THE SOCIAL CONTEXT OF WOMEN'S SLEEP: 
PERCEPTIONS AND EXPERIENCES OF 
WOMEN AGED 40 AND OVER

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Thesis Submitted for the Degree of Doctor of Philosophy
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© Jenny Hislop, July 2004
This thesis is dedicated to Poppy
with much love and gratitude.

*May you rest in peace*
*under the gum trees in a far off land.*
ABSTRACT

"Without Thee what is all the morning's wealth? 
Come, blessed barrier between day and day,  
Dear mother of fresh thoughts and joyous health!"

(Wordsworth, 1770-1850, To Sleep)
http://www.netpoets.com

This thesis, the first empirical study of the sociology of sleep conducted in the UK, takes a new approach to sleep research by examining the interrelationship between social context and the structuring of women’s sleep. The thesis contends that women’s sleep is influenced across the life course by the interaction of social roles and relationships and by life events and transitions. In conjunction with physiological factors, these dynamics define the nature of women’s sleep, create the potential for disruption, and influence women’s response to it.

Using a multi-method approach, including focus groups, qualitative interviews, sleep-life grids, audio sleep diaries and a national sleep survey to record and interpret women’s perceptions and experiences of sleep in everyday life, the thesis shows that for most women aged 40 and over, sleep disruption is a fact of life. It impacts on the quality of their lives and compromises their ability to function effectively. Socio-temporal factors associated with the institutionalised structures of paid work and retirement, women’s relational responsibilities in the home, and life events such as divorce, the menopause and widowhood, often impede access to a good night's sleep. Women are proactive in responding to disruptions by adopting a range of sleep management strategies, but the constraints of their everyday lives may limit the degree of control they can exercise over strategy choice.

The thesis concludes that not only is women’s sleep structured by the socio-temporal realities of everyday life, but that it may also reaffirm and perpetuate the gendered roles and relationships which underpin, structure and constrain women’s lives. Sleep thus becomes a lens through which to gain insights into the patterning of society with its gendered inequalities, as well as a fascinating topic in its own right.
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- The many women throughout the UK who generously shared their perceptions and experiences of sleep in focus groups, interviews, sleep-life grids, audio sleep diaries, and postal questionnaires in so doing revealing the diversity and complexity of their everyday lives. This is their story.

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INTRODUCTION

Sleep...........

".....knits up the ravell’d sleeve of care,
The death of each day’s life, sore labour’s bath,
Balm of hurt minds, great nature’s second course
Chief nourisher of life’s feast, ....”

(Shakespeare: Macbeth, Act ii, Sc.2)

Background to the study

As the ‘chief nourisher of life’s feast’, sleep plays a vital role in health, well-being and quality of life. Yet despite its prominent place in literature and in bio-medical research, sleep has until recently been missing from the sociological agenda; considered an unconscious state with little relevance to an understanding of everyday waking life. This thesis is dedicated to addressing this gap. By recording and interpreting women’s perceptions and experiences of sleep, the study seeks not only to increase awareness of the interrelationship between sleep and its social context, but to give insights into the gendered roles and relationships which underlie everyday life.

In January 2001, the opportunity arose to carry out pioneering empirical research into sleep in women aged 40 and over as part of a European Union funded project entitled Sleep in Ageing Women. This three-year project, comprising a team of sleep researchers from five European countries¹, represented an exciting new development in sleep research. For the first time sociologists were invited to complement the work of bio-medical scientists by examining the social dimensions of women’s sleep. The overall objectives of the project were to clarify why women aged 40 and over suffer from a considerable number of sleep disruptions that adversely affect their quality of life and efficacy in daily performance; and to consider ways of treating these disruptions.

¹The EU-project was co-ordinated by Tarja Porkka-Heiskanen (Finland) and involved teams led by Sara Arber and Debra Skene (UK), Myriam Kerkhofs (Belgium), Thomas Pollmacher (Germany), and Irene Tobler (Switzerland).
This thesis is based on my work as lead researcher on the sociology part of the project conducted in the Sociology Department at the University of Surrey (with Sara Arber as Principal Investigator). It represents the culmination of a three year journey in which sleep has permeated my working and leisure time as well as remaining an enjoyable and essential interlude between successive days. From being an innate part of my life attracting little thought, sleep has emerged not only as a fascinating topic worthy of study in its own right, but as a key to understanding the gendered roles and relationships and constraints which shape women’s lives across the life course.

Thesis aims

The thesis adopts a multi-method approach, using focus groups, qualitative interviews, sleep-life grids, audio sleep diaries, and a sleep questionnaire to record and analyse women’s experiences of sleep in the context of their everyday lives. It aims to:

- increase understanding of women’s sleep in relation to its social context by examining the impact of roles and relationships, life events and transitions on the structuring of women’s sleep across the life course;

- identify and evaluate the strategies women use to manage sleep disruption in relation to these factors; and

- give insights into the gendered roles and relationships which underpin, structure and constrain women’s everyday lives.

The research questions

Within the context of these aims, the thesis addresses four main research questions which focus on the:
• characteristics of sleep in women aged 40 and over in the UK;
• factors associated with women’s experience of sleep disruption;
• ways in which women seek to improve their sleep outcomes; and
• insights the study brings to understandings of gender roles and relationships.

These research questions are discussed in more detail in Chapter Three.

Outline of the thesis

The thesis comprises fifteen chapters, arranged in six parts:

PART I: Researching sleep (Chapters One and Two)
PART II: Methodology (Chapters Three to Five)
PART III: The characteristics of women’s sleep (Chapter Six)
PART IV: Understanding sleep disruption (Chapters Seven to Ten)
PART V: Managing sleep disruption (Chapters Eleven to Fourteen)
PART VI: Discussion and conclusions (Chapter Fifteen)

Part I provides a review of the bio-medical and sociological literature on sleep which informs this study. Chapter One examines the contribution of bio-medical sciences to an understanding of sleep physiology. It provides a brief overview of sleep physiology; highlights research findings in relation to ageing, sex differences and sleep; examines recent developments in research into women’s sleep; and identifies, from a sociological perspective, limitations in this approach. Chapter Two reviews the key stages in the development of a sociology of sleep. It examines the early writings of Aubert and White (1959a; 1959b), Schwartz (1973) and Taylor (1993) in establishing a sociology of sleep; discusses the contribution of more recent theoretical studies, including those of Williams and Bendelow (1998) and Williams
(2002), in setting an agenda for the sociology of sleep; and highlights the potential contribution of a sociological approach to multi-disciplinary sleep research.

Part II examines the integrated multi-method approach used in researching women’s sleep in this thesis. Chapter Three outlines the research design. It includes discussion of the research framework, the research questions, and the methodological approach which underlie the research. Chapter Four overviews the use of qualitative methodology. It discusses the use of focus groups, qualitative interviews, and audio sleep diaries, as well as approaches to analysing these data. Chapter Five examines the use of quantitative methodology, focusing on the development and analysis of a self-completion postal questionnaire, the 2003 Women’s Sleep in the UK Survey.

Part III comprises one chapter (Chapter Six) which describes the characteristics of women’s sleep from the age of 40. Based on findings from the 2003 Women’s Sleep in the UK Survey, the chapter uses univariate and bivariate analysis to describe the nature of women’s sleep, factors influencing the quality of their sleep, and strategies for managing sleep disruption. The effect of ageing on women’s sleep is also highlighted.

Comprising four chapters, Part IV focuses on understanding sleep disruption in terms of the institutional, relational and life course constraints on women’s lives. Drawing on relevant literature, it contends that the social context of women’s lives, with its competing socio-temporal demands from paid work and family responsibilities creates differential access to the sleep resource throughout the life course, thus rendering sleep disruption a fact of life for most women aged 40 and over. Chapter Seven considers the socio-temporal constraints which structure women’s sleep across the life course, suggesting a model through which to examine the incidence of sleep disruption. Chapter Eight focuses on the influence of the institutionalised structures of work on women’s sleep and on the effect of the loss of this structure on sleep after retirement. Chapter Nine considers the relational aspects of women’s lives and suggests that the gendered nature of women’s roles and relationships may constrain their access to good sleep. The final chapter in Part IV, Chapter Ten, examines how the interplay of institutional, relational and life course factors shape women’s sleep
patterns, forming a sleep trajectory across the life course. Using a case study approach, it draws on data from sleep-life grids to illustrate how women’s sleep reflects their life circumstances.

Part V examines how mid-life and older women manage sleep disruption in their everyday lives. It suggests that women’s approaches to sleep management can best be conceptualised as a three-tiered model (Chapter Eleven), comprising a core of everyday routines, activities and lifestyle behaviours (Chapter Twelve); the use of over-the-counter products and complementary therapies to supplement these strategies (Chapter Thirteen); and the use of medical intervention when sleep disruption seriously undermines functioning in everyday life (Chapter Fourteen).

Part VI draws together the results of the research in Chapter Fifteen. It discusses the relevance of the study to both an understanding of the nature of women’s sleep, and to an understanding of the gendered nature of women’s roles and relationships in everyday life. It concludes by evaluating the contribution of the study to the development of a sociology of sleep and to sleep research in general, and suggests future research and dissemination activities.
PART I
RESEARCHING SLEEP
Chapter One

THE CONTRIBUTION OF BIO-MEDICAL SCIENCES TO AN UNDERSTANDING OF SLEEP PHYSIOLOGY

'Sleep is a dynamic behaviour. Not simply the absence of waking, sleep is a special activity of the brain, controlled by elaborate and precise mechanisms.' (Hobson, 1989: 1)

This thesis is concerned with researching women’s sleep from a sociological perspective. However, any study of sleep must begin with a brief history of the development of sleep science and its contribution to an understanding of sleep physiology.

As described by Dement (2000), scientific interest in the study of sleep dates to the first recording of electrical activity in the human brain by the German psychiatrist, Hans Berger, in 1928. The use of electroencephalograms (EEG) to measure sleep brain wave patterns in humans represented a major breakthrough in sleep research. However, it was not until the early 1950s that the basic sleep pattern of 90-minute cycles of REM (rapid eye movement) and non-REM sleep was discovered by Aserinsky and Kleitman (1953) and reported in a seminal paper. Dement, who worked with Aserinsky and Kleitman during this period, describes the discovery as follows:

‘After carrying out all-night recordings in a large number of individuals, I began to become convinced that periods of rapid eye movement were part of a 90-minute basic sleep cycle. Everybody, without exception, had the same pattern of sleep. This was a major discovery.' (Dement and Vaughan, 2001: 38)

This discovery marked the beginning of sleep becoming a ‘true scientific field’ (Dement and Vaughan, 2001: 37). It heralded an upsurge of interest in sleep research, spawned the publication of the first journal dedicated to the study of sleep, Sleep, in 1978 (Dement and Vaughan, 2001), and a plethora of research projects aimed at increasing knowledge and understanding about sleep. In the past forty
years, research studies have focused on areas such as the role of circadian rhythms in regulating sleep; the influence of hormones such as prolactin, growth hormone, cortisol, and melatonin on sleep patterns; the impact of sleep deprivation on mood, cognitive skills and physical performance; and, more recently on the impact of the menstrual cycle, pregnancy, and the menopause on women’s sleep (see Dzaja et al., forthcoming).

