             |                     |
| Sub-categories                               |                     |
| Shortage of staff                            |                     |
| Business of labour ward                      |                     |
| Lack of instructing and supervising midwives available |             |
## APPENDIX Y

Demographic characteristics of respondent midwives – pre-intervention 2004

<table>
<thead>
<tr>
<th>Trust</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust A</td>
<td>37 (22.3%)</td>
</tr>
<tr>
<td>Trust B</td>
<td>35 (21.1%)</td>
</tr>
<tr>
<td>Trust C</td>
<td>26 (15.7%)</td>
</tr>
<tr>
<td>Trust D</td>
<td>24 (14.5%)</td>
</tr>
<tr>
<td>Trust E</td>
<td>23 (13.9%)</td>
</tr>
<tr>
<td>Trust F</td>
<td>21 (12.7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166 (100%)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>163</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>12 (7.2%)</td>
</tr>
<tr>
<td>31-45</td>
<td>93 (56.0%)</td>
</tr>
<tr>
<td>46-60</td>
<td>54 (32%)</td>
</tr>
<tr>
<td>60+</td>
<td>2 (1.2%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of time practicing as a midwife</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>4 (2.4%)</td>
</tr>
<tr>
<td>1-5 years</td>
<td>31 (18.7%)</td>
</tr>
<tr>
<td>6-10 years</td>
<td>21 (12.7%)</td>
</tr>
<tr>
<td>11-15 years</td>
<td>35 (21.1%)</td>
</tr>
<tr>
<td>16-20 years</td>
<td>33 (19.9%)</td>
</tr>
<tr>
<td>21-25 years</td>
<td>25 (15.1%)</td>
</tr>
<tr>
<td>26-30 years</td>
<td>12 (7.2%)</td>
</tr>
<tr>
<td>31-35 years</td>
<td>4 (2.4%)</td>
</tr>
<tr>
<td>&gt; 36 years</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>Not stated</td>
<td>4 (2.4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Return to practice</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinical grade</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>7 (4.2%)</td>
</tr>
<tr>
<td>F</td>
<td>87 (52%)</td>
</tr>
<tr>
<td>G</td>
<td>59 (35.5%)</td>
</tr>
<tr>
<td>H</td>
<td>9 (5.4%)</td>
</tr>
<tr>
<td>I</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>Management spine</td>
<td>3 (1.8%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Present post</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>77 (46.4%)</td>
</tr>
<tr>
<td>Part-time</td>
<td>69 (41.6%)</td>
</tr>
<tr>
<td>Less than 18.75hrs</td>
<td>20 (12.0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practice allocation</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery suite</td>
<td>48 (28.8%)</td>
</tr>
<tr>
<td>Community</td>
<td>9 (5.4%)</td>
</tr>
<tr>
<td>Integrated hospital/ community</td>
<td>17 (10.2%)</td>
</tr>
<tr>
<td>AN/PN ward</td>
<td>7 (4.2%)</td>
</tr>
<tr>
<td>Postnatal ward</td>
<td>25 (15%)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pattern of work</th>
<th>Numbers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core labour ward midwife</td>
<td>42 (25.3%)</td>
</tr>
<tr>
<td>Internal rotation</td>
<td>34 (20.5%)</td>
</tr>
<tr>
<td>Community only</td>
<td>12 (7.2%)</td>
</tr>
<tr>
<td>Community in and out</td>
<td>37 (22.3%)</td>
</tr>
<tr>
<td>Role</td>
<td>Count</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Team midwife</td>
<td>16</td>
</tr>
<tr>
<td>Permanent night duty</td>
<td>11</td>
</tr>
<tr>
<td>Bank midwife</td>
<td>7</td>
</tr>
<tr>
<td>Management</td>
<td>4</td>
</tr>
<tr>
<td>Lecturer practitioner</td>
<td>2</td>
</tr>
<tr>
<td>Consultant midwife</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weeks worked on delivery suite in preceding year</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10 weeks</td>
<td>79</td>
<td>47.6%</td>
</tr>
<tr>
<td>11-20 weeks</td>
<td>28</td>
<td>16.9%</td>
</tr>
<tr>
<td>21-30 weeks</td>
<td>12</td>
<td>7.2%</td>
</tr>
<tr>
<td>31-40 weeks</td>
<td>13</td>
<td>7.8%</td>
</tr>
<tr>
<td>41-52 weeks</td>
<td>13</td>
<td>7.8%</td>
</tr>
<tr>
<td>Working elsewhere</td>
<td>12</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
Thematic analysis of two student midwives' focus group interviews following an intervention perineal repair educational programme for midwives in five maternity units. Post-intervention

Theme. Student midwives' perceived confidence and competency undertaking perineal repair under mentor supervision

<table>
<thead>
<tr>
<th>Factors influencing the students' perceived confidence and competency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acquisition of Knowledge</strong></td>
</tr>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Instruction and workshop in university</td>
</tr>
<tr>
<td><strong>Sub-categories</strong></td>
</tr>
<tr>
<td>Handling instruments and suture material</td>
</tr>
<tr>
<td>Enables you to put theory into practice without practising on the woman</td>
</tr>
<tr>
<td>Suturing on a model</td>
</tr>
<tr>
<td>Refresher in emergency skills day</td>
</tr>
<tr>
<td><strong>Sub-categories</strong></td>
</tr>
<tr>
<td>Discussion in class</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Sub-categories</strong></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

Appendix 2
### Sub-categories

**Category**

**Support**

<table>
<thead>
<tr>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived mentor support</td>
</tr>
<tr>
<td>1-1 instruction, supervision and support by mentor</td>
</tr>
<tr>
<td>Mentor keen to teach</td>
</tr>
<tr>
<td>Midwives attending workshop or module keen to teach and were more confident to repair</td>
</tr>
<tr>
<td>Confidence boost from good instruction and supervision</td>
</tr>
<tr>
<td>Process discussed as instructed</td>
</tr>
<tr>
<td>Newly qualified midwives more confident using continuous suturing technique</td>
</tr>
</tbody>
</table>

**Category**

**Factors inhibiting mentors instruction and supervision of student**

<table>
<thead>
<tr>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentors inability to suture</td>
</tr>
<tr>
<td>Inconsistency of techniques by midwives – instilled a lack of confidence</td>
</tr>
<tr>
<td>Out of date techniques by mentors</td>
</tr>
<tr>
<td>Midwife not aware of continuous technique</td>
</tr>
<tr>
<td>More experienced midwives using interrupted technique</td>
</tr>
<tr>
<td>Mentors own need for practising their skills</td>
</tr>
<tr>
<td>Perceived mentors lack of confidence</td>
</tr>
<tr>
<td>Mentor not competent in repair procedure</td>
</tr>
</tbody>
</table>

### Category

**Perceived influence of guidelines and policies on decision making for midwives**

<table>
<thead>
<tr>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshooting problems</td>
</tr>
<tr>
<td>Measurement of trauma (5x1)</td>
</tr>
<tr>
<td>Anticipated learning</td>
</tr>
<tr>
<td>Guidance for midwives</td>
</tr>
<tr>
<td>Recent data on midwives experience</td>
</tr>
<tr>
<td>Midwives may need longer – awareness of unexpected situation and uncertainty of long term</td>
</tr>
<tr>
<td>Trust guidelines all accept degree and time to be informed (Trust H)</td>
</tr>
<tr>
<td>Midwifery issues with antenatal (Trust 3)</td>
</tr>
<tr>
<td>Midwives make aware of size of trauma</td>
</tr>
<tr>
<td>Assessment of trauma may mask thorough evaluation for injuries via IRP policy</td>
</tr>
<tr>
<td>Parameters of Trust guidelines and midwives need to be clear (Trust H)</td>
</tr>
</tbody>
</table>

### Category

**Students' perceived importance of undertaking perineal repair prior to registration**

<table>
<thead>
<tr>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important to continuity of care</td>
</tr>
</tbody>
</table>

### Category

**All goes back the same way**

- Sexual activity
- Pain
- Incontinence
- Bowels
- Aesthetic appearance
- Husbands and partners fears
<table>
<thead>
<tr>
<th>Not a priority for students</th>
<th>Finishes the job</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organisational constraints</strong></td>
<td><strong>Important for job prospects and grade</strong></td>
</tr>
<tr>
<td>Pressure of a busy delivery suite</td>
<td></td>
</tr>
<tr>
<td>Lack of time</td>
<td></td>
</tr>
<tr>
<td>Inconvenience to mentor</td>
<td></td>
</tr>
</tbody>
</table>
EPISIOTOMY AND PERINEAL REPAIR

UP-DATE FOR INSTRUCTING MIDWIVES IN PERINEAL REPAIR

AIMS AND OBJECTIVES FOR THE SESSION

This session is for you, and it is your needs that we shall be addressing.

- Outline the work of the Perineal Repair Working Group (PRWG) initiated in December 2001.
- Discuss current experiences, trends and evidence-based practice relating to the assessment, repair and evaluation of perineal trauma.

AIMS AND OBJECTIVES CONT:

- Provide an overview of the anatomy and physiology of the pelvic floor and anorectum; relating this specifically to the recognition of varying degrees of perineal trauma.
- Discuss the rationale behind repair/non repair. Repair techniques and material.
- Discuss the new documentation for the assessment and repair of perineal trauma.

AIMS AND OBJECTIVES CONT:

- Discuss the assessment of midwives undertaking perineal repair using the Objective Structured Clinical Examination (OSCEs) framework.
- ‘Hands on’ as required.

PERINEAL REPAIR WORKING GROUP

- Initiated in December 2001
- Members: Practice development midwives and delivery suite specialists, Tutors.
- Rationale: To elicit midwives and students experience in perineal repair and current provision of in-service education

PRWG CONT: Terms of reference

- Design a framework for in-service education and a WBL module.
- Design a proforma for assessing perineal trauma and rationale for repair.
- Review current policies and guidelines in five Trusts - design ‘Evidence for Best Practice’ a guide.
- Design midwives personal formative and summative assessment log.
## Academic characteristics of respondents

### Professional qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Number of Respondents</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN, RM</td>
<td>95</td>
<td>(57.2%)</td>
</tr>
<tr>
<td>DHE Midwifery</td>
<td>11</td>
<td>(6.6%)</td>
</tr>
<tr>
<td>BSc (Ord) Midwifery</td>
<td>2</td>
<td>(1.2%)</td>
</tr>
<tr>
<td>BSc (Hons) Midwifery</td>
<td>15</td>
<td>(9.0%)</td>
</tr>
<tr>
<td>RM &amp; Advanced Diploma in Midwifery</td>
<td>7</td>
<td>(4.2%)</td>
</tr>
<tr>
<td>DPSM</td>
<td>8</td>
<td>(4.8%)</td>
</tr>
<tr>
<td>MSc Midwifery Practice</td>
<td>3</td>
<td>(1.8%)</td>
</tr>
<tr>
<td>RM, HV</td>
<td>1</td>
<td>(0.6%)</td>
</tr>
<tr>
<td>RM, BSc Health Studies and Supervisor of Midwives</td>
<td>2</td>
<td>(1.2%)</td>
</tr>
<tr>
<td>RN, BSc (Hons) Midwifery</td>
<td>9</td>
<td>(5.4%)</td>
</tr>
<tr>
<td>RN, DHE Midwifery</td>
<td>3</td>
<td>(1.8%)</td>
</tr>
<tr>
<td>RN, RM, &amp; DPSM</td>
<td>1</td>
<td>(0.6%)</td>
</tr>
<tr>
<td>RN, RM &amp; DPSN</td>
<td>1</td>
<td>(0.6%)</td>
</tr>
</tbody>
</table>

### Teaching qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Number of Respondents</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>997</td>
<td>103</td>
<td>(62.0%)</td>
</tr>
<tr>
<td>998</td>
<td>18</td>
<td>(10.8%)</td>
</tr>
<tr>
<td>Cert Ed</td>
<td>2</td>
<td>(1.2%)</td>
</tr>
<tr>
<td>City and Guilds</td>
<td>2</td>
<td>(1.2%)</td>
</tr>
<tr>
<td>PGCEA</td>
<td>5</td>
<td>(3.0%)</td>
</tr>
<tr>
<td>No teaching qualification</td>
<td>36</td>
<td>(21.7%)</td>
</tr>
</tbody>
</table>

### Midwives undertaking Continuing Professional Development (CPD)

<table>
<thead>
<tr>
<th>CPD Status</th>
<th>Number of Respondents</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwives attending CPD</td>
<td>47</td>
<td>(28.3%)</td>
</tr>
<tr>
<td>Midwives not attending CPD</td>
<td>119</td>
<td>(71.7%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attendance Status</th>
<th>Number of Respondents</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at external Perineal Repair study day</td>
<td>22</td>
<td>(13.3%)</td>
</tr>
<tr>
<td>Non-attendance at an external Perineal Repair study day</td>
<td>115</td>
<td>(69.3%)</td>
</tr>
</tbody>
</table>

### Frequency attending post-registration study days

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number of Respondents</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 monthly</td>
<td>29</td>
<td>(17.5%)</td>
</tr>
<tr>
<td>4-6 monthly</td>
<td>41</td>
<td>(24.7%)</td>
</tr>
<tr>
<td>10-12 monthly</td>
<td>13</td>
<td>(7.8%)</td>
</tr>
<tr>
<td>Annually</td>
<td>10</td>
<td>(6.0%)</td>
</tr>
<tr>
<td>Negotiated when needed</td>
<td>4</td>
<td>(2.4%)</td>
</tr>
<tr>
<td>Not attended</td>
<td>4</td>
<td>(2.4%)</td>
</tr>
</tbody>
</table>

### Frequency CPD discussed with supervisor/manager

<table>
<thead>
<tr>
<th>Discussion Frequency</th>
<th>Number of Respondents</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6 months</td>
<td>18</td>
<td>(10.8%)</td>
</tr>
<tr>
<td>6 months</td>
<td>8</td>
<td>(4.8%)</td>
</tr>
<tr>
<td>Annually</td>
<td>108</td>
<td>(65.1%)</td>
</tr>
<tr>
<td>&gt; year</td>
<td>23</td>
<td>(13.9%)</td>
</tr>
<tr>
<td>Not discussed</td>
<td>9</td>
<td>(5.4%)</td>
</tr>
</tbody>
</table>
ANATOMY AND PHYSIOLOGY OF THE PELVIC FLOOR AND ANORECTUM

REVIEW OF CURRENT PRACTICE

- Trends in perineal repair.
- Review of current research to support evidence-based midwifery practice.

Discussion
- Does suturing make a difference?
- Continuous versus interrupted repair
- To stitch or not to stitch - women’s views
- Three stage versus two stage technique.

PERINEAL REPAIR BY THE MIDWIFE

- It is widely reported that women suffer from perineal trauma and repair often causing long term physical and psychosocial problems (Olah 1994, Draper 1996, Kettle & Johnson 2001, Kettle 2002 et al)

- Approximately 350,000 women will require perineal repair in the UK following a normal delivery, in essence 85% endure perineal trauma and 69% require repair (Kettle 2002).

- Trends require review and robust RCTs to evaluate current practices: repair/non-repair.

KEY FACTORS ASSOCIATED WITH MORBIDITY

- The extent and type of trauma: 1st, 2nd, 3rd and 4th degree trauma
- Episiotomy or tear
- Repair technique
- Type of suture material
- The skill of the operator (Grant 1989, Kettle 2002)

TREND OF NON SUTURING OF SECOND DEGREE TEARS.

- Trend commenced over last five years, why? Staffing, midwives autonomy, women’s choice. Needs careful consideration in line with best practice.

- No reliable evidence to-date to support non suturing, small or qualitative studies only: Clement and Reed (1998), Head (1993), Lundquist and Forlossnings (1999).

THE RATIONALE FOR REPAIR

- Refer to new assessment proforma*
- To control bleeding
- To maintain function of the pelvic floor
- To aid first intention healing of wound - healing is more rapid and less scarring if no infection present
- Wound will heal by secondary intention if left unrepaired. Granulation tissue formed which contracts to form scar tissue
- To prevent infection
FACTORS WHICH REDUCE PERINEAL PAIN

- Loose continuous repair with a knot at the apex and final one inside introitus (non-locking). See Kettle (2002)
- Tight sutures create pain and discomfort due to oedema and tissues hypoxia. This may impede healing.
- Over use of suture material retards healing and increases the inflammatory process. If trauma not too deep, close deep and superficial muscle layers together.
- Benefit of subcuticular sutures to skin: avoids the nerve endings in the skin (Kettle 2002).

ASSESSMENT OF PERINEAL TRAUMA

Refer to new perineal assessment proforma and handbook for midwives for principles of repair.

CAN WE IMPROVE THE DIAGNOSIS OF THIRD DEGREE TEARS?

REPAIR OF THE VAGINAL MUCOSA

Identify apex, knot, using continuous non locking stitch, this helps to reduce shortening and tension on the posterior vaginal wall.

REPAIR TO PERINEAL MUSCLE

Continue into muscle with continuous stitch. Re-align muscle to ensure skin edges are bought together without tension. Less material used in contrast to interrupted.

REPAIR TO PERINEAL SKIN

Continuous subcuticular sutures commenced at the distal end of perineum and inserted below skin surface to avoid the profusion of nerve endings. End just within introitus.

INTERRUPTED REPAIR

- Interrupted sutures - required for ragged tears or as deemed necessary by midwife.
- Less pain at 10 days with subcuticular technique.
- Long term outcomes at 3 months - showed no significant difference in dyspareunia between subcuticular and interrupted repair (kettle 2002).
SUMMARY - MAIN PRINCIPLES
- Regardless of technique, it is the principle of repair that is important.
- Suture as soon as is practicable to reduce swelling, haematoma, and infection.
- Use non-toothed forceps to prevent tissue trauma.
- Use minimal suture material.
- Keep sutures loose.
- Ensure knots are secure and inside introitus.
- Ensure you are competent to undertake repair!

RECOMMENDATIONS FOR BEST PRACTICE
- Clinical up-date for all midwives and doctors
- Assessment of perineal trauma using proforma
- Evidence for Best Practice - A guide (flexible for practice)
- Use of recommended repair techniques and materials.
- Trained instructors to assess midwives undertaking perineal repair using OSCEs format.