In addition, the development of sleep medicine since the 1970s has seen the burgeoning of research into the diagnosis and treatment of specific sleep disorders such as obstructive sleep apnoea (OSA: a snoring-related disorder in which the airways collapse blocking breathing), narcolepsy (an extreme tendency to fall asleep), and restless legs syndrome (RLS: a ‘creepy crawly’ sensation in the legs accompanied by a strong urge to keep moving the legs or get up and walk around to relieve the discomfort). These studies have been facilitated by the use of polysomnography and actigraphy which identify sleep stages and measure bodily movements during sleep.

This chapter examines the contribution of the bio-medical sciences to sleep research as a means of contextualising the thesis within the existing body of knowledge about sleep. It:

- provides a brief overview of sleep physiology;
- highlights research findings in relation to ageing and sex differences;
- examines recent developments in research into women’s sleep; and
- identifies, from a sociological perspective, limitations in a bio-medical approach to sleep research.
1.1 A brief overview of sleep physiology

1.1.1 The importance of sleep

"Care-charming Sleep, thou easer of all woes."

(Francis Beaumont, *Valentinian*, ii)
http://www.digiserve.co.uk/quotations/search.cgi

Sleep is ‘a basic necessity of life, as fundamental to our health and well-being as air, food and water’ (National Sleep Foundation, 2001b, website). Yet, despite the vast scientific literature on sleep which has emerged in the past forty years, the precise function of sleep remains unknown. Two main theories have emerged to explain why we sleep: firstly that the function of sleep is to conserve and balance the energy that is expended during the day; and secondly, that sleep serves as a period of total body and neurological restoration (Shapiro and Flanigan, 1993). Expressed simply, however, the function of sleep is ‘to enable us to be awake’, with insufficient sleep resulting in sleepiness, mood swings, difficulty concentrating, lack of energy and creativity, and poor quality of life, as well as an increased risk of accidents (Hetta, 2002).

Sleep is not only essential to mental and physical performance, but inadequate sleep has been found to weaken the immune system and may be a risk factor for type-11 diabetes and obesity (National Sleep Foundation, 2002). In somewhat alarmist tones, the subheading to an article in *Reader’s Digest* (Brink, 2001: 100) warns that ‘skimping on sleep could be the death of you’. The article claims that ‘our productivity, our safety, our health are at risk’ if we do not get enough sleep. Citing research carried out by pre-eminent sleep scientists in the US, it suggests that lack of sleep can accelerate weight gain; alter our white blood-cell counts and immune-response modifiers leaving us open to infection; and even increase our risk of breast cancer through disruption of hormone levels.

Indicative of this research is a ground-breaking study carried out by Van Cauter’s team at the University of Chicago on the potential health impact of repeated sleep
deprivation (or 'chronic sleep debt') on the metabolic and endocrine functions of young men (N=11) restricted to four hours sleep per night for six days (Spiegel et al., 1999a). The results of this study suggest that inadequate sleep can increase the risk of diabetes and hypertension. Subsequent research has also highlighted a possible link between chronic sleep loss and the trend to obesity in the US (Van Cauter, 2002). Lack of sleep can force down production of the growth hormone which controls the body’s proportions of fat and muscle, while low levels of leptin which result from loss of sleep may increase hunger and appetite (Brink, 2001).

1.1.2 Sleep needs

"Six hours in sleep, in law’s grave study six
Four spend in prayer, the rest on Nature fix."

(Sir Edward Coke, 1553-1634)
http://education.yahoo.com/search/bfq?p=sleep

Opinion concerning the right amount of sleep has differed across time. Coke’s schedule of six hours sleep reflects common perceptions of the appropriate amount of sleep in the pre-industrial era, and is supported by a common aphorism of this period which dictated ‘six (hours of sleep) for a man, seven for a woman, and eight for a fool’ (Wright, 1962). Yet, throughout the past century, eight hours sleep per night has become the recommended amount needed to ensure good health and well-being:

‘Most adults find they require at least eight hours of uninterrupted sleep to avoid fatigue, irritability and a drop in performance.’ (Johnson, 2000: 1)

According to the 2000 Omnibus Sleep in America Poll (National Sleep Foundation, 2000, website), however, few people reach this goal, with the majority sleeping on average 6 hours and 54 minutes per night during the working week. Sleep is often given a low priority in people’s lives, creating a ‘national sleep debt’ in the US:

‘In our 24-hour society, we steal nighttime hours for daytime activities, cheating ourselves of precious sleep. In the past century, we have reduced our average time asleep by 20 percent and, in the past 25 years, added a month to
However, there is increasing evidence which suggests that eight hours of sleep is in fact excessive and may be a risk factor in mortality. Kripke’s analysis of the results of three studies on the relationship between sleep duration and mortality (Kripke et al., 2002; Patel et al., 2003; Tamakoshi and Ohno, 2004), showed that ‘long sleep (above 7.5 hours) was associated epidemiologically with more of the populations’ excess mortality risk than short sleep (below 6.5 hours)’ (Kripke, 2004: 13).

According to Kripke, these results ‘falsify the widely-circulated hypothesis that it is best to sleep at least 8 hours’, and on this basis he suggests that clinicians should not recommend that adults sleep eight hours or more (Kripke, 2004: 13-14). In terms of mortality, sleep duration of between 6.5-7.5 hours on weekdays is advised. If this is the case, then Americans may not in fact be experiencing the sleep debt described above, but may ironically be ensuring a longer life through shorter sleep duration.

Yet despite these findings, the amount of sleep one needs remains highly individualised and perhaps best expressed, not in terms of actual sleep duration, but in terms of feelings of well-being and perceived ability to perform the following day. In essence, people need enough sleep to function and perform well during the daytime (Hetta, 2002). Thus setting goals of eight hours or even 6.5-7.5 hours may in fact create unrealistic sleep expectations which place unnecessary pressure on individuals to conform to an ideal rather than their own needs. Moreover, although sleep needs may remain constant throughout adult life, changes to sleep patterns in later life may mean that sleep is distributed differently during the 24 hour period (Phillips and Ancoli-Israel, 2001). Increased napping activities after retirement, for example, may compensate for shorter night-time sleep.

1.1.3: The sleep-wake cycle

According to Dijk and Lockley (2002), the two major determinants of the timing of the human sleep-wake cycle are the circadian pacemaker (or clock) and the sleep homeostat. The circadian clock maintains 24 hour rhythms in ‘most physiological,
biochemical and behavioural variables’ (Rajaratnam and Arendt, 2001: 999), including core body temperature and the synthesis and secretion of hormones such as melatonin, cortisol and prolactin. The onset of sleep is dictated by the stage of the circadian cycle we have reached and is normally initiated at night ‘during the rising phase of the melatonin rhythm and declining phase of the body temperature rhythm’ (Rajaratnam and Arendt, 2001: 999). As the body temperature starts to rise again around 4-6am and increasing light lowers melatonin levels, the likelihood of waking increases. External time cues or zeitgebers such as alarm clocks also influence the timing of the sleep-wake cycle.

Closely interrelated with the circadian clock, the homeostatic system regulates patterns of alertness and sleepiness throughout the 24 hour cycle. Pressure to sleep increases the longer we have been awake; while feelings of alertness usually follow a period of sleep. (For a more detailed analysis of the circadian system in relation to sleep see Czeisler and Khalsa, 2000)

1.1.4: The main stages of sleep

During the night the body alternates between two main sleep states: non rapid eye movement (non-REM) and rapid eye movement (REM) sleep. Non-REM sleep comprises 75-80% of sleep, while REM sleep occupies 20-25% of sleep duration (Carskadon and Dement, 2000). Insights into the main stages of sleep can be gained by examining the output of polysomnographic recordings of sleep (known as hypnograms). Figure 1.1 is a hypnogram of normal sleep patterns in younger adults, which illustrates the four main stages of non-REM sleep (Stages 1-4). These stages are characterised by changes in brain wave activity as shown in the electroencephalogram (EEG) in Figure 1.2.

As Figures 1.1 and 1.2 show, non-REM sleep comprises four main stages:

- **Stage 1** (2-5% of total sleep time): a short transitional period of ‘falling asleep’ following sleep onset. Stage 1 is characterised by a shift from the
rapid beta waves of daytime to slower alpha waves, and a gradual relaxation of the muscles. At this stage, however, the person can be easily awakened.

Figure 1.1: The main stages of sleep in younger adults

![Diagram of sleep stages]

Figure 1.2: Electroencephalogram (EEG) of brain wave activity during REM and non-REM sleep

![EEG diagram]

(Morgan, 1998: 1402, Figure 99-1)

(Gribben, 1990: 3)
• **Stage 2 (45-55% of total sleep time):** the first phase of real sleep. This stage is characterised by larger brain wave activity as breathing and pulse rate slow down and blood pressure drops.

• **Stage 3 (3-8% of total sleep time):** a relatively short period of deepening sleep which acts as a bridge between Stages 2 and 4. Stage 3 is characterised by the production of large, slow brain waves (delta waves) and a further relaxation of the muscles.

• **Stage 4 (10-15% of total sleep time):** a period of deep sleep characterised by slow delta waves, and a drop in body temperature during which it is very difficult to wake people. Stages 3 and 4 are generally referred to as slow-wave sleep (SWS) or delta sleep.

The completion of the non-REM sleep cycle is followed by a period of REM sleep (20-25% of total sleep time), during which dreaming may occur. This phase is characterised by rapid eye movement; irregular breathing, pulse and blood pressure; and muscle twitching. While brain waves during this period are similar to those when awake, the person is essentially paralysed to prevent enactment of dreams.

The complete sleep cycle of non-REM Stages 1-4 and REM sleep takes approximately 90 minutes and is repeated four to six times throughout the night. As Figure 1.1 shows, however, the nature of sleep changes over the course of the night. Slow wave sleep (SWS) is most intense during the early part of the sleep period, diminishing to almost nothing by morning. In contrast, REM sleep episodes usually become longer across the night.

Yet, while Dement’s observation made in the 1950s that alternating patterns of non-REM and REM sleep were common to all humans is correct (Dement and Vaughan, 2001), subsequent research has shown that sleep patterns are subject to change across the life course and between men and women. Section 1.2 examines how ageing can influence the structuring of sleep and how this differs for men and women.
1.2 Ageing, sex differences and sleep

1.2.1: Changing patterns of sleep with ageing

Age is the strongest and most consistent factor affecting the pattern of sleep stages across the night (Carskadon and Dement, 2000). From a physiological viewpoint, ageing is associated with major changes in sleep structure, quality and timing (Dijk et al., 2001).