A HAPPY PAIN FREE MUM!

![Image of a happy mother with her baby]
PERINEAL TRAUMA ASSESSMENT AND REPAIR PROFORMA

Proforma to be completed by person undertaking the assessment for repair/non repair

1. If continuous bleeding from perineal site on assessment proceed to repair.

2. If no bleeding evident, continue to assess perineal trauma in the following sequence and add score in mm in the box provided. An accurate assessment is best achieved in the lithotomy position with good lighting. Please use the Peri-Rule (Metcalfe 2004) if available on the delivery suite, or measure digitally as demonstrated in the perineal repair workshops.

<table>
<thead>
<tr>
<th>Length of tear from fourchette to apex</th>
<th>Depth of tear from fourchette into deepest part of perineal body</th>
<th>Length of tear from fourchette to distal end of perineal skin</th>
<th>Perform rectal examination bi-digitally to assess for anal sphincter damage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*If the trauma measures more than 2cms overall and based on the midwives clinical judgement it is advisable to repair trauma involving perineal muscle to maintain individual muscle integrity and strength.

<table>
<thead>
<tr>
<th>EXTENT OF TRAUMA (please tick appropriate boxes)</th>
<th>TYPE OF PERINEAL TRAUMA (Please tick appropriate boxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good apposition of trauma</td>
<td>No trauma identified</td>
</tr>
<tr>
<td>Skin edges jagged</td>
<td>First degree tear (skin only)</td>
</tr>
<tr>
<td>Skin edges straight</td>
<td>Second degree tear (perineal muscle involved)</td>
</tr>
<tr>
<td>Multidimensional vaginal tear</td>
<td>Third degree tear 3a &lt;50% thickness of external anal sphincter (EAS) muscle (RCOG 2004)</td>
</tr>
<tr>
<td>One-dimensional vaginal tear</td>
<td>Third degree tear 3b &gt; 50% thickness external sphincter</td>
</tr>
<tr>
<td>Cervical tear</td>
<td>Third degree tear 3c including internal anal sphincter (IAS)</td>
</tr>
<tr>
<td>Labial involvement</td>
<td>Fourth degree tear involving internal and external anal sphincter and anal epithelium</td>
</tr>
<tr>
<td>Clitoral involvement</td>
<td>Tear</td>
</tr>
<tr>
<td>Other</td>
<td>Episiotomy</td>
</tr>
</tbody>
</table>

Does this perineum require repair? Y/N
Discussion of repair/non repair with mother? Y/N
Informed consent? Y/N

Rationale for none repair:
## MATERIALS AND METHODS USED FOR REPAIR

<table>
<thead>
<tr>
<th>Material used for repair</th>
<th>Method used for repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal mucosa</td>
<td></td>
</tr>
<tr>
<td>Perineal muscle</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Needle and swab count undertaken</th>
<th>Rectal examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No</td>
<td>Before Yes/No</td>
</tr>
<tr>
<td></td>
<td>After repair Yes/No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analgesia used for repair</th>
<th>Estimated blood loss after repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No</td>
<td></td>
</tr>
</tbody>
</table>

### Allergy to lignocaine
- Yes/No

### Advice re:
- Pelvic floor exercises Yes/No
- Diet Yes/No
- Hygiene Yes/No

<table>
<thead>
<tr>
<th>Time of delivery</th>
<th>Time repair commenced</th>
<th>Time repair completed</th>
<th>Post-repair analgesia</th>
<th>Need for referral</th>
<th>Referred to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes/No</td>
<td></td>
</tr>
</tbody>
</table>

**Signature:**

**Date:**

*If trauma not repaired, this needs to be checked and signed by a second midwife/doctor.*

**Signature:**

**Date:**

*Please enter details into computer and place proforma in woman’s case notes for use in clinical audit and risk management.*

### References:


RCOG 2004 Methods and materials used in perineal repair, Guideline No23 [www.rcog.org.uk](http://www.rcog.org.uk)

### Contributors to proforma:

Members of the Perineal Repair Working Group 2001-2005

© A. Wilson 2004
RECORD OF PERINEAL REPAIR/TRAUMA

"All perineal trauma, including reasons for episiotomy, type of repair and suture material is recorded."
"Outcome of perineal trauma, whether sutured or not, should be recorded."
(Ref. Effective Procedures Suitable For Audit, RCOG Clinical Audit, June 1997)

FULL NAME: __________________________________________ UNIT No: __________________________

TYPE OF PERINEAL TRAUMA (please tick box):

| No trauma identified                                      |
| First degree tear (involving skin only)                   |
| Second degree tear (involving perineal muscle)            |
| Third degree tear 3a (involving <50% of external anal sphincter) |
| Third degree tear 3b (involving >50% of external anal sphincter) |
| Third degree tear 3c (including internal anal sphincter)   |
| Fourth degree tear (involving anal sphincter & rectal mucosa) |
| Simple Graze                                              |

OTHER TEAR (describe):

Episiotomy: Yes / No: Reason:

ANAESTHETIC:

| None                  |
| Epidural / Spinal     |
| Pudendal             |
| Lignocaine 1% Total amount mis. |

MATERNAL CONSENT: Yes / No

PRE-SUTURING: PV: Yes / No PR: Yes / No

SUTURED IN Lithotomy Yes / No

METHOD OF REPAIR

Vagina: ____________________________________________

Perineal muscle: ____________________________________

Perineal skin: ______________________________________

Additional information: ______________________________

Justification for no repair:

TAMPOON: Used / Not Used SUTURE MATERIAL: ________________

NUMBER OF NEEDLES: __________ NUMBER OF SWABS: __________

CHECKED BY (print name): ______________________________

ESTIMATED BLOOD LOSS: After delivery: ____________

After Suturing: ____________ TOTAL BLOOD LOSS: ____________

Time of Delivery: ________________ Post-Suturing: PV: ________________ PR: ________________

Time of Repair: ________________

If delivery to repair interval greater than 30 minutes please give reason:

Explanation given to mother: Yes / No

Gynaecology Outpatient Appointment in six weeks arranged: Yes / No

REPAIRED BY (print name): ________________________ SIGNED AND DATED: ________________

ADVICE REGARDING:

<table>
<thead>
<tr>
<th>Hygiene</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Relief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvic Floor Exercises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DESIGNATION: ________________________

AUTHORS: Caroline Clarke, Ibby Elrahman July 2004

REVIEW DATE: July 2007
Hospital ID No.  

APPENDIX BBb  
Name:  

PERINEAL TRAUMA ASSESSMENT AND REPAIR PROFORMA  

Proforma to be completed by person undertaking the assessment for repair/non repair  

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*If the trauma measures more than 2cms overall and based on the midwives clinical judgment it is advisable to repair trauma involving perineal muscle to maintain individual muscle integrity and strength.

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<tr>
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<th>TYPE OF PERINEAL TRAUMA (Please tick appropriate boxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good apposition of trauma</td>
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</tr>
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<td>First degree tear (skin only)</td>
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<tr>
<td>Clitoral involvement</td>
<td>Tear</td>
</tr>
<tr>
<td>Other</td>
<td>Episiotomy</td>
</tr>
<tr>
<td>Does this perineum require repair?</td>
<td>Y/N</td>
</tr>
<tr>
<td>Discussion of repair/non repair with mother?</td>
<td>Y/N</td>
</tr>
<tr>
<td>Informed consent?</td>
<td>Y/N</td>
</tr>
</tbody>
</table>

Rationale for non repair:

...
**MATERIALS AND METHODS USED FOR REPAIR**

<table>
<thead>
<tr>
<th>Material used for repair</th>
<th>Method used for repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal mucosa</td>
<td></td>
</tr>
<tr>
<td>Perineal muscle</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td></td>
</tr>
</tbody>
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</thead>
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<tr>
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</tr>
<tr>
<td></td>
<td>After repair Yes/No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analgesia used for repair</th>
<th>Estimated blood loss after repair</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Allergy to lignocaine</th>
<th>Advice re:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No</td>
<td>Pelvic floor exercises Yes/No</td>
</tr>
<tr>
<td></td>
<td>Diet Yes/No</td>
</tr>
<tr>
<td></td>
<td>Hygiene Yes/No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time of delivery</th>
<th>Time repair commenced</th>
<th>Time repair completed</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Post-repair analgesia</th>
<th>Need for referral Yes/No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Referred to:</th>
</tr>
</thead>
</table>

Signature:

Date:

*If trauma not repaired, this needs to be checked and signed by a second midwife/doctor.*

Signature:

Date:

*Please enter details into computer and place proforma in woman's case notes for use in clinical audit and risk management.*

References:


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Contributors to proforma:

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© A. Wilson 2006
RECORD OF PERINEAL REPAIR/TRAUMA

All perineal trauma, including reasons for episiotomy, type of repair and suture material is recorded.

Outcome of perineal trauma, whether sutured or not, should be recorded.