Figure 1.3: The main stages of sleep in older adults

As Figure 1.3 shows, among older adults sleep patterns become lighter and more fragmented (compared to those in Figure 1.1) and are characterised by more frequent and prolonged awakenings as the amount of slow wave or deep sleep declines (see for example, Bixler et al., 1984; Bliwise, 2000; Morgan, 1998). Although the amount of REM sleep remains constant across the life course, many people over 60 have ‘very little stage 4 (deep sleep) left at all’ (Dement and Vaughan, 2001: 122), thus leaving them vulnerable to sleep disruption from external factors such as noise, light, and movement. Moreover, changes in the circadian regulation of the sleep-wake cycle with ageing create a tendency for people to become ‘more larklike, falling asleep earlier and getting up earlier’ (Dement and Vaughan, 2001: 122). Shifts in the circadian clock may also lead to patterns of daytime napping and increased fatigue, thus further compromising the ability of the older person to sleep at night. The discontinuity in sleep patterns arising from these age-related changes may cause
feelings of anxiety and dissatisfaction with sleep as the gap between sleep expectations, based on lifetime experiences, and new sleep realities becomes apparent.

1.2.2: Sex differences and sleep

The process of change in sleep patterns associated with ageing is unique and different not only between individuals but also between men and women. Studies of brain wave patterns in sleep indicate that, from a physiological perspective, it is men who experience the greater deterioration in sleep patterns with ageing (see for example, Webb, 1982; Reynolds et al., 1985; Hume et al., 1998; Schubert et al., 2002). Rediehs et al’s (1990) meta-analysis of 27 sleep studies addressing differences in sleep behaviour between men and women aged 58 and over, found that while older men had a higher percentage of lighter sleep stages, women enjoyed a greater percentage of deeper restorative sleep. Similarly, Bixler et al’s (1984) study of the effects of age and sex on nocturnal waking for men and women aged between 19 and 80 (N=100), found that although wakefulness during the night increased with age across both sexes, it was more positively correlated with age for men than for women.

However, studies which explore the prevalence of sleep problems in men and women show that it is women, rather than men, who report a higher incidence of sleep disruption. According to the 2000 Omnibus Sleep in America Poll (National Sleep Foundation, 2000, website), for example, insomnia symptoms occurring at least a few nights a week were reported by 61% of women compared to 53% of men. The findings of this survey are supported by other studies which have shown a higher incidence of reported complaints of sleep disturbance in women (see for example, Rediehs et al., 1990; Reyner and Horne, 2002; Schubert et al., 2002; Morgan, 1998). Morgan’s (1998) study of sleep in people aged 65 and over in Nottingham in the late 1980s, showed a reported prevalence of insomnia (problems with sleep onset, maintenance, and early awakening) in almost twice as many women as men (28% vs 15%). Similarly, Schubert et al (2002) found that the problem of waking and having a hard time getting back to sleep, although experienced by both men and women,
was more commonly reported by women than men up to the age of 80. Reyner and Horne (2002), in their study of adults aged 20-70 (N=400), found that women reported more awakenings, more total time spent awake during the night and poorer sleep quality than men, with these findings more evident in older women. Similarly Middelkoop et al’s (1996) epidemiological study of sleep characteristics in men and women aged 50 and over (N=1485) showed that the prevalence of disturbed sleep onset and maintenance was greater in women than in men.

Sex differences have also been found in relation to the prevalence of specific sleep disorders. Rediehs et al’s (1990) review of sleep literature found that the incidence of respiratory disturbances such as the snoring-related disorder obstructive sleep apnoea (OSA), and periodic limb movements (PLMS: a condition in which people experience periodic leg jerks throughout much of the night) was significantly higher in men than women. This review is supported by subsequent studies. Ancoli-Israel et al’s (1991) study of a randomly selected sample of 192 men and 228 women aged 65 and over in the US found that although the prevalence of PLMS was equally distributed among men and women across all ages 65-89, relatively severe PLMS was almost twice as high in men aged 65-79 as in women. Enright et al’s (1996) study of self-reported sleep disturbances in 5201 men and women aged 65 and older participating in a cardiovascular health study in the US found that the prevalence of snoring increases with age until the age of 70, with men more likely than women to report that others had complained about their loud snoring (33% vs. 19%). The implications of increased movement from partners and the sound of snoring on maintaining sleep quality and harmony in the couple relationship are potentially considerable.

1.2.3: Health factors, sleep and ageing

Alongside physiological changes in sleep patterns, the ageing process is characterised by an increase in health problems which can cause discomfort and sleep disturbance both for the sufferer and, by association, for their partner. Medical diseases and chronic illness play an important role in influencing sleep quality in old age. Heart and respiratory problems, sleep apnoea, joint pain, arthritis, prostate
problems, hypertension, restless legs, cancer and dementia, as well as the medications used to treat these disorders, can increase the potential for sleep disruption. Bliwise et al (1992) in their study of the prevalence of self-reported poor sleep in a carefully screened healthy population aged 50-65, found that sleep problems in this group were consistently lower than in previous population-based studies of individuals of comparable age. They concluded that when health factors are taken into account, a decline in sleep quality is not necessarily inevitable in later life.

Foley et al (1995), in studying sleep complaints among men and women aged 65 and older (N=9000), concluded that a considerable proportion of sleep complaints may be associated with co-morbidity. These findings are supported by those of Ito et al (2000) in their study of the correlates of sleep disturbance among elderly Japanese (N=255 men, 262 women), and Vitiello et al (2002) in their study of the relationship between health and sleep complaints in 2954 volunteers. These studies both found a close association between sleep disturbances and health problems. According to Vitiello et al (2002: 558), the majority of sleep complaints seen in later life are 'most likely secondary to any number of medical and psychiatric illnesses and related health problems, rather than directly related to ageing per se'. Ito et al stressed the need for clinicians to consider underlying health problems when patients complain of sleep-related symptoms.

Health problems which may affect the quality of sleep in later life can be related to ageing and sex differences. A survey conducted by MORI on behalf of the Arthritis Research Campaign (ARC) (2002, website) found that people aged 55 and over were almost three times more likely to suffer from arthritis or joint pain than those aged under 55 years (52% vs 18%). The study found that the incidence of arthritic conditions was more prevalent in women than men. The need to go to the toilet frequently during the night (nocturia) is similarly problematic in later life for both men and women. Non-cancerous enlargement of the prostate affects about half of all men by the age of 60, rising to 80% in their 80s, while prostate cancer increases in men from the age of 50 (Prostate Research UK, 2003, website). Asplund and Aberg (2000), in a study of nocturia and health in women aged 40-64, found that the need to go to the toilet during the night increased in frequency after the menopause. Nocturia
can thus increasingly disturb the sleep and well-being of both men and women in later life.

1.3 Research into women’s sleep

1.3.1: Bias in physiological sleep research

From self-report studies, the link between women’s sleep and changing levels of hormones such as oestrogen and progesterone during the menstrual cycle, pregnancy and the menopause is well-established. A survey of women’s sleep conducted in the US (National Sleep Foundation, 1998, website), for example, found that:

- sleep is disturbed 2.5 days during the menstrual cycle for all menstruating women;
- women who are pregnant or recently pregnant are more likely to report disturbed sleep (64%) than menopausal/postmenopausal women (56%) and premenopausal (non-pregnant) women (49%);
- women going through the menopause reported difficulty sleeping due to hot flashes an average of five days a month; and
- menopausal and postmenopausal women sleep less than pre-menopausal (non-pregnant) women both during the working week and on weekends.

Yet although bio-medical studies have included women in their samples, sleep scientists have been reluctant to engage in specific research on women’s sleep. Most basic and clinical studies reported in academic papers on sleep in the past 20 years relate primarily to men:

‘Most of our present knowledge about normal sleep, sleep disorders and the consequences of disrupted sleep have come from studies of men .... once reproductive maturity is reached, it seems there has been a bias to exclude adult females from research studies.’ (Driver et al., 1999: 274).

This bias towards men’s sleep is highlighted in a survey of sleep research literature conducted in 1994 for the National Commission of Sleep Disorders Research in the
US, which found that, although women composed 52% of the population, 85% of sleep studies were conducted on men (Carskadon et al., 1994; cited in Driver et al., 1999). A MEDLINE search of publications in 1996 compared representation by sex in papers published on sleep over a ten year period (Driver et al., 1999). The search found that although the number of studies which included women as well as men had increased three-fold since 1986, the number and relative proportion of papers verified to be sleep studies on women only, fell from 13% in 1986 to just under 8% in 1996, compared to sleep studies on men only, which fell slightly from 36% to 32% over the same period. Moreover, less than 15% of the total number of sleep studies on women in 1996 dealt with the issues of pregnancy, menstruation and the menopause.

1.3.2: Current developments

This situation may slowly be changing, however. Through its research and dissemination, the EU-funded Sleep in Ageing Women project, on which this thesis is based, aims to address the gap in physiological knowledge on women's sleep. A review of research on women's sleep conducted by the project team (Dzaja et al., forthcoming) provides some insights into current developments in our understanding of sleep from a women's perspective. In relation to the distinctive changes in sleep across the menstrual cycle, during pregnancy and the menopause, for example, the review shows that:

- in healthy women, total sleep time, sleep efficiency, sleep latency, and subjective sleep quality do not appear to be strongly affected by the menstrual cycle;
- sleep quality is impaired in women suffering from dysmenorrhea (painful periods), and/or pre-menstrual syndrome (PMS) or pre-menstrual dysphoric disorder (PMDD);
- pregnancy is accompanied by dramatic changes in hormonal levels which affect sleep quality;
- increased awakenings after sleep onset and decreased sleep efficiency are common during pregnancy;
• there is an increase in the incidence of restless legs syndrome among pregnant women, although this ceases in most women after delivery;

• there is a marked increase in deeper slow wave sleep (SWS) in women who breast feed their babies which may be attributable to increased levels of circulating prolactin;

• vasomotor symptoms such as hot flushes during the menopausal transition correlate strongly with sleep complaints; and

• the use of hormone replacement therapy (HRT) may be an effective treatment to control menopausal sleeping complaints, especially vasomotor symptoms.

1.4 Conclusion

As this chapter has shown, our knowledge of sleep to date has been predominantly informed by bio-medical research. From a physiological viewpoint, sex differences and ageing play a key role in structuring sleep, and by investigating sleep from these viewpoints, sleep scientists continue to make a valuable contribution to our understanding of the nature of sleep. Yet, while the bio-medical approach has yielded significant insights into the nature and structure of sleep, from a sociological perspective, it has a number of shortcomings:

• Although advancements in technology such as actigraphy have enabled some sleep studies to be conducted in the field, research still takes place predominantly in science laboratories or sleep clinics, removed from the everyday sleeping environments of participants. As Rediehs et al (1990: 422) observe, participants agree to sleep with multiple monitoring devices attached, including ‘electroencephalogram, electro-oculogram, and electromyogram leads, possibly nasal and oral termisters, and devices to measure leg movements and penile tumescences’. In this environment, there is no assurance that sleep achieved is equivalent to normal sleep in participants’ own homes. Yet, conclusions about the nature of sleep have been reached on the basis of results obtained under these, or similar, conditions.
• Participants are carefully screened and may be excluded from studies on the basis of such factors as: sex; age; illness; and use of contraceptives, hormone replacement therapy or other medication. This approach, while necessary to minimise the influence of these variables on results, fails to capture a complete picture of ‘normal’ everyday sleep which takes place against a backdrop of diverse socio-cultural influences. As a result, scientific data has been biased towards younger men, with women often excluded from studies, and older people ruled out because of co-existing medical conditions. Conditions unique to women such as the menstrual cycle, pregnancy and the menopause and their impact on sleep may be neglected. Research findings may thus fail to appreciate important differences in sex and ageing on the structuring of sleep.