(Ref. Effective Procedures Suitable For Audit, RCOG Clinical Audit, June 1997)

FULL NAME:__________________________________________UNIT No: __________________________

TYPE OF PERINEAL TRAUMA (please tick box):

<table>
<thead>
<tr>
<th>No trauma identified</th>
<th>First degree tear (involving skin only)</th>
<th>Second degree tear (involving perineal muscle)</th>
<th>Third degree tear 3a (involving &lt;50% of external anal sphincter)</th>
<th>Third degree tear 3b (involving &gt;50% external anal sphincter)</th>
<th>Third degree tear 3c (including internal anal sphincter)</th>
<th>Fourth degree tear (involving anal sphincter &amp; rectal mucosa)</th>
<th>Simple Graze</th>
</tr>
</thead>
</table>

EXTENT OF TRAUMA (please tick all appropriate boxes):

<table>
<thead>
<tr>
<th>Labial Involvement</th>
<th>Unilateral vaginal Tear</th>
<th>Bilateral Vaginal Tear</th>
<th>Straight Skin Edges</th>
<th>Ragged Skin Edges</th>
<th>Perineal Skin Edges down to Anal Margin</th>
<th>Labial Trauma: Sutured</th>
<th>Labial Trauma: Not Sutured</th>
</tr>
</thead>
</table>

Other tear (describe): __________________________________________

Episiotomy: Yes / No: Reason: __________________________________

ANAESTHETIC

<table>
<thead>
<tr>
<th>None</th>
<th>Epidual / Spinal</th>
<th>Pudendal</th>
<th>Lignocaine 1% Total amount</th>
<th>mls.</th>
</tr>
</thead>
</table>

Maternal Consent: Yes / No
Pre-suturing: PV: Yes / No
PR: Yes / No
Sutured in Lithotomy Yes / No

METHOD OF REPAIR

Vagina: __________________________________________

Perineal muscle: ______________________________________

Perineal skin: _______________________________________

Additional information: ________________________________

Justification for no repair: ____________________________

Tampon: Used / Not Used
Suture Material: ____________________________________
Number of Needles: __________________________
Number of Swabs: __________________________

Checked by (print name): ____________________________

Estimated Blood Loss: After delivery: ____________
After Suturing: ____________
Total Blood Loss: ____________

Time of Delivery: __________________________
Post-Suturing: PV: ____________
PR: ____________

Time of Repair: __________________________

If delivery to repair interval greater than 30 minutes please give reason: __________________________

Explanation given to mother: Yes / No

Gynaecology Outpatient Appointment in six weeks arranged: Yes / No

Repaired by (print name): __________________________

Signed and dated: __________________________

Advice regarding:

<table>
<thead>
<tr>
<th>Hygiene</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Relief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvic Floor Exercises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Designation: __________________________

Authors: Caroline Clarke, Ibby Elrahmart July 2004

Review Date: July 2007
# MIDWIFERY PROFICIENCY FOR PERINEAL SUTURING

## Standard Statement

The midwife will be competent to undertake the repair of the perineum, an injury sustained by either a second degree tear or episiotomy.

<table>
<thead>
<tr>
<th>Practice in accordance with the Midwives Rules and Standards (NMC, 2004) and Code of Professional Conduct (NMC, 2004).</th>
<th>Discuss Trust policy in relation to perineal repair by the midwife.</th>
<th>Demonstrate a good understanding of the anatomy and physiology of the pelvic floor and ano rectum, integrating the appropriate research literature to perineal trauma and repair.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake assessment of perineal trauma using the ‘Perineal Assessment Tool’ and categorise the degree of trauma. Ensure two midwives have assessed the perineum if suturing is not required.</td>
<td>Refer all trauma for repair, that is outside the range of proficiency, to a midwife or medical practitioner with a higher level of proficiency.</td>
<td>Discuss the procedure and explain the rationale for repair/non repair with the woman and gain informed consent.</td>
</tr>
<tr>
<td>Position the woman comfortably to enable good visualisation for the procedure.</td>
<td>Demonstrate the ability to infiltrate the perineum with local anaesthetic, or top-up the epidural in order to provide adequate pain relief. Be aware of the doses and side effects of these and practice in accordance to the Guidelines for the Administration of Medicines (NMC, 2004) and Trust Medicine Policy</td>
<td>Demonstrate awareness of the correct suture material and needle size, in accordance with recent research evidence.</td>
</tr>
<tr>
<td>Demonstrate the ability to complete the repair using the most appropriate technique, while following recommended evidence-based best practice</td>
<td>Demonstrate the ability to complete the repair with the correct apposition and alignment of perineal tissue as well as achieving haemostasis.</td>
<td>Demonstrate asepsis while preparing and implementing the procedure.</td>
</tr>
<tr>
<td>Demonstrate the ability to perform a safe and accurate swab, needle and instrument count prior to and following the procedure and dispose of this equipment in an appropriate manner.</td>
<td>Demonstrate the ability to complete all necessary records in accordance with Trust Policy and the Guidelines for Records and Record Keeping (2004). In addition complete and enclose the ‘Perineal trauma assessment proforma’in woman’s case notes</td>
<td>Discuss the care of the perineum with the woman following repair/non repair to ensure optimum healing. This should include advice for pelvic floor exercises as appropriate.</td>
</tr>
</tbody>
</table>

1. The midwife is required to observe at least 5 perineal repairs performed by a competent/proficient practitioner prior to undertaking the procedure themselves.
2. The midwife is required to undertake at least 5 repairs under supervision of a competent/proficient practitioner.
3. These observations and repairs need to be documented in a log book and signed.
4. A minimal level 4 competency/proficiency must be achieved to enable the practitioner to practice independently.

G:/ Shared/ Women and Children’s Care Group/Maternity/Jenny Hughes/Word/Supervision/Competencies
**LEVELS OF PROFICIENCY FOR PERINEAL REPAIR**

**STANDARD STATEMENT**

The midwife will be proficient to undertake the repair of the perineum, an injury sustained by either a second degree tear or episiotomy.

<table>
<thead>
<tr>
<th>LEVEL OF ACHIEVEMENT</th>
<th>LEVEL DACUM (Herman and Kenyon 1987)</th>
<th>LEVEL (Benner 1984)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot perform this activity satisfactorily to participate within the clinical environment.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Can perform this activity, but not without constant supervision, assistance and/or guidance.</td>
<td>1</td>
<td>Novice</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily, but requires some supervision and assistance and/or minimal guidance.</td>
<td>2</td>
<td>Advanced beginner</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily, when instructed to do so, without further supervision, assistance and/or guidance.</td>
<td>3</td>
<td>Competent</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily without supervision, assistance and/or guidance, with acceptable promptness and quality of work with understanding and appropriate application.</td>
<td>4</td>
<td>Proficient</td>
</tr>
<tr>
<td>Can, independently, perform this activity, satisfactorily with more than acceptable speed, quality and with initiative and adaptability to specific problems as and when they arise.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Can perform this activity satisfactorily with more than acceptable speed and quality and with initiative and adaptability and can lead/instruct/assess other practitioners in performing this activity.</td>
<td>6</td>
<td>Expert</td>
</tr>
</tbody>
</table>

Adapted Hermon and Kenyon 1987 & benner 1984 (Wilson 2005)

* Minimum level of proficiency to be achieved by midwife to practice without supervision is level 4
ASSESSMENT, REPAIR AND EVALUATION OF PERINEAL TRAUMA BY THE MIDWIFE

The following principles are to guide the midwife with the best available evidence for best practice in the assessment, repair and evaluation of perineal trauma.

Evidence to-date

It has become an increasing trend amongst many midwives not to repair small perineal tears. A two-stage repair of perineal trauma, leaving the skin unsutured has been evaluated by Gordon et al (1998) and Grant et al (2001) and has been found to reduce the likelihood of the perineum feeling different from before the delivery, and resulted in less pain and dyspareunia in the short term. There were no apparent disadvantages noted. Fleming and Hagen (2003) found in their small RCT comparing sutured and non suturing of first and second degree tears, that there was no significant difference between the groups in terms of pain or depression. There was however, significant differences in wound closure at six weeks. Women who were not repaired had poor wound approximation.

Lundquist's (2000) small RCT of 80 women found that minor perineal lacerations; those not bleeding and not extending 2 x 2 cms healed as well as those lacerations sutured. There is an urgent need for a large and robust prospective RCT to evaluate the long term consequences of this practice (Lee 2002). However, it must be the decision of two midwives, competent to undertake perineal repair as to whether superficial perineal muscles can be left un-sutured. (Please refer to assessment criteria for perineal repair in the assessment proforma, Appendix 1). Metcalfe et al (2004) has devised an objective tool for the measurement of perineal trauma: the Peri-Rule which can assist the midwife in determining the trauma that could be safely left to heal naturally. This use of this tool is being negotiated with delivery suite managers and midwives in view of practically and cost.

Kettle (2002), carried out a large RCT of 1542 women and found that Vicryl and Vicryl Rapide resulted in similar pain outcomes using either suture materials. However Vicryl is preferable to catgut for the reduction of perineal pain at 10 days (Kettle 2002, Kettle & Johanson 1999, Mohamed 1989). However Vicryl Rapide, the more readily absorbable suture material was associated with less need for suture removal. Vicryl Rapide or the equivalent brand is therefore the suture material of choice for current practice.