• While epidemiological studies of sleep may comprise a large representative sample of the population, the number of participants in many laboratory studies is quite small. Driver et al’s (1996) study of sleep across the menstrual cycle, for example, comprised just nine women; Spiegel et al’s (1999b) study of the impact of sleep deprivation on metabolic and endocrine functions comprised eleven young men. While these studies may provide preliminary insights into the nature of sleep and form the basis of future investigations, they represent too small a sample to be generalised to a wider population.

• Objective, quantitative methods are used to collect data, including clinical trials, randomised crossover designs, encephalography (EEG) recordings, polysomnography, actigraphy, sleep questionnaires, and sleep logs. Data is quantified, with little opportunity to reflect participants’ subjective experiences of sleep. While the influence of social factors on sleep is sometimes acknowledged, the methods preclude a detailed exploration of everyday experiences of sleep.

• Sleep medicine focuses on the diagnosis and treatment of clinical sleep disorders such as obstructive sleep apnoea, restless legs syndrome and
narcolepsy, rather than the ‘normal’ disruptions associated with sleep in everyday life, for example, the influence of children, partners, and work on sleep. Treatments are based on medical intervention, and include the use of benzodiazepine hypnotics (sleeping pills) for insomnia, and CPAP (Continuous Positive Airways Pressure) masks for sleep apnoea, thus emphasising the role of the medical profession in managing women's sleep. The day-to-day strategies which women use to help overcome sleep problems within their individual social contexts are thus overlooked.

- Bio-medical studies of sleep often use the term ‘gender differences’ to refer to the physiological distinction between male and female sex. Discussions of gender differences from this perspective, however, fail to take into account the influence on sleep of socially constructed differences between men and women, for example, gender roles and relationships within the home. To avoid confusion in this thesis, the term ‘sex differences’ will be used when referring to bio-medical research, and ‘gender’ when referring to the sociological conceptualisation of difference.

- Similarly, ageing is seen in bio-medical research as a chronologically determined variable characterised by adverse physiological change, rather than in its social context as a reflection of changing roles and relationships in response to life events and transitions.

Yet if one of the major shortcomings of the bio-medical approach to the study of sleep has been its failure to adequately address the social context of sleep, then sociology has been similarly negligent. Despite its potential to provide the missing link in sleep research, until recent years the study of sleep has been absent from the sociological agenda, Chapter Two provides an overview of sociological approaches to the study of sleep as a basis for contextualising the aims and objectives of this thesis.
Chapter Two

TOWARDS A SOCIOLOGY OF SLEEP: A REVIEW OF SOCIOLOGICAL APPROACHES TO THE STUDY OF SLEEP

"From nearly all social history and biography, one third of the story is missing .... a gap of about eight hours in every day, hours which need by no means be uneventful or without significance." (Wright, 1962: preface)

The sociology of sleep offers an exciting new dimension in sleep research. Once considered a ‘taken for granted a-sociological phenomenon of unconsciousness’ (Taylor, 1993: 463) and thus outside the scope of sociology with its concerns for waking life, sleep has only recently emerged as a recognised theme for sociological study. Rather than focusing exclusively on the physiology of sleep, sociologists contend that sleep takes place within a social context which influences the patterning of sleep throughout the life course. As a mirror of everyday life, sleep reflects the roles and responsibilities, gender divisions, health patterns, and transitions which characterise people’s lives.

This chapter reviews the key stages in the development of a sociology of sleep. It:

- examines the contribution of Aubert and White (1959a; 1959b), Schwartz (1973) and Taylor (1993) to the establishment of a sociology of sleep;

- discusses the contribution of more recent theoretical studies, including those of Williams and Bendelow (1998) and Williams (2002), in setting an agenda for the sociology of sleep; and

- analyses the key role of sociology in multi-disciplinary sleep research.
2.1 The dormancy of sleep: Early writings

The publication of two papers by Aubert and White (1959a; 1959b) in the late 1950s marked a cornerstone in the development of a sociology of sleep. In proposing a social interpretation of sleep, Aubert and White claim that in addition to being a biological activity, human sleep is a 'social event' characterised by culturally defined behaviours and roles learned from childhood. Moreover, they claim, sleep is a key factor in social organisation. Social identity in terms of residence and family bonding, for example, is shaped by the need to establish a dedicated place to sleep. A person 'lives' where he (sic) sleeps; to sleep outside the family grouping is to contradict social norms of behaviour and invite stigma rather than strengthening the family bond. Aubert and White suggest that these social structures, together with cultural patterns such as prayers and lullabies, have developed in part to protect the sleeper from fears of death, loneliness, and interaction with the supernatural world through dreams.

Yet while recognising the social nature of sleep, Aubert and White (1959a: 52) conceive the sleep period as a *temps perdu*, a static 'scene of life' which effectively places a 'social barrier between two successive days and the social activities they encompass'. Sleep, they assert, challenges a person’s right to occupy their daytime roles and their social identity and represents a corresponding loss of power. They contend that to compensate for this, the sleep-role permits the abandonment of waking roles, with a sleeping person granted absolution from the expectations and responsibilities which apply in daily life.

This idea of sleep being a periodic remission from daytime roles is carried forward by Schwartz (1973: 20), who, drawing on the work of Parsons (1951), describes sleep as 'the fundamental tension release phenomenon .... (which) admits withdrawal from all that is subjectively as well as objectively social'. This withdrawal is facilitated by an institutionalisation of sleep within society which encourages people to synchronise their sleep to a common time schedule. According to Schwartz, this scheduling is regulated by a set of rights and obligations. A sleeper’s right to sleep undisturbed within a particular time period is ensured by their obligation to segregate
themselves within the home so as not to ‘needlessly intrude upon the conscious world’ (Schwartz, 1973: 26). Entry to the sleep role is preceded by an ‘institutionalised transition phase’ (p. 25) in which the sleeper undertakes a series of rituals which establish the wake-sleep boundary. Similarly, a set of preparatory movements mark the sleep-wake transition in the morning.

Schwartz also considers the influence of power and social rank on the sleeper. He compares the right of the sleeper in society to privacy during sleep with that of prisoners in total institutions whose sleep is subject to public monitoring throughout the night. He contends that the sleep role reflects hierarchical order, with sleeping arrangements indicative of the sleeper’s rank and status in society. Prisoners, are subject to the control of authorities who dictate where they sleep and with whom they share their cells. In the home environment, parents may not only occupy the ‘master bedroom’, but have power to impose bedtimes on their children.

These ideas were to form an important part of subsequent sociological enquiry into sleep. Interest in the sociology of sleep, however, was to lie dormant for a further twenty years until Taylor (1993) took up the challenge of ‘socialising’ sleep in the early 1990s.

Taylor’s thesis centres on bringing sleep into the sociological domain through a linguistic shift from the passive concept of ‘being asleep’ to the more active idea of ‘doing sleep’. He suggests moving the focus of sleep research from the ‘what’ and ‘why’ questions posed by sleep scientists, to the ‘when’, ‘where’ and ‘with whom’ questions associated with sociological enquiry. Taylor’s paper represents an important step in correlating sleep with sociological variables such as age, social class and gender. He argues that sleep becomes more private and less ‘interactive’ as age increases. While children’s sleep is subject to observation by others, the right to sleep privately without being observed is an important part of the transition to adulthood. Like Schwartz, Taylor notes the loss of power, authority and identity which occurs when adults are stripped of the right to privacy in medical and other institutionalised settings where observation by others during sleep is standard practice.
Taylor contends that from a sociological perspective, sleep is related to issues of class inequalities. The right to sleep privately, he alleges, is linked to socio-economic status; a fact illustrated by the freedom of married members of the upper classes, such as royalty, to choose private sleeping arrangements, while the ‘tenement dweller living five to a room would find sleeping alone an impossible luxury’ (Taylor, 1993: 467). Similarly, people’s perceptions of the purpose of sleep may also be related to social class. While those of lower status may see sleep as a respite from exhausting labour and as preparation for the following day’s work, for others, sleep may be considered a leisure pursuit, an acceptable and desirable pastime.

As an introduction to the sociology of sleep, the works of Aubert and White, Schwarz, and Taylor raise a number of important sociological issues to guide further research. Yet, in terms of addressing women’s sleep they have little to say. While Aubert and White, and Schwarz make no specific mention of women’s sleep, Taylor hypothesises that sleep may provide fascinating insights into sociological constructs such as gender. He suggests a possible correlation between gender and sleep patterns indicative of wider inequalities of power:

‘The question of whether females’ sleep is considered less important than that of males’ could be operationalized through a simple research project designed to discover which married partner, for example, is less likely to have their sleep broken by such necessities as ringing telephones, crying babies, or burglars.’ (Taylor, 1993: 467)

Taylor’s suggestion of a possible link between gendered roles and responsibilities and sleep is reflected in the work of Williams and Bendelow (1998) and Williams (2002). Building on the work of Aubert and White (1959a; 1959b), Schwartz (1973), and Taylor (1993), Williams’ theoretical studies have established a foundation for future research into the sociology of sleep.
2.2 Setting an agenda for the sociology of sleep: Recent developments

Unlike Aubert and White who saw the sleep period as 'lost time', Williams and Bendelow (1998: 177) propose that sleep is a 'temporally bounded activity that is lived through' and never entirely 'cut off' from the world of which it is part. As such it is sociologically relevant. They contend that sleep and its social organisation is a functional pre-requisite of society. Mirroring the work of Parsons (1951) and Schwartz (1973), Williams and Bendelow describe the institutionalised role of the sleeper as characterised by a series of rights, duties and obligations which contribute to social cohesion. These include the right while sleeping to freedom from noise and interference from others, except in times of emergency; exemption from normal role obligations; and no loss of waking role status while asleep. In terms of duties and obligations, the social organisation of sleep involves sleeping at night unless legitimate social circumstances such as work dictate otherwise; and sleeping in a bed, in a private place, away from public view, preferably in 'proper attire'.

Following on from Taylor's work (1993), Williams and Bendelow (1998) discuss the social patterning of sleep in relation to socio-structural and demographic factors such as age, work, and gender. They exemplify this by highlighting the changing patterns of sleep with ageing, quoting statistics from the *Health and Lifestyles Survey* (HALS) (Cox et al., 1987; Blaxter, 1990) which showed a reduction in sleep time with ageing (confounded by health status). In exploring the gendered nature of tiredness, Williams (2002) addresses women's sleep in the context of lifestyle factors. He draws on the HALS survey and the work of Brannen and Moss (1988) and Popay (1992) which shows that women are more likely to experience tiredness than men. This tiredness, Williams asserts, is linked to women's roles and responsibilities as mothers and workers as they try to balance the demands of domestic and paid work.