Kettle (2002) also identified that by using a continuous non-locking stitch to the vaginal mucosa, this resulted in less tightness, shortening of the vaginal wall and discomfort. Also, significantly fewer women reported pain at 10 days with the continuous technique using subcuticular sutures to skin than with the interrupted method. This supports similar findings in other studies (Grant et al 1989, Kettle 2001, Kettle and Johanson 1999). Where possible, this should be the method undertaken for repair following initial training, appropriate supervision or up-date in perineal repair (Kettle 2002). Technique is equally as important as suture material in reducing perineal morbidity.

Defining perineal trauma

A definition of spontaneous perineal trauma has been provided by Johnson and Taylor (2000) and the RCOG (2002). These are as follows:

- First degree - involving skin only.
APPENDIX EE

❖ Second degree tear or episiotomy - involving skin, posterior vaginal wall and superficial perineal muscles with occasionally the deep muscle involved.
❖ Third degree - involving the same structures as a second degree as well as the anal sphincter muscle.

Sultan (2002) further classifies a 3rd degree tear as:
   a. partial tear of the external sphincter involving less than 50% thickness
   b. complete tear of the anal sphincter
   c. internal sphincter torn also;

❖ Fourth degree - involving complete disruption to the external and internal sphincter and mucosa

Groom et al (2002) and Sultan (1994, 2002) state that with increased vigilance, it is possible to improve the clinical diagnosis of third and fourth degree tears. Improvement in training in the recognition and diagnosis of severe perineal trauma will ensure that appropriate referral and repair will lead to improvements in long-term outcome for many women.

Assessment of trauma

Please refer to the criteria for assessing perineal trauma attached. This proforma will need to be completed, signed and retained in the woman’s case notes.

Aims of perineal repair

The midwife must ensure that the perineal tissues are correctly realigned, haemostasis is attained and dead space is reduced to prevent haematoma formation, reducing the risk of postpartum haemorrhage (PPH). At all times the integrity of the woman’s pelvic floor needs to be maintained.

Always refer third and fourth degree trauma to an experienced registrar. In some cases the woman will need to be referred to an ano-rectal surgeon. Labial tears need to be sutured using a fine suture by an appropriately trained health professional. A current video should be available on the delivery suite, demonstrating perineal repair for the midwife. You should not undertake perineal repair unless you are competent in this procedure. Supervision is required by a more competent practitioner. The Midwives Rules 40:2 (UKCC 1998), clearly state that:

"...a practising midwife shall not... undertake any treatment which she has not... been trained to give..."

Aims of repair

❖ To reduce perineal morbidity by ensuring all perineal tissues are repaired in the correct anatomical manner
❖ To provide good analgesia for the duration of repair and thereafter
❖ To ensure perineal trauma is repaired within 30 minutes where possible
❖ To provide continuity of midwifery care where possible
❖ To provide adequate privacy for the mother during the procedure
❖ To have regard for the healing period and the resumption of sexual intercourse
❖ Be sensitive to the impact of the procedure on partners and birth companions.
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Procedure

1. Assess whether perineal repair is required (see assessment criteria in appendix 1).

2. Always inform, gain consent and reassure the mother throughout the procedure.

3. Always suture as soon as possible. Odibo (1997) suggests within 30 minutes.

4. Always provide adequate analgesia, i.e. Epidural top-up or perineal infiltration. (Lignocaine 1% 10-20 mls). Entonox may also be used while infiltration is taking place. **The baby should be visible to mother during the procedure.**

5. Good visualisation is essential, adjust lighting and mother's comfort to suit, an angle poise lamp can be used in the community setting.

6. A good surgical procedure involves:
   - an aseptic procedure
   - haemostasis
   - accurate approximation of the tissues
   - avoiding excessive use of suture materials (excessive material prevents healing and adds to discomfort)
   - avoiding areas of dead space as blood may collect, causing pain and discomfort. It may also predispose to a haematoma formation.

Preparation of the woman

Before commencing with the procedure ensure that the mother's general condition is assessed. Ensure the uterus is well contracted. Check for postpartum bleeding. Explain the procedure. Discuss leaving a small 1st degree skin wound unsutured and the benefits (Gordon et al 1998, Grant et al 2001). Obtain informed consent. Assist the mother into lithotomy position with either another midwife or the partner. Lithotomy is particularly advisable if the repair is difficult to undertake as it facilitates a clear view. This can be adapted in the home situation.

Equipment required

Suture pack and instruments
Green dressing towels
Hibitaine cream or KY jelly
Gloves
20ml syringe, green needle and needle pad
Lignocaine 1% 10-20 mls
Vicryl Rapide sutures 2/0 and 3/0
Warm tap water for perineal swabbing (Keane & Thornton 1998)
Goggles and apron
Receptacle for waste
Stool

Procedure

1. Prepare trolley and wash hands
2. Undertake swab and needle count

3. Swab perineal area.

4. Apply sterile drapes.

5. INSPECT; perineum, labia, vagina, cervix and anal sphincter. This is to assess extent and position of trauma. A rectal examination will assist in assessing the extent of damage into the anal sphincter muscle and is recommended by Sultan (2002) to avoid missing a third and fourth degree tear. Using the perineal trauma proforma will further assist the midwife in her clinical judgement and decision in perineal repair/non repair management.

* IF RECTAL MUCOSA OR CERVIX IS INVOLVED REGISTRAR MUST REPAIR.

6. Explain procedure to both parents at all times.

_Infiltrate areas to be repaired_

1. Plan the repair to ensure edges of the muscles and tissues are brought together accurately.

2. Use Lignocaine 1% - 10-20 mls depending on the extent of repair required.

3. Insert tampon if necessary, always affix Spencer –Wells forceps to tampon string and green towel.

4. Follow the suture line making sure the fourchette and APEX of the wound, particularly around the anus are well anaethetised, as these areas tend to be very sensitive. Lignocaine should be infiltrated into the four aspects of the tear, moving along the left and then right side of the vaginal wall and perineal muscles.

5. WAIT 4 -5 minutes, then test the perineal area. Sensations of pressure or pulling may be felt but NO PAIN. Be alert to any side effects of lignocaine. Some women may experience dizziness, confusion and depressed respiration's. In severe cases convulsion may occur. If there are any concerns inform senior doctor.

**REPAIR**

Repair in two or three layers, depending on depth of tear.

1. Vaginal epithelium

2. Muscles of the pelvic floor (superficial : bulbo cavernosus, transverse perini. (The deep muscle: pubo coccygeus may also be involved).

3. Skin and subcutaneous tissues.
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Repair technique

Small lacerations on the lateral or anterior vaginal walls need to be repaired (only if necessary) before posterior tears. Labial tears may require repair as this prevents both labia fusing together.

1. VAGINA: Locate APEX of the vaginal tear. Place the first anchoring stitch beyond this to secure any bleeding points.

* BLEEDING POINTS NEED TO BE CAREFULLY IDENTIFIED. A tampon should be inserted into the vagina to prevent blood obscuring the vision.

2. If the APEX is not visible, locate with finger, stitch, pull down to locate full length. ACCURATE REPAIR OF THE VAGINAL MUCOSA IS ESSENTIAL TO PREVENT HAEMATOMA INTO PERINEAL MUSCLES.

3. Use a continuous non-locking stitch for the vaginal mucosa. This prevents shortening of the posterior vaginal wall and provides good haemostasis. A knot should NOT be placed at the introitus. This has been shown to reduce scar tissue and less dyspareunia (Cronk 1987, Kettle 2002).

3. When the introitus has been reached, the same suture material may be used to continue into the muscle layer. This reduces unnecessary knots and excessive suture material.

Pelvic floor muscles

1. Identify torn muscles of the pelvic floor.

2. Use continuous stitches along the length of the perineal muscles down to the inferior aspect of the tear/episiotomy (interrupted uses more suture material). This ensures closure of the dead space between vaginal mucosa and perineal body. *ENSURE ANAL SPHINCTER IS NOT CAUGHT. Identify the depth of the wound with your finger. Where there is a large tear/episiotomy the muscles will need to be repaired in two layers depending on depth of trauma.

Skin and subcutaneous tissues

Continuous subcuticular technique

1. If the skin is sutured, it should be approximated and sutured using a continuous subcuticular technique, this causes least pain (Kettle 2002, Gordon 1998, Grant et al 2001). Start at the anal end (distal) and take a small bite of subcuticular tissue (just under the skin) first on the left, reverse the needle and then a small bite on the right side. Continue with this technique until just short of the introitus (see appendix 2). The sutures are placed deeply in the subcutaneous tissue layer but a separation of 2-3mm between skin edges on completion. This technique avoids contact with nerve endings and the likelihood of increased pain occurring.

On completion of continuous suturing, a small loop and reef knot secures the end which is buried beneath the skin. Once completed remove the tampon from the
vagina and perform a vaginal examination to check for bleeding, and any other lacerations or gaps in the suture line. Check introitus admits two fingers and that the sutures along the posterior vaginal wall are not too tight.

2. Inform mother of the need for a rectal examination to be performed to ensure no sutures have penetrated the rectal mucosa. *A suture into the rectum may cause a recto-vaginal fistula.

3. Some units may insert Voltarol suppositories for analgesia at this point. Check unit protocol and standing orders. *Also need to check for contraindications.

Following the repair

❖ Check haemostasis is achieved
❖ Ensure tampon has been removed
❖ Check needle and swab counts are correct (includes tampon and thread)
❖ Check comfort of the mother - consider further analgesia if required.
❖ Clear equipment and wash hands.
❖ Postnatal care of the perineum and evaluation of the healing process — Assessment of healing see Rheeda Scale used by Steen (1997). Check perineal audit guidelines in the Unit. Ideally, the midwife who undertook the repair needs to assess the healing of the perineum repaired. Reassure the mother that the suture material will start to disintegrate at approximately 10–14 days, when the perineum should have healed. Vicryl Rapide is absorbed by hydrolysis which reduces tissue reaction and inflammation (Ethicon 1998). A postnatal perineal inspection should be carried out regularly by the midwife to assess healing. Advise mother on perineal hygiene. There is no evidence to support the use of salt or ‘Savlon’ over normal bath water.

❖ CONTEMPORANEOUS RECORD KEEPING AND EVALUATION OF HEALING PROCESS — ensure assessment of perineal trauma proforma is completed, signed placed in the mothers notes. Needle and swab count must be noted.

SUMMARY

❖ Perineal repair of uncomplicated perineal trauma should be undertaken by all midwives, trained and competent to undertake this important procedure for the mother.

❖ Evidence supports the use of Vicryle Rapide as the suturing material of choice with the use of a continuous non-locking stitch to repair the vaginal mucosa. Continuous subcuticular repair is recommended to close the perineal skin if required.

❖ The midwife is responsible for acknowledging her/his limitations in perineal repair, using recommended materials and techniques, together with contemporaneous record keeping.

*For training and up-date in perineal assessment and repair, please enquire with your Practice Development Midwife. A handbook — The Principles and Practice of Perineal Repair for the Midwife is currently being finalised.
APPENDIX EE

This guide to Evidence for Best Practice in perineal assessment, repair and evaluation of perineal trauma has been developed by the members of the perineal Repair Working Group 2001-2004.

References


Keane H, Thornton J 1998 A trial of cetrimide/chlorhexidine or tap water for perineal cleansing British Journal of Midwifery 6 (1):34-37


RGOG 2002a Perineal trauma 5.10 Effective Procedures in Maternity Care suitable for Audit www.rcog.org.uk/mainpages.asp?page

RGOG 2002b Perineal trauma 5.10 Effective Procedures in Maternity Care suitable for Audit www.rcog.org.uk/mainpages.asp?page
APPENDIX EE

RCOG 2002 Methods and materials used in perineal repair (23) Clinical Green Top Guidelines www.rcog.org.uk/guidelines.asp

Sultan A 2002 Episiotomy and Perineal Tear Repair Study Day, Mayday University Hospital, Croydon, Surrey. Personal communication. * Dr Sultan is Consultant at this hospital and specialises in 3rd and 4th degree perineal repair and surgery. Study Days continue.


\Surrey\Public\User\Data\eih172\My Documents\ms2aw\Perineal repair working group\PROPOSED GUIDELINES FOR PERINEAL ASSESSMENT AND REPAIR BY THE MIDWIFE.doc.Updated by A.Wilson.Nov 2006
APPENDIX EE

PERINEAL TRAUMA ASSESSMENT AND REPAIR PROFORMA

Proforma to be completed by person undertaking the assessment for repair/non repair

1. If continuous bleeding from perineal site on assessment proceed to repair.

2. If no bleeding evident, continue to assess perineal trauma in the following sequence and add score in mm in the box provided. An accurate assessment is best achieved in the lithotomy position with good lighting. Please use the Peri-Rule (Metcalfe 2004) if available on the delivery suite, or measure digitally as demonstrated in the perineal repair workshops.

<table>
<thead>
<tr>
<th>Length of tear from fourchette to apex</th>
<th>Depth of tear from fourchette into deepest part of perineal body</th>
<th>Length of tear from fourchette to distal end of perineal skin</th>
<th>Perform rectal examination bi-digitally to assess for anal sphincter damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>........................................</td>
<td>..............................................................</td>
<td>..............................................................</td>
<td></td>
</tr>
</tbody>
</table>

*If the trauma measures more than 2cms overall and based on the midwives clinical judgement it is advisable to repair trauma involving perineal muscle to maintain individual muscle integrity and strength.

<table>
<thead>
<tr>
<th>EXTENT OF TRAUMA (please tick appropriate boxes)</th>
<th>TYPE OF PERINEAL TRAUMA (Please tick appropriate boxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good apposition of trauma</td>
<td>No trauma identified</td>
</tr>
<tr>
<td>Skin edges jagged</td>
<td>First degree tear (skin only)</td>
</tr>
<tr>
<td>Skin edges straight</td>
<td>Second degree tear (perineal muscle involved)</td>
</tr>
<tr>
<td>Multidimensional vaginal tear</td>
<td>Third degree tear 3a &lt;50% thickness of external anal sphincter (EAS) muscle (RCOG 2004)</td>
</tr>
<tr>
<td>One-dimensional vaginal tear</td>
<td>Third degree tear 3b &gt; 50% thickness external sphincter</td>
</tr>
<tr>
<td>Cervical tear</td>
<td>Third degree tear 3c including internal anal sphincter (IAS)</td>
</tr>
<tr>
<td>Labial involvement</td>
<td>Fourth degree tear involving internal and external anal sphincter and anal epithelium</td>
</tr>
<tr>
<td>Clitoral involvement</td>
<td>Tear</td>
</tr>
<tr>
<td>Other</td>
<td>Episiotomy</td>
</tr>
</tbody>
</table>

| Does this perineum require repair? | Y/N |
| Discussion of repair/non repair with mother? | Y/N |
| Informed consent?                  | Y/N |

Rationale for none repair:
## MATERIALS AND METHODS USED FOR REPAIR

<table>
<thead>
<tr>
<th>Material used for repair</th>
<th>Method used for repair</th>
<th>Rectal examination</th>
<th>Estimated blood loss after repair</th>
<th>Analgesia used for repair</th>
<th>Allergy to lignocaine</th>
<th>Advice re:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal mucosa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perineal muscle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle and swab count</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>undertaken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analgesia used for repair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of delivery</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Time repair commenced</td>
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</tr>
<tr>
<td>Time repair completed</td>
<td></td>
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<tr>
<td>Post-repair analgesia</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Need for referral</td>
<td>Yes/No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Please enter details into computer and place proforma in woman’s case notes for use in clinical audit and risk management.*

**References:**


RCOG 2004 Methods and materials used in perineal repair, Guideline No23 [www.rcog.org.uk](http://www.rcog.org.uk)

**Contributors to proforma:**

Members of the Perineal Repair Working Group 2001-2006

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University of Surrey  
European Institute of Health and Medical Sciences  

The Principles & Practice of Perineal Repair for the Midwife  

Objective Structured Clinical Examination  

<table>
<thead>
<tr>
<th>OSCE Pathway</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwifery Practice</td>
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<table>
<thead>
<tr>
<th>Candidate's Name</th>
<th>Candidate’s URN</th>
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</table>

<table>
<thead>
<tr>
<th>Examiner from Clinical Practice</th>
<th>EIHMS Examiner</th>
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</table>

<table>
<thead>
<tr>
<th>1st Attempt OSCE</th>
<th>Retest OSCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes □</td>
<td>Yes □</td>
</tr>
</tbody>
</table>

This assessment of competency/proficiency in perineal repair in clinical practice is designed for you to complete formatively and your mentor to complete summatively following the attendance at a recent perineal repair workshop in your unit and/or are undertaking the level 3 post-registration module: The Principles and Practice of Perineal Repair for the Midwife. A minimum level of 4 competency/proficiency is required to undertake this procedure without supervision in practice (see attached perineal trauma assessment proforma, areas and levels of competency). * The assessment must be undertaken by a midwife who has completed their OSCE assessment at level 6.  

Clinical scenario, setting and history  

Your woman has recently given birth to a healthy live infant in the delivery suite or community setting. During the delivery you believe that she has sustained an uncomplicated second degree tear or required an elective episiotomy (This type of trauma is the most appropriate for this assessment).  

Please assess the ‘perineum’ for trauma that you see in front of you and the need for perineal repair. You will need to justify your rationale for repair/non repair, considering the mother’s informed choice and decision. You will also need to provide a rationale for repair technique based on current evidence, and perineal trauma assessment proforma. You will also need to consider how you would evaluate the perineum for healing in the puerperium.  