The correlations between sleep and socio-demographic variables, Williams (2002) contends, may mirror wider inequalities in society, including class. Moreover, broader questions of power, surveillance and control may underlie these relationships. Williams highlights, for example, the potential control or colonisation of sleep by various forms of expertise, including the medical profession with its
prescribing of benzodiazepines, the health industry with its focus on lifestyle and behavioural change, and the pharmaceutical industry dedicated to the marketing of sleep products and remedies. More recently, Kroll-Smith (2003) has continued to explore this perceived ‘colonisation’ of sleep by examining the influence of popular culture in the creation of medical problems. Responding to a ‘cultural directive’ imposed by the media, he contends, people are self-diagnosing with a novel sleep disorder, excessive daytime sleepiness (EDS). In this context, the media, and the public who respond to its dictates, become alternative authorities in the regulation of their sleep, operating alongside the traditional authority of the medical profession.

Despite making a valuable contribution to the development of a sociology of sleep, Williams’ work to date, however, has been entirely theoretical, without the supporting framework of empirical research which compiles and analyses people’s reported experiences of sleep in the context of their everyday lives. In setting a research agenda, Williams (2002) recognises the need for more empirical as well as theoretical work on the institutionalisation and social patterning of sleep. He suggests research into lay concepts and beliefs about sleep; the social and cultural ‘patterning’ of sleep, including experiences of sleep problems, the role of critical life events in changing sleep patterns, and the influence of class, gender, age and ethnicity; the medicalisation/healthicisation of sleep; and the commercialisation of sleep.

This thesis builds on the work of Williams by addressing the need for an empirical basis to support the theoretical underpinnings of research into the sociology of sleep. Focusing on women aged 40 and over, it examines the way in which gender roles and relationships implicate the structuring of sleep patterns across the life course.

2.3 Conclusion

The emergence of a sociological approach to the study of sleep in recent years thus offers the possibility of addressing the shortcomings inherent in the bio-medical approach described in Chapter One. Compared to this approach, the empirical study of women’s sleep which forms the basis of this thesis:
• acknowledges the social context of sleep. From a sociological perspective, sleep is more than a physiological process. Rather it is an intrinsic part of everyday life which illuminates fundamental issues associated with gender, ageing, health and illness, and life course transitions.

• defines gender as a social construction rather than purely as a physiological determinant of difference. It focuses, therefore, on the impact of socially defined roles and relationships on the structuring of women’s sleep, rather than on biological difference.

• considers the impact of ageing on women’s sleep patterns from the perspective of changing roles and relationships across the life course, as well as physiological change.

• captures the everyday world of sleep by recording and analysing women’s experiences of sleep in their own homes rather than in laboratories and sleep clinics. It focuses on women’s actual experiences of sleep in the context of their everyday life.

• uses a multi-method qualitative and quantitative approach to explore women’s subjective experiences of sleep. These data are used as a basis for examining the interrelationship between sleep and social roles, relationships, life events and transitions.

• focuses on ‘normal’ sleep disruption rather than specific sleep disorders. While sleep disorders are relatively rare, sleep disruption is a fact of life for many women. It arises not solely from physiological causes, but in response to the impact of social roles, relationships and responsibilities on women’s lives.
- acknowledges women as active agents in managing their sleep, rather than as passive recipients of medical treatments. It focuses on self-help strategies which women use to help overcome sleep problems as well as medico-pharmaceutical interventions.

To study sleep without taking into account its social context is to ignore an essential part of the sleep story. Sociology, with its focus on the social aspects of sleep, has the potential to provide a missing link in understandings of sleep. By complementing the work of other sleep scientists, sociology can make an important contribution to our overall understanding of the subject of sleep as well as being an invaluable resource in highlighting underlying patterns of gendered roles and relationships in everyday life. It is with these goals in mind that this thesis is written.

Part II presents an overview of the methodology used in the thesis to study women’s sleep. Chapter Three outlines aspects of the research design, including the research framework, research questions, and the multi-method approach adopted in the study. Chapters Four and Five then consider in detail the qualitative and quantitative methods used in the study to produce a rich source of data on sleep as well as insights into the everyday lives of women aged 40 and over.
PART II
METHODOLOGY
Chapter Three

RESEARCH DESIGN

‘Without an empirical base, social theory becomes a pointless and empty enterprise’ (Bourdieu, 1993: 29; cited in Baert, 1998)

Bourdieu’s assertion of the importance of empirical research as a complement to theoretical understandings of a subject has resonance with the approach adopted in this study of sleep in women aged 40 and over. Building on the theoretical bases for the development of a sociology of sleep proposed by Williams (see Chapter Two), the primary aim of this thesis is to uncover an understanding of sleep through an empirical study which draws on women’s perceptions and experiences of sleep in the context of their everyday lives.

Researching sleep, however, presents a dilemma for the sociologist. In essence, sleep is an intrinsic part of everyday life and an innate part of people’s experiences. Yet, like breathing, it remains a subconscious activity which is little understood. While for bio-medical scientists sleep can be measured objectively through the use of polysomnography and actigraphy while people are asleep (see Chapter One), sociologists must base their understandings of sleep on conscious, subjective accounts of sleep given retrospectively. The role of the sociologist in this case may thus become one of interpreting interpreted meanings. The approach adopted in this study must therefore enable understandings of sleep to emerge as a joint construction of the researcher and research participants through the compilation of women’s experiences of sleep and the interpretation of these data from a sociological perspective.

This chapter outlines the approach taken in this research. It:

- discusses the research framework which underpins the study;
outlines the research questions around which the study was conducted; and

describes the multi-method approach used to collect data.

3.1 Research framework

Sztompka (2003) contends that to make sociology relevant to society, the role of the sociologist is to map everyday life as a means of identifying both the problems that concern people in general and solutions which may enable people to improve their lives. Similarly, in researching women's sleep in the context of everyday life, my role as a researcher is to capture individual subjective experiences of sleep as expressed by women aged 40 and over; to interpret these experiences from a sociological perspective; and to use these understandings as a basis for informing the academic community, health professionals and members of the public about women's sleep in its social context.

Central to this thesis, therefore, is the adoption of an interpretivist approach whereby:

‘Interpretations of meanings, experiences, accounts, actions, (and) events, can be developed into explanations and understandings, (where) the role of the researcher is to understand everyday or lay interpretations, as well as supplying social science interpretations and to move from these towards an explanation.’ (Mason, 1996b: 139-40)

For the interpretivist, 'social reality is the product of its inhabitants; it is a world which is already interpreted by the meanings which participants produce and reproduce as a necessary part of their everyday activities together' (Blaikie, 1993: 48). Referring to Heidegger's work, Blaikie (1993: 34) suggests that 'understanding is embedded in the fabric of social relationships and interpretation is simply making this understanding explicit in language'. As research subjects, women make sense of their sleep through the lens of everyday waking life, through the social context in which sleep takes place, through their roles and relationships with others and through the life events and transitions which characterise their lives. They speak of sleep in
terms of others in the household; in terms of their daily roles as mothers, partners and workers; and in terms of life course transitions such as the menopause, divorce, retirement, ill-health and bereavement.

Thus to understand sleep, the social researcher ‘enters the everyday social world in order to grasp the socially constructed meanings, and then reconstructs these meanings in social scientific language.’ (Blaikie, 1993: 96). My role as a sociologist in this research, therefore, is to make explicit underlying meanings and assumptions about the structuring of women’s sleep in relation to its social context, while at the same time, locating these meanings within a wider conceptual framework. In this sense, sleep is not only structured by the complex realities of women’s everyday lives, but simultaneously can be seen as a vehicle through which to gain insights into the gendered roles and relationships which underpin women’s lives. In making conscious the routines and contingencies of everyday life as reflected and perpetuated through sleep, the researcher may thus provide further insights into the subtleties and power dynamics around which women’s lives are ordered.

It is with this framework in mind that the following research questions emerged. These questions form a central focus for the thesis, informing both the research methodology and analysis of data.

3.2 Research questions

According to Blaikie (2003: 1), ‘all research should be directed towards answering one or more research questions’. He identifies three types of research questions:

- **what** questions which aim to describe a phenomenon by looking for characteristics or patterns in the data;

- **why** questions which aim to explain or understand a phenomenon by looking for influences; and

- **how** questions which aim at intervention and change in characteristics and patterns.
These question-types are appropriate for researching women’s sleep. Using a multi-method approach including focus groups, in-depth interviews, audio sleep diaries, and a national survey to record the actual sleep experiences of women, this thesis seeks to examine the interrelationship between social context and the structuring of sleep in women aged 40 and over in relation to the following research questions:

1. **What are the characteristics of sleep patterns in women aged 40 and over in the UK?**

   This question examines the extent to which sleep disruption is a fact of life for women aged 40 and over. Using data from a national survey, the *2003 Women’s Sleep in the UK Survey*, it describes the sleep patterns experienced by women participating in this study within their normal sleeping environments as a means of identifying the types of sleep problems they face, factors which influence their sleep, and possible correlations between sleep problems and age.

2. **Why do women experience sleep disruption?**

   This question examines the social context of women’s sleep, highlighting the relationship between sleep and the socio-temporal constraints which underpin women’s everyday lives. It seeks to explain why women experience problems sleeping by considering the possible influence of women’s gendered roles and relationships as mothers, carers, and workers on sleep quality; as well as assessing the impact of life events and transitions such as the menopause, divorce, retirement and bereavement on sleep patterns.

3. **How can women’s sleep outcomes be improved?**

   This question examines how women can improve their sleep within the constraints of their social circumstances. Based on women’s experiences, it considers and evaluates a range of interventions for improving sleep, as well
as highlighting the socio-cultural constraints which may restrict access to these strategies.

In addition, the research seeks to examine how women’s sleep can be used as a resource to throw light on underlying gender roles and relationships and power dynamics in society. To do this, it addresses the following research question:

4. What insights does studying women’s sleep bring to understandings of gender roles and relationships?

3.3 Methodological approach

The EU *Sleep in Ageing Women* project, on which this thesis is based, stipulated the use of a mixed methodology incorporating both qualitative and quantitative dimensions as a means of encapsulating the multiple dimensions of the social context of women’s sleep. The decision to use mixed methodologies in this study reflects recent trends away from the paradigm of either quantitative or qualitative towards a more inclusive approach to research. In conceptualising research as an holistic enterprise, Newman and Benz (1998: 20) put forward a model of a qualitative-quantitative interactive continuum in which ‘each approach adds to our body of knowledge by building on the information derived from the other approach’. According to Bryman, (1999a: 64) ‘when quantitative and qualitative research are jointly pursued, much more complete accounts of social reality can ensue’. Indeed, the ‘goal of combining research methods is to strengthen the total research project’ (Morgan, 1997: 23).

Rather than viewing qualitative and quantitative methodologies as ‘fundamentally different paradigms’, Hammersley (1996: 160) suggests that these methodologies are complementary and often used side by side in the same research. He outlines the following rationale for combining methodologies:
as a means of triangulation in which findings from both methodologies are used to check each other;

as a means of facilitating the research, with one approach acting as a source of hypotheses or as the basis for the development of research strategies; and

as a source of complementarity where the two approaches provide different sorts of information which complement one another (Hammersley, 1996: 166-68).