I would like you to demonstrate how you would assess and manage this woman
## History taking

(Tick the box if demonstrated, discussed or requested) ✔️

* These areas can be discussed prior to delivery

- Previous problems identified with woman associated with perineal trauma
- Assessment, management or repair
- Integrity of bladder from previous birthing experience
- Integrity of anal sphincter muscle from previous birthing experience
- Substantial perineal scar tissue from a previous delivery

<table>
<thead>
<tr>
<th>History taking</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Tick appropriate rating box)</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Examiners comments to justify rating:

---

## Past medical and surgical history

*These areas can be identified prior to delivery

- Previous third/fourth degree perineal trauma and repair
- Other significant perineal trauma ie cervical, labial/clitoral which may influence the woman's attitude towards repair

<table>
<thead>
<tr>
<th>Past medical and surgical history</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
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</tbody>
</table>

Examiner's comments to justify rating:
# Current medication

<table>
<thead>
<tr>
<th>Current medication</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lignocaine (total dose woman received) from episiotomy infiltration</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Epidural – Bupivicane 0.1% and Fentanyl 0.002% (in 20ml syringe) mobile epidural</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>- Bupivicane 0.25% prior to instrumental delivery</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>- Other</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Examiner's comments to justify rating:

---

# Social history

*These areas can be discussed prior to delivery

Any relevant disclosures to consider when undertaking perineal assessment and management of trauma ie sexual abuse

<table>
<thead>
<tr>
<th>Social history</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Examiner’s comments to justify rating:

---

# Psychosocial assessment

*May be discussed prior to delivery and following assessment of trauma

Considers women's views towards her perineal assessment and management of trauma

Issues of sexuality, urodynamics, elimination and pelvic function discussed

<table>
<thead>
<tr>
<th>Psychosocial assessment</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
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<td>□</td>
<td>□</td>
</tr>
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</table>
### Perineal Trauma Assessment

<table>
<thead>
<tr>
<th>Seeks consent from woman for assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considers analgesia prior to assessment</td>
</tr>
<tr>
<td>Considers Trust /RCOG guidelines/policy when determining repair</td>
</tr>
<tr>
<td>Demonstrates an understanding of the anatomy of the pelvic floor and anorectum when assessing level of perineal trauma; ie 1&lt;sup&gt;st&lt;/sup&gt;, 2&lt;sup&gt;nd&lt;/sup&gt;, 3&lt;sup&gt;rd&lt;/sup&gt; or 4&lt;sup&gt;th&lt;/sup&gt; degree trauma.</td>
</tr>
<tr>
<td>Assesses extent of blood loss</td>
</tr>
<tr>
<td>Undertakes the assessment of: apposition of trauma</td>
</tr>
<tr>
<td>Whether skin edges jagged</td>
</tr>
<tr>
<td>Whether tears are branched</td>
</tr>
<tr>
<td>Extent of tear from fourchette to perineal skin in cm</td>
</tr>
<tr>
<td>Depth of tear into vagina (apex) in cm</td>
</tr>
<tr>
<td>Depth of tear into perineal muscle in cm</td>
</tr>
<tr>
<td>Assesses for other categories of trauma</td>
</tr>
<tr>
<td>Considers labial and clitoral lacerations</td>
</tr>
<tr>
<td>Considers third and fourth degree tears (undertakes anal sphincter assessment bimanually)</td>
</tr>
<tr>
<td>Considers a cervical tear</td>
</tr>
<tr>
<td>Considers whether trauma requires repair (based muscle involvement)</td>
</tr>
<tr>
<td>Consideration for referral to a more competent midwife or doctor</td>
</tr>
<tr>
<td>Considers allergies ie Lignocaine</td>
</tr>
<tr>
<td>Discussion of trauma with woman with information provided for informed choice and joint decision repair/non repair as appropriate</td>
</tr>
<tr>
<td>Evidence to support measurement of perineal trauma i.e 2 cm rule or Peri-Rule</td>
</tr>
<tr>
<td>Perineal trauma assessment proforma used as a guide</td>
</tr>
</tbody>
</table>

### Repair Procedure

| Ensures good lighting and position of woman for repair |
| Plans systematically repair procedure |
| Rationale and consent for rectal examination prior to repair, as judged appropriate |
| Considers analgesia: Epidural top-up; perineal infiltration with lignocaine; Entonox. |
| Swab and needle count |
| Rationale for repair technique: vaginal mucosa |
| Rationale for repair technique: perineal muscle |
| Rationale for repair technique: skin |
| Explanation and reassurance for woman |
| Maintains asepsis throughout procedure |
| Swab and needle count following procedure |
| Rationale and consent for rectal examination following repair |
| Effective communication throughout procedure |
### Evaluation of repair and comfort

- Evaluation of repair technique
- Consideration of maternal comfort
- Post repair analgesia considered
- Advice re perineal hygiene, pelvic floor exercises and general care
- Record keeping, completion of perineal trauma proforma

<table>
<thead>
<tr>
<th>Midwifery assessment, repair and evaluation</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examiner’s comments to justify rating:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Interpretation of assessment & differential diagnosis

- Need to refer to more competent/proficient practitioner

<table>
<thead>
<tr>
<th>Interpretation of assessment and differential diagnosis</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examiner’s comments to justify rating:</td>
<td></td>
<td></td>
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</tbody>
</table>
### Works in partnership with woman
Provides unbiased information regarding perineal management to enable woman to make a fully informed choice
Joint decisions made in respect of informed choice

<table>
<thead>
<tr>
<th>Works in partnership with woman</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
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</thead>
<tbody>
<tr>
<td></td>
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</table>

Examiner’s comments to justify rating:

### Systematic and thorough approach to assessment
Demonstrates the ability to prioritise and work in a logical order
Holistic approach to midwifery care

<table>
<thead>
<tr>
<th>Systematic and thorough approach to assessment</th>
<th>Not Achieved</th>
<th>Borderline</th>
<th>Pass</th>
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<tbody>
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</tbody>
</table>

Examiner’s comments to justify rating:
University of Surrey  
European Institute of Health and Medical Sciences  

The Principles & Practice of Perineal Repair for the Midwife  
OSCE Student Feedback  

<table>
<thead>
<tr>
<th>OSCE Pathway</th>
<th>Date</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Midwifery Practice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Candidate's Name</th>
<th>Candidate’s URN</th>
<th></th>
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</tbody>
</table>

Examiner from Clinical Practice  
EIHMS Examiner  

**FINAL AWARD**  

PASS □  REFER □  FAIL □  LEVEL OF COMPETENCY □  

Examiners' comments to justify final award:  

Approved OSCE Assessors signature  

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### MIDWIFERY PROFICIENCY FOR PERINEAL SUTURING

**Standard Statement**

*The midwife will be competent to undertake the repair of the perineum, an injury sustained by either a second degree tear or episiotomy.*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>Practice in accordance with the Midwives Rules and Standards (NMC, 2004) and Code of Professional Conduct (NMC, 2004).</td>
<td>Discuss Trust policy in relation to perineal repair by the midwife.</td>
<td>Demonstrate a good understanding of the anatomy and physiology of the pelvic floor and ano rectum, integrating the appropriate research literature to perineal trauma and repair.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>Undertake assessment of perineal trauma using the 'Perineal Assessment Tool' and categorise the degree of trauma. Ensure two midwives have assessed the perineum if suturing is not required.</td>
<td>Refer all trauma for repair, that is outside the range of proficiency, to a midwife or medical practitioner with a higher level of proficiency.</td>
<td>Discuss the procedure and explain the rationale for repair/non repair with the woman and gain informed consent.</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td><strong>8</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Position the woman comfortably to enable good visualisation for the procedure.</td>
<td>Demonstrate the ability to infiltrate the perineum with local anaesthetic, or top-up the epidural in order to provide adequate pain relief. Be aware of the doses and side effects of these and practice in accordance to the Guidelines for the Administration of Medicines (NMC, 2004) and Trust Medicine Policy.</td>
<td>Demonstrate awareness of the correct suture material and needle size, in accordance with recent research evidence.</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td><strong>11</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>Demonstrate the ability to complete the repair using the most appropriate technique, while following recommended evidence-based best practice.</td>
<td>Demonstrate the ability to complete the repair with the correct apposition and alignment of perineal tissue as well as achieving haemostasis.</td>
<td>Demonstrate asepsis while preparing and implementing the procedure.</td>
</tr>
<tr>
<td><strong>13</strong></td>
<td><strong>14</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Demonstrate the ability to perform a safe and accurate swab, needle and instrument count prior to and following the procedure and dispose of this equipment in an appropriate manner.</td>
<td>Demonstrate the ability to complete all necessary records in accordance with Trust Policy and the Guidelines for Records and Record Keeping (2004). In addition complete and enclose the Perineal trauma assessment proforma in woman's case notes.</td>
<td>Discuss the care of the perineum with the woman following repair/non repair to ensure optimum healing. This should include advice for pelvic floor exercises as appropriate.</td>
</tr>
</tbody>
</table>

---

1. The midwife is required to observe at least 5 perineal repairs performed by a competent/proficient practitioner prior to undertaking the procedure themselves.
2. The midwife is required to undertake at least 5 repairs under supervision of a competent/proficient practitioner.
3. These observations and repairs need to be documented in a log book and signed.
4. A minimal level 4 competency/proficiency must be achieved to enable the practitioner to practice independently.
LEVELS OF PROFICIENCY FOR PERINEAL REPAIR

**STANDARD STATEMENT**

The midwife will be proficient to undertake the repair of the perineum, an injury sustained by either a second degree tear or episiotomy.