It is these understandings of the use of mixed methodologies which underlie the approach adopted in this study.

In accordance with the main aims and objectives of the research, the multi-method approach enabled the researcher to examine women’s sleep from three main perspectives: firstly, as a source of information to increase understanding of the changing patterns of women’s sleep across the life course; secondly, as a means of highlighting the interaction between institutional, relational and life course factors in the structuring of women’s sleep; and thirdly, as a resource through which to gain insights into the ways in which the study of sleep in its social context can highlight the underlying gendered roles and relationships and inherent constraints which characterise women’s everyday lives. As Figure 3.1 shows, the use of both qualitative and quantitative sources of data, including focus groups, in-depth interviews, audio sleep diaries, and a postal survey, was important in producing a balanced, comprehensive picture of women’s sleep within its social context.

These methods were implemented in stages over the three years of the EU Sleep in Ageing Women project. As illustrated in Table 3.1, focus groups took place both at the beginning of the study (Stage 1) to gain an overview of women’s perceptions and experiences of sleep in relation to their social context, and towards the end of the research (Stage 2) to follow-up in more detail the strategies used by women to manage their sleep. Interviews were also held in two stages: the first stage enabled the researcher to gain in-depth insights into the types of sleep problems faced by
Figure 3.1: Model of mixed methodologies applied to this study of women’s sleep

- Focus groups
- In-depth interviews (including sleep-life grids)
- Audio sleep diaries

Table 3.1: Schedule for implementation of multi-method approach to the study of women’s sleep

<table>
<thead>
<tr>
<th>Activity</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus groups (Stage 1)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus groups (Stage 2)</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Interviews (Stage 1)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews (Stage 2) - sleep-life grids</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>GP interviews</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio sleep diaries (Stage 1)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio sleep diaries (Stage 2)</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Survey (design, piloting, implementation)</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Analysis of data</td>
<td></td>
<td></td>
<td>on-going</td>
</tr>
</tbody>
</table>
women, while the second stage focused on the development of sleep-life grids in which women aged 60 and over mapped their sleep trajectory from the age of 40 in relation to life events and transitions. Interviews were also carried out with five GPs to ascertain their perceptions of women's sleep problems and treatment practices. The compilation of audio sleep diaries, in which women recorded an assessment of their sleep each morning for seven consecutive days, was also carried out in two stages, the first stage with women under 60, the second with women who participated in the sleep-life grid interviews. Data from these qualitative sources informed the development of the 2003 Women's Sleep in the UK Survey, a postal questionnaire designed to ascertain the sleep experiences of a representative sample of women throughout the UK. Analysis of data was on-going throughout the study, with each method contributing to an overall understanding of the social context of women's sleep.

The above methods and the approaches used in analysing data will be discussed in detail in Chapters Four and Five.

3.4 Conclusion

As an introduction to Part II, this chapter has outlined the research framework, research questions and methodology around which this thesis is structured. In accordance with the empirical focus of the study, the thesis adopts an interpretivist approach, recording, compiling and making explicit women's retrospective experiences of sleep and interpreting these meanings through a sociological lens. The research questions which underpin the study, framed in a what, why, how format, are designed to elicit data which describe the nature of women's sleep; explain the incidence of sleep disruption in relation to the socio-temporal constraints impacting on women's lives; and suggest interventions which may help improve women's sleep. In addition, through studying women's sleep, the thesis aims to throw light on inequalities within the household and partnerships. The adoption of a multi-method qualitative and quantitative approach facilitates the achievement of research aims by
revealing women’s perceptions and experiences of sleep in the context of their everyday lives.

The following two chapters explore these methodologies and their corresponding methods in more detail, as well as discussing ethical issues relevant to conducting the research. Chapter Four discusses the use of qualitative methods in the form of focus groups, interviews, sleep-life grids and audio sleep diaries in this study. Analysis of data from these sources highlighted important themes and hypotheses about women’s sleep and the extent to which the study of sleep provides insights into the gendered nature of women’s roles and relationships in everyday life. In contributing to the researcher’s understanding about sleep in its social context, qualitative data also informed the development of a postal questionnaire (see Chapter Five), used to collect descriptive information about women’s sleep and how it changes with ageing. In providing separate but complementary data, the two methodologies were invaluable both in addressing the research questions and in achieving the study’s aims and objectives.
Chapter Four

QUALITATIVE METHODOLOGY

‘Qualitative methods are usually used when the object of study is some form of social process or meaning or experience which needs to be understood and explained in a rounded way.’ (Mason, 1996b: 96)

From a sociological perspective, the study of women’s sleep is a new direction with little existing literature to describe the relationship between sleep and social context. One of the key goals of this study, therefore, is to build an understanding of sleep as a social process, through research which interprets the experiences of women aged 40 and over. In the absence of existing empirical data, women themselves are an invaluable resource for tapping into knowledge about how sleep is experienced in everyday life. As Bryman (1988: 61) states, the most fundamental characteristic of qualitative research is its ‘express commitment to viewing events, action, norms, values, etc from the perspective of the people who are being studied.’ In this respect, a qualitative approach would appear to offer the means of accomplishing research goals by providing opportunities for women to share their unique experiences of the phenomenon of sleep.

In her study of menopausal and mid-life women, Wadsworth (2000: 5) found that by employing multiple qualitative methods she was able to provide a ‘rich and detailed account which was most useful in exploring the complexity and variety of women’s experiences’. Similarly, in this study the use of multiple methods of qualitative research has enabled the researcher to explore the breadth and depth of women’s perceptions of sleep across the life course from the age of 40, in so doing ‘increasing recognition and understanding of the diversity and complexity of experiences’ (Wadsworth, 2000: 10). Figure 4.1 shows the range of qualitative methods used in this research.
As Figure 4.1 suggests, the methods are complementary rather than distinct, with data generated from focus groups, audio sleep diaries and in-depth interviews (including sleep-life grids) contributing to a composite understanding of how women experience sleep within their social context.

This chapter examines in turn each of these qualitative methods and their application in the study, before outlining the methods of analysis used. It:

- discusses the use of focus groups to collect data on women's perceptions of sleep in everyday life;

- outlines the use of qualitative interviews, including the application of a sleep-life grid approach to recording women's experiences of sleep in relation to life events and transitions across the life course;
• discusses the use of audio sleep diaries as a method of highlighting the relationship between roles and relationships and women’s sleep;

• discusses the ethical issues involved in conducting qualitative research in this study; and

• examines the analytical approaches used to generate key concepts and hypotheses, and to analyse interaction in focus groups and sleep-life grid interviews.

4.1 Focus groups

4.1.1: Rationale

Once predominantly associated with the field of market research, focus groups have emerged in recent years as a key method of qualitative research (for a history of focus group research see, for example, Morgan, 1997; Cronin, 2001; Bloor et al., 2001). In essence, focus groups are small group discussions around a specified topic. Comprising ideally a group size of between four and eight people (Kitzinger, 1995), focus groups are guided by a facilitator or moderator whose role is to engage participants in a wide-ranging and free-flowing discussion of the topic for approximately 1.5 hours.

Citing Vaughn et al (1996), Smithson (2000: 106) states that focus groups are ‘particularly useful at an early stage of research as a means for eliciting issues which participants think are relevant, which can then be used to inform the design of larger studies’. In the absence of existing empirical studies on women’s sleep, the use of focus groups in the early stages of this study enabled a broad exploration of the subject of women’s sleep providing insights into women’s experiences, beliefs and attitudes towards sleep in the context of their social roles across the life course. In keeping with the grounded approach to analysis adopted in this thesis, data from focus groups in Stage 1 of the study formed the basis for the generation of themes.
and hypotheses to be explored throughout the study. Moreover, the use of the focus group method at the outset of the study was significant in informing and complementing subsequent research design and analysis. As well as providing preliminary understandings of women’s experiences of sleep, the method also offered insights into ‘how participants think and talk’ about sleep as well as ‘examples of the terms and words they use’ (Quine, 1998: 4). By enabling the researcher to move beyond the language of the science of sleep towards the vernacular of real world sleep as expressed by the women themselves, focus groups provided a valuable context for subsequent development of interview schedules and survey questions.

As well as playing a major role in the generation of data during the preliminary stages of a study, focus groups can also be used at other stages of the research process to ‘follow up research to clarify findings from another method’ (Morgan, 1997: 17). In this case, a second round of focus groups (Stage 2) was arranged towards the end of the research (November 2003) to examine in greater depth the strategies women use to help overcome sleep disruption. These data complemented and extended the findings of the earlier focus groups, the in-depth interviews, audio-sleep diaries, and the survey.

In addition to providing substantive data on the topic of interest, a key characteristic of the focus group method is the interaction between group members. Indeed, Kitzinger (1995: 1) defines focus groups as ‘a form of group interview that capitalises on communication between research participants in order to generate data’, with the moderator encouraging participants to share experiences, ask questions, and comment on each other’s point of view. Smithson (2000: 105) speaks of focus group discussions as ‘a social event that includes performances by all concerned’. The group dynamic, or energy, resulting from this interaction differentiates focus groups from more conventional interview methods and is a key mechanism for the generation of data. According to Kitzinger (1994), interaction can be both complementary as women share common experiences, as well as adversarial, with women questioning, challenging and disagreeing with each other. Focus group sessions which take place in a supportive atmosphere in which the complexities of
intra-group relationships can be played out, thus contribute to the emergence of a unique data set. As Smithson (2000: 116) observes, ‘opinions stated in the groups should be viewed not as previously formed, static things which people brought to the focus group, but as constructed in social situations’. As a result, the data emerging from focus groups are group data, reflecting ‘collective notions shared and negotiated by the group’ (Berg, 1995: 78), as much as being the expression of individual opinions, experiences and attitudes.

Section 4.1.2, examines in detail the use of focus groups in Stage 1 with specific reference to recruiting the sample, focus group composition, participant profile, and conducting the sessions. It illustrates the interaction of the moderator and participants in the creation of understandings and explanations about the nature of women’s sleep in relation to its social context. Section 4.1.3 then gives a brief overview of Stage 2 focus groups which took place at a later stage of the research.

4.1.2: Focus groups (Stage 1)

Recruiting the sample

According to Arber (2001: 61), the use of purposive or non-probability sampling is appropriate ‘where the researcher’s aim is to generate theory and a wider understanding of social processes or social actions’, rather than a concern with the representativeness of the sample. In this case, the primary aim of using a focus group approach at the beginning of the study was to gain an understanding of women’s sleep across the life course from the age of 40 as a means of generating preliminary hypotheses about the relationship between women’s sleep and its social context. To achieve this aim, a purposive sample of women aged 40 and over living in a medium-sized city in southern England were invited to participate in one of a series of ten focus group sessions to discuss their experiences of sleep.

A range of strategies was used to recruit participants, including the use of poster advertisements throughout the city area, and network or snowball sampling whereby the researcher made initial contact with a small group of people and then used them
to establish contact with others (Bryman, 2001). Posters (see Appendix A) were placed in community centres, adult education organisations, libraries, GP surgeries, cafes, sports centres, and on social and community notice boards. Participants were also recruited by the researcher contacting the personnel manager of local retail organisations, including Marks & Spencer, Tesco and B&Q, and asking for notices to be placed on staff notice boards. In addition, the researcher used her own network of friends, neighbours, choir, and book group contacts to recruit participants, with respondents asked to advertise the study through their own professional and social networks. Recruits were also gained through speaking directly to co-ordinators of social, educational, and community groups who were able to publicise the study through their contact with group members. This was particularly successful in recruiting participants over age 50.

Focus group composition

The exploratory nature of this initial research, with its focus on highlighting issues of substantive interest, was a key factor in determining focus group composition. Rather than seeking representation of women in the UK as a whole, the main considerations in forming groups were to ensure that, where possible:

- the focus groups encapsulated a range of women in different age groups from age 40;

- each group was homogeneous in terms of age and menopausal status; and

- the women reflected diversity in terms of marital status, educational background, household composition, number of children, and employment status.

While chronological age is an important marker of change and transition in people’s lives, in the case of women, the menopause, occurring on average at the age of 51 years, is also a defining time and, according to the sleep literature (see Chapter One), a contributor to changes in sleep patterns. It was decided therefore to segment focus
group participants on the basis of age and expected menopausal status. As a result five categories were established: 40-47 (pre-menopausal, having periods), 48-52 (peri-menopausal, periods becoming irregular or recently ceased), 53-59, 60-69, and 70 and over (post-menopausal, no periods for at least a year), with two focus group sessions, each 1.5 hours in duration, being held for each age group. Throughout this thesis, these focus groups are coded as FG1.1, FG1.2, FG2.1, FG2.2 through to FG5.1, FG5.2, followed by the age group of participants. Pseudonyms have been used to protect women’s identities.

A total of 131 women, ranging in age from 40 to 86, responded either by telephone or email to the promotional campaign, providing basic personal and contact details. Women were subsequently contacted by phone by the researcher, and given a choice of two focus group sessions. A letter (Appendix B) confirming the date, time and location of the session, as well as information about the research and confidentiality issues was then sent in advance of the session. Participants were advised that they would receive an honorarium of £20 at the end of the session for contributing to the research.

A number of women were unable to participate in the sessions due to previous commitments, or as a result of over-subscription of women in particular age groups. These women remained on the database and were subsequently invited to take part in in-depth interviews. Table 4.1 shows the final structure of the ten focus groups. Only three women who accepted the invitation failed to attend the focus groups; all of whom contacted the researcher in advance.

At the beginning of each focus group session participants were asked to complete a short questionnaire (Appendix C). As shown in Table 4.2, each group was homogeneous in terms of age, but not always in terms of predicted menopausal status. This lack of homogeneity of menopausal status was not, however, considered a drawback and had no observable negative impact on group interaction, with pre- and peri-menopausal women drawing on the experiences of post-menopausal group members.
Table 4.1: Composition of focus groups (Stage 1)

<table>
<thead>
<tr>
<th>Age</th>
<th>Focus group</th>
<th>Participants</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-47</td>
<td>1.1</td>
<td>9 (9)*</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>6 (8)</td>
<td></td>
</tr>
<tr>
<td>48-52</td>
<td>2.1</td>
<td>7 (8)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>8 (8)</td>
<td></td>
</tr>
<tr>
<td>53-59</td>
<td>3.1</td>
<td>9 (9)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>9 (9)</td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>4.1</td>
<td>8 (9)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td>9 (9)</td>
<td></td>
</tr>
<tr>
<td>70 &amp; over</td>
<td>5.1</td>
<td>9 (9)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>5.2</td>
<td>8 (8)</td>
<td></td>
</tr>
</tbody>
</table>

* brackets show number invited

Table 4.2: Expected vs actual menopausal status of focus group participants (Stage 1)

<table>
<thead>
<tr>
<th>Age group</th>
<th>Expected menopausal status</th>
<th>Actual menopausal status</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-47</td>
<td>Pre-menopausal</td>
<td>Pre-menopausal 73%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peri-menopausal 7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-menopausal 20%</td>
</tr>
<tr>
<td>48-52</td>
<td>Peri-menopausal</td>
<td>Pre-menopausal 33%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peri-menopausal 40%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-menopausal 27%</td>
</tr>
<tr>
<td>53-59</td>
<td>Post-menopausal</td>
<td>Peri-menopausal 22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-menopausal 78%</td>
</tr>
<tr>
<td>60-69</td>
<td>Post-menopausal</td>
<td>Post-menopausal 100%</td>
</tr>
<tr>
<td>70 &amp; over</td>
<td>Post-menopausal</td>
<td>Post-menopausal 100%</td>
</tr>
</tbody>
</table>

As Table 4.3 shows, the focus groups reflected diversity both between groups in terms of age and menopausal status, as well as within each group in terms of household composition, marital status, menopausal status, children, educational background, employment status, and occupational background. It is this diversity, rather than the representativeness of each group in terms of the population as a whole, which ensured that, from a substantive and interactive viewpoint, emerging data provided an initial overview of the process of sleep from multiple perspectives.
Table 4.3: Profile of women aged 40 and over participating in focus groups (Stage 1) by age (N=82)

<table>
<thead>
<tr>
<th>Marital status</th>
<th>40-47 (N=15)</th>
<th>48-52 (N=15)</th>
<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married/cohabiting</td>
<td>9</td>
<td>6</td>
<td>15</td>
<td>9</td>
<td>5</td>
<td>44</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Never married</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>40-47 (N=15)</th>
<th>48-52 (N=15)</th>
<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-level and above</td>
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<td>52</td>
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<table>
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<tr>
<th>Household composition</th>
<th>40-47 (N=15)</th>
<th>48-52 (N=15)</th>
<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
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<td>31</td>
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<td>Husband/partner only</td>
<td>4</td>
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<td>11</td>
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<td>28</td>
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<tr>
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<table>
<thead>
<tr>
<th>Children (ever born)</th>
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<th>48-52 (N=15)</th>
<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
</tr>
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<th>48-52 (N=15)</th>
<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
</tr>
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<tr>
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<td>Not working (not retired)</td>
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<td>15</td>
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<td>38</td>
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<table>
<thead>
<tr>
<th>Occupation (current or most recent)</th>
<th>40-47 (N=15)</th>
<th>48-52 (N=15)</th>
<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
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<tr>
<td>Professional/managerial/technical</td>
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<td>11</td>
<td>10</td>
<td>10</td>
<td>3</td>
<td>41</td>
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<tr>
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<table>
<thead>
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<th>53-59 (N=18)</th>
<th>60-69 (N=17)</th>
<th>70 &amp; over (N=17)</th>
<th>Total (N=82)</th>
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</thead>
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<td>4</td>
<td>0</td>
<td>0</td>
<td>11</td>
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<td>Post-menopausal</td>
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<td>4</td>
<td>14</td>
<td>17</td>
<td>17</td>
<td>55</td>
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</tbody>
</table>

To summarise the data from Table 4.3, in terms of socio-demographic characteristics, the majority of women participating in the focus groups:
• were married/cohabiting (54%), although a high percentage (26%) were separated/divorced;

• lived with their partner (with or without children) (54%), although 38% were living alone as a result of separation/divorce, widowhood, or never marrying;

• were highly educated, with 63% holding at least A-level qualifications, although one fifth of participants had no formal qualifications;

• had two or more children (62%), although one quarter of the women were childless;

• were working either on a full-time or part-time basis (48%), although 46% had retired;

• worked (now or most recently) in a professional/managerial or technical capacity (50%), although 43% worked in routine non-manual or manual jobs; and

• were post-menopausal (67%).

Conducting the focus groups

The ten Stage 1 focus group sessions took place in Oxford between April and June 2001. As Kitzinger (1995: 4) notes ‘sessions should be relaxed: a comfortable setting, refreshments, and sitting around in a circle will help to establish the right atmosphere’. Choice of venue was an important factor in creating a relaxed social atmosphere in which women felt free to discuss their experiences of sleep. In this case, eight of the ten focus group sessions were held in the sitting room of the researcher’s home. One of the two sessions for women aged 70 and over was held in a community centre where the group meets regularly for senior citizen functions, and the other in the home of the co-ordinator of U3A programs in which a number of the group were involved. As Quine (1998) states, holding sessions in familiar
surroundings is important when working with older people in terms of providing support and a sense of trust. In all venues a convivial atmosphere conducive to interaction was established from the outset, with the moderator greeting participants, issuing name tags, providing refreshments including wine, and introducing women to each other as they arrived. The strategy of asking women to complete a brief questionnaire (Appendix C) ensured that women were involved while waiting for the session to commence.

Following introductions, the moderator reiterated the purpose of the research, reinforced issues of confidentiality, and outlined the structure of the session. A semi-structured focus group guide (Appendix D), comprising eight broad topic areas, was used to promote discussion and interaction between participants. These topics included attitudes to sleep, patterns of sleep, sleeping as a shared experience, ageing and sleep, effects of poor sleep, strategies for overcoming sleep problems, and the role of GPs in treating sleep problems. Probes were used as appropriate to gain further insights into women’s sleep experiences.

In each group, the moderator’s role was to preserve a balance between the need to cover a wide range of topics associated with sleep, while encouraging free-flowing interaction between group members to enable a comprehensive picture of sleep to evolve naturally. To maintain this balance, the moderator drew on feminist approaches to interviewing as outlined by Oakley (1999). According to Oakley (1999: 51), the best way to find out about people is ‘when the relationship of interviewer and interviewee is non-hierarchical and when the interviewer is prepared to invest her own personal identity in the relationship’. As a middle-aged woman, the moderator was immediately recognisable to participants as ‘one of them’ or ‘becoming one of them’, with similar experiences and concerns. Her willingness to share her experiences and to input knowledge where appropriate was a key factor in ensuring an openness among group members and a positive light-hearted atmosphere throughout the sessions. By drawing on excerpts from focus group data, Table 4.4 highlights the types of roles engaged in by the moderator during the session:
Table 4.4: Types of roles engaged in by the moderator in focus groups (Stage 1)

<table>
<thead>
<tr>
<th>Moderator as ....</th>
<th>Excerpt</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitator (FG4.2: 60-69)</td>
<td>Has anyone ever taken any medication to help them sleep?</td>
<td>Moves discussion on from previous topic by asking question.</td>
</tr>
<tr>
<td>Informant/ ‘expert’ (FG4.1: 60-69)</td>
<td>I think from what I have read you still need the same amount of sleep (when you’re older) but you do it differently ....</td>
<td>Provides input into interchange between participants on changes in sleep patterns with ageing.</td>
</tr>
<tr>
<td>Confidante (FG1.1: 40-47)</td>
<td>Edith*: I worry about my father in America, he’s quite old and has a lot of health problems.</td>
<td>Identifies with the comments made by Edith by sharing her own experiences of having elderly parents living abroad.</td>
</tr>
<tr>
<td>Empathiser (FG2.1: 48-52)</td>
<td>Mod: My dad is nearly 88 and he’s in Australia and I know what you’re talking about.</td>
<td>Shows sympathy for the difficulties Tania has experienced since her husband’s death.</td>
</tr>
</tbody>
</table>

As well as moderator-participant interaction, interaction between participants, with or without moderator involvement, is a key feature of the focus group approach. This interaction can take a number of forms, including using humour to establish rapport with other participants or to defuse embarrassing situations; listening to others and sharing experiences to create a sense of commonality and mutual respect; providing information to increase other participants’ understanding of the topic; contradicting other opinions to highlight different perspectives; and showing empathy in response to the life experiences of other group members. It is through this interaction, reflected in the emerging data, that group members construct their story of sleep. The atmosphere which developed throughout the ten focus group sessions was conducive...
to wide-ranging interaction between group members. The following three excerpts illustrate this.