<table>
<thead>
<tr>
<th>LEVEL OF ACHIEVEMENT</th>
<th>LEVEL DACUM (Herman and Kenyon 1987)</th>
<th>LEVEL (Benner 1984)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot perform this activity satisfactorily to participate within the clinical environment.</td>
<td>0</td>
<td>Novice</td>
</tr>
<tr>
<td>Can perform this activity, but not without constant supervision, assistance and/or guidance.</td>
<td>1</td>
<td>Advanced beginner</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily, but requires some supervision and assistance and/or minimal guidance.</td>
<td>2</td>
<td>Competent</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily, when instructed to do so, without further supervision, assistance and/or guidance.</td>
<td>3</td>
<td>Proficient</td>
</tr>
<tr>
<td>Can perform this activity satisfactorily without supervision, assistance and/or guidance, with acceptable promptness and quality of work with understanding and appropriate application.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Can, independently, perform this activity, satisfactorily with more than acceptable speed, quality and with initiative and adaptability to specific problems as and when they arise.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Can perform this activity satisfactorily with more than acceptable speed and quality and with initiative and adaptability and can lead/instruct/assess other practitioners in performing this activity.</td>
<td>6</td>
<td>Expert</td>
</tr>
</tbody>
</table>


* Minimum level of proficiency to be achieved by midwife to practice without supervision is level 4
REFERENCES AND BIBLIOGRAPHY


Allan, H.T. 2005 Gender and embodiment in nursing: the role of the female chaperone in the infertility clinic *Nursing Inquiry* 12 (3) pp 175-183


Axe, S. 2000. Labour debriefing is crucial for good psychological care *British Journal of Midwifery* **8** (10) pp 626-631


Bausell, RB. *A practical guide to conducting empirical research* New York, Harper & Row 1986

*A practical guide to conducting empirical research* New York, Harper & Row


Brimacombe, M. 1995. Reaping the pain from what others have sewn. The Independent 14th march pp 21.


Browne, J. 2003 Bloody footprints: learning to be with women. The Royal College of Midwives Evidence Based Midwifery. 1 (2) :42-47.

Brosnan M, Evans W, Brosnan E 2006 Implementing objective structured clinical skills evaluation (OSCE) in nurse registration programmes in a centre in Ireland: A utilised focused evaluation Nurse Education Today 26 pp 115-122


Burke, L. Integration into higher education: key implementers' views on why nurse education moved into higher education Journal of Advanced Nursing 42 (4) pp 382-389.


Butler M Frazwe D, Murphy R, 2008 What are the essential competencies required of a midwife at the point of registration? Midwifery 24 pp 260-269


Chioncel, N. Van Der Veen, R. Wildermeersch, D. Jarvis, P. 2003 The validity and reliability of focus groups as a research method in adult education. *International Journal of Lifelong Education* 22 (5) :495-517.


Cowin L, Hengstberger-Sims, Eagar S 2008 Competency measurements: testing convergent validity for two measures *Journal of Advanced Nursing* 64 (3) 272-277


CNST NHS Litigation Authority 2008
www.nhsla.com/riskmanagement/Cnststandards Accessed 12.2.09


Davey, B. Murrells, T. 2002. To get a better job or do a better job: motivations of registered general nurses to participate in post-registration degrees. *Learning in Health and Social Care*. 1 (3) pp 139-149.

*Policy Futures in Education* 1 (1) pp 20-49


Davis, D. 1999. Embracing the past, understanding the present, creating the future: Feminism and Midwifery *New Zealand College of Midwives* 20 April pp 5-9.


Department of Health 2008b Framing the Nursing and Midwifery Contribution: driving up the quality of care. DoH, London


Dewey, J. Experience and Education. New York: Kappa Delta Pi. 1938.


www.carlton.ca/~reaman/27511/practice_theory


English National Board. 2001a. *Education in focus – strengthening pre-registration Nursing and Midwifery Education,* Section 3; guidelines for pre-education midwifery programmes. London: ENB.


English National Board & Department of Health. 2001c *Preparation of Mentors and Teachers – A new framework of guidance.* London. ENB


Fowler, D. 2008. Student midwives and accountability: are mentors good role models?. *British Journal of Midwifery*. 16 (2) pp 100-104.


Fraser, D. Cooper, M. (ed) *Myles Textbook for Midwives*. Elsevier Health Sciences: UK.


Further Education Unit. Towards a Competency-based system. London FEU. 1984

Further Education Unit. Assessment, Quality and Competence. Ypok: FEU/Longman Group Resources Unit. 1986.


507
Gilligan, C. Woman's place in mans life cycle in *Feminism and Methodology* Ed. Harding S. Indiana University Press. USA. 1988


Gould, D. 2009. Re-engaging with accountability *British Journal of Midwifery* 17 (1) pp 6


Granger, R. Establishing causality in evaluations of comprehensive community initiatives. In Fulbright-Anderson A (Eds) *New Approaches to evaluating*


Greenwood J, n'haWinifreya A, 1995 Two strategies for promoting clinical competence in pre-registration nursing students Nurse Education Today 15 pp 184-189


Grundy, L. 1997. The role of the midwife in perineal wound healing following childbirth. British Journal of Nursing 6 (10) pp

Guerrina, R. Mothering the Union Manchester University Press. Manchester. 2005


Guiver, D. 2004. The epistemological foundation of midwife-led care that facilitates normal birth. The Royal College of Midwives Evidence Based Midwifery. 2 (1) pp 28-34.
Guthrie C 1999 Nurses' perceptions of sexuality relating to patient care *Journal of Clinical Nursing* 8 pp 313-321


Hinterberger, A. 2007. Feminism and the politics of Representation: Towards a critical and ethical encounter with ‘others’ Journal of International Women’s Studies 8 (2) pp 74-83

Hoffman J. 2001 Blind Alley : Defining feminism Politics 21 (3) : 193-199


Houle, C. 1961 The Inquiring Mind Madison, USA : University of Wisconsin Press.


Hubert, D. 2009 NMC News 27 NMC. London


Jarvis, P. 2007 Continuing learning and the place of university in the third age in late modern society. www.uni-ulm.de/LiLL/5.0/E/5.3/continui Accessed 1.10.07.


Kerka, S. 1994. Mandatory continuing education *ERIC Clearinghouse on Adult, Career and Vocational Education* Columbus Ohio.


Leap N. 2009 Woman-centred care or women-centred care: does it matter? *British Journal of Midwifery* 17 (1) ; 12-16


Miles, S. 2008. Make or break: the importance of good mentorship *British Journal of Midwifery* 16 (11) pp 704-711


Moyzakitis, W. 2004. Exploring women’s descriptions of distress and/or trauma in childbirth from a feminist perspective *The Royal College of Midwives Evidence Based Midwifery* 2 (1) pp 8-14.


Mutema E. 2007 'A tale of two cities': auditing midwifery practice and perineal trauma *British Journal of Midwifery* 15 (8) : 511-513


Mulhall, A. 2003 In the field: notes on observation in qualitative research *Journal of Advanced Nursing* 41 (3) pp 306-313.


*National Institute of Health and Clinical Excellence 2007*.


Nursing and Midwifery Council 2004b *Standards and proficiency for pre-registration midwifery education*. London: NMC.


Nursing and Midwifery Council 2007 *Standards for the preparation and practice of supervisors of midwives* London: NMC.

NMC 2008a *Standards to Support learning and Assessment in Practice: Standards for mentors, practice teachers and teachers* NMC. London

NMC 2008b *Supervision, support and safety* NMC. London

NMC 2008c *Modern Supervision in action: a practical guide for midwives* NMC. London


Nursing and Midwifery Order 2001 (S12002/253). The Stationary Office: www.hmso.gov.uk


Poell, R. Nan Der Krot, F. 2001. Constructing a research methodology to develop models for work-related learning: social science in action *Qualitative Studies in Education* 14 (1) pp 55-70.


Radcliffe, W. *Milestones in Midwifery*. Bristol: John Wright and Sons Ltd. 1967.


Royal College of Midwives. 2007b. RCM: Midwifery the Cinderella of the NHS. *Midwives*. 10 (2) pp 54.


Sarup, M. 1993. Postmodernism and its critics In www.as.ua.edu/ant/Faculty/murphy Accessed 21.3.03


Scheffler I 1965 *Conditions of Knowledge: an introduction to epistemology and education* Scott Foresman and Company : Chicago

Scott, J.W. Deconstructing equality-versus-difference: or the uses of poststructuralist theory for feminism In *Theorizing Feminism: Parallel Trends in the*
Scott-Smith, W. 2006 The development of reasoning skill and expertise in primary care. *Education for Primary Care* 17 pp 117-29.


Sloan, D. Donnelley, M. 1995. The objective clinical examination (OSCE) for formative and summative assessment in general practice clinical attachment and


Tanner, J. Hale, C 2002. The workshop as an effective method of dissemination: the importance of the needs of the individual *Journal of Nursing Management* 10 pp 47-54.


*The Learning Age* DfEE 1998.


Trochim, W. 2002 Quasi-experimental design
http://trochim.human.cornell.edu/kb/quasiexp.htm


UKCC. 1992 *Scope of professional Practice*. London: UKCC.


UKCC. 2001a Supporting nurses, midwives and health visitors through lifelong learning London: UKCC.


www.healthywomen.org/healthcentres/sexualhealthcentre/glossarysexualhealthtextmsoknow Accessed 31.3.08.