In the first excerpt from a focus group for the 60-69 age group, participants use humour to defuse a very open and honest discussion in which they expose the stigma attached to sleeping apart in our culture which emphasises togetherness. Dee brings humour and light-heartedness into the discussion by ‘warning’ the moderator that she too will ‘become like them’. The moderator affirms her comments, then proceeds, as facilitator, to defuse the subject by justifying the women’s actions:

Noni: (Sleeping apart) gets more common as you get older.

Dee: So watch out, Jenny.

Mod: Yes, that is my future.

Noni: It’s not altogether bad, though.

Mod: No, it doesn’t sound it at all, it is a positive way of doing it.

Noni: Yes, it is. (FG4.1: 60-69)

In the second excerpt from a focus group for the 48-52 age group, Karen provides information to the group about her husband’s sleep apnoea in response to questions from participants:

Karen: My husband’s got sleep apnoea.

Mod: He has, has he?

Karen: But he’s now got a gum shield which is fantastic ......

Corinne: Can I be nosy and say how do you discover sleep apnoea?

Karen: He started off snoring ......

Lucy: Is it like chain-sawing?

Karen: It isn’t. It’s like what happens is that they snore, there’s a noise that goes when they breathe and then they go gasp.

Julie: So they hold their breath in? (FG2.1: 48-52)
In the final excerpt from a focus group for the 40-47 age group, participants share experiences of worries which influence their sleeping patterns. An overview of the types of worries experienced by these women is built up as participants listen to each other’s stories, using these as triggers for explaining their own similar or different concerns:

*Jan*: You just worry. I’m afraid I just worry about things that need doing, and I worry that everything isn’t going to get done, or I will forget something.

*Vicki*: Yes, that is very much what I do, thinking of all the jobs I need to do, get done at work and at home. This feeling of almost being out of control, never getting it all done ......

*Toni*: I worry more about finances and the children’s future and things like that, not trivial things. They’re not trivial to me.

*Anne*: I worry my children will grow up and leave home.

*Chris*: I’d be more worried if they grow up and stay! (FG1.1: 40-47)

Focus groups were tape-recorded and later transcribed verbatim. These data were essential in gaining an initial overview of sleep from the perspective of women, highlighting their perceptions, attitudes, concerns, and understandings of the interrelationship between sleep and their everyday lives. Moreover, the data were pivotal in the early generation of key themes and hypotheses. As a precursor to in-depth interviews, the focus groups provided not only valuable background information on women’s sleep but also identified important issues for elaboration in interviews.

4.1.3: Focus groups (Stage 2)

Towards the end of the study, a further five focus group sessions (coded FG1.3-FG5.3) were held. The aims of these sessions were to evaluate the different treatment strategies used to counteract sleep disruption among women aged 40 and over, and to make recommendations on strategies for treating sleep problems based on women’s experiences.
To increase the geographical diversity of women in the study, focus groups were recruited by *Quality Fieldwork*, a company in Birmingham which specialises in the provision of research services. The company was given information about the research (Appendix E) to assist in recruitment of participants, and was asked to recruit eight women for each group. To ensure consistency with earlier focus groups, one group was recruited for each of the age ranges 40-47, 48-52, 53-59, 60-69 and 70 and over (Table 4.5).

**Table 4.5: Composition of focus groups (Stage 2)**

<table>
<thead>
<tr>
<th>Age</th>
<th>Focus group</th>
<th>Participants (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-47</td>
<td>1.3</td>
<td>8 (9)*</td>
</tr>
<tr>
<td>48-52</td>
<td>2.3</td>
<td>9 (9)</td>
</tr>
<tr>
<td>53-59</td>
<td>3.3</td>
<td>8 (10)</td>
</tr>
<tr>
<td>60-69</td>
<td>4.3</td>
<td>9 (9)</td>
</tr>
<tr>
<td>70 &amp; over</td>
<td>5.3</td>
<td>8 (9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total (N) = 42</td>
</tr>
</tbody>
</table>

* brackets show number invited

The sessions took place in Birmingham in early November 2003 and were of 1.5 hours duration, including time to complete the *2003 Women’s Sleep in the UK Survey* (see Chapter Five). All sessions were held in a meeting room at the offices of *Quality Fieldwork*, either in the morning (60-69 and 70 and over age groups) or in the evening (40-47, 48-52 and 53-59 age groups). Participants were paid an incentive of £20 for their contribution. A focus group guide was developed (Appendix F) to facilitate the discussion. This covered topics such as the importance of good sleep, the sleeping environment, pre-bed rituals, sleep strategies during the night, sleeping apart, the use of over-the-counter products and alternative therapies, and the use of prescription medication for sleep problems.

These focus groups were conducted in accordance with the methods used in Stage 1 (see section 4.1.2 above). Each session was tape-recorded and later transcribed. As shown in Table 4.6, participants reflected a cross-section of women in terms of age, marital status, education and socio-economic group:
Table 4.6: Profile of women aged 40 and over participating in focus groups
(Stage 2) by age (N=42)

<table>
<thead>
<tr>
<th>Age (N)</th>
<th>40-47 (N=8)</th>
<th>48-52 (N=9)</th>
<th>53-59 (N=8)</th>
<th>60-69 (N=9)</th>
<th>70 &amp; over (N=8)</th>
<th>N (N=42)</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/cohabiting</td>
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<td>5</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>24</td>
<td>57</td>
</tr>
<tr>
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<td>0</td>
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<td>0</td>
<td>6</td>
<td>14</td>
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<td>24</td>
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</tr>
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<td>29</td>
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<tr>
<td>Husband/partner only</td>
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<td>4</td>
<td>4</td>
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<td>15</td>
<td>36</td>
</tr>
<tr>
<td>Husband/partner + children</td>
<td>5</td>
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<td>2</td>
<td>0</td>
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<td>10</td>
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<td>Children only</td>
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<td>1</td>
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<td>7</td>
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<td>3</td>
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<td>17</td>
</tr>
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<td>4</td>
<td>2</td>
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<td>26</td>
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<td>1</td>
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<td>21</td>
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<td>3</td>
<td>7</td>
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</tr>
<tr>
<td>Routine and manual</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Menopausal status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-menopausal</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>Peri-menopausal</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Post-menopausal</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

* (woman’s own, based on current or last occupation)
To summarise the data from Table 4.6 in terms of socio-demographic characteristics:

- 57% of the women participating in the focus groups were married or cohabiting, although almost a quarter were widowed. All women in the sample had been married at some stage of their lives.

- 60% lived with their partner (with or without children), although 29% were living alone as a result of separation/divorce, or widowhood.

- 43% held O-level/vocational qualifications, although almost one third held A-level or higher qualifications. One fifth of participants had no formal qualifications.

- Two thirds had two or more children. 17% of the women were childless.

- Almost half worked on a full-time or part-time basis. 36% had retired.

- Equal numbers of respondents belonged to the managerial or professional, and intermediate occupational class groups (36% in each). 14% worked now or most recently in routine and manual occupations.

- 60% were post-menopausal.

The use of focus groups towards the end of the study enabled the researcher to examine women’s sleep management strategies in more detail. These data are discussed in detail in Part V.

Section 4.2 examines the use of qualitative interviews and sleep-life grids in this study.
4.2 Qualitative interviews and sleep-life grids

4.2.1: Rationale

Qualitative interviews share many features in common with focus groups in that they provide a forum for generating insights into social phenomena. Both methods produce rich qualitative data which can contribute to the formulation of hypotheses and theories about the topic. Both involve the use of an interviewer or moderator whose role is ‘to orchestrate the intellectual and social dynamics of the situation to ensure relevant data is generated’ (Mason, 1996b: 42). Yet while data emerging from focus groups is constructed by and reflects the multiple interactions between participants facilitated by the moderator, data from in-depth interviews exists solely as an output of interaction between interviewer and interviewee. While focus groups enable a broad exploration of a subject from multiple viewpoints, time limitations and the number of participants mean that individual contributions and in-depth probing of issues are kept to a minimum. Interviews, however, provide opportunities to establish greater rapport with interviewees and to investigate issues in greater depth.

In this study, the use of in-depth interviews was seen as essential in developing an understanding of women’s sleep; a means of moving from the breadth of information provided by the focus groups to the more detailed insights and perspectives available through the medium of interview. As Morgan (1997: 22) observes, preliminary focus groups can provide ‘a useful starting point for individual interviews that involve unfamiliar topics’ by providing a ‘range of future informants’ thoughts and experiences prior to interviews’. Follow-up interviews can help ‘provide depth and detail on topics that were only broadly discussed in focus groups’ and provide insights into perspectives which ‘may have been underrepresented in the groups’ (Morgan, 1997: 22).

A total of 35 women were interviewed for this study. Interviews took place in two stages, reflecting the changing needs and directions of the study emerging in response to themes generated by focus group data. The initial phase of interviewing
Stage 1 involved 12 women and took place in Oxford in May-June 2001, overlapping with the remaining Stage 1 focus group sessions. This stage sought to explore in more detail factors affecting women's sleep by focusing on women with particular sleep problems or circumstances that had had adverse effects on their sleep. The second stage of interviewing took place in Oxford in March-April 2002 and involved conducting interviews with 23 women aged 60 and over using a sleep-life grid approach. Details of each stage of this interview process are given in sections 4.2.2 and 4.2.3 below. Data from interviews are coded throughout this thesis as IV001-IV035, followed by the participant's age. Pseudonyms have been used to protect women's identities.

To gain insights into GP attitudes to the treatment of women's sleep problems, the researcher also conducted informal half hour interviews with five GPs (see 4.2.4). Although not a major focus of this study, their comments are used in the thesis (coded as GP001-GP005) to illustrate the interface between women and their GPs in relation to sleep.

4.2.2: An overview of qualitative interviews (Stage 1)

Preliminary analysis of focus group data showed the strong influence of life factors on women's sleep. To investigate this further it was decided to conduct a series of in-depth interviews with a range of women with sleep problems who could provide further insights into how aspects of their life impacted on their sleep. In accordance with the theoretical sampling approach used in recruiting focus group participants (see section 4.1.2 above), respondents were selected to maximise the development of hypotheses about the relationship between sleep and its social context. In this case, the researcher wanted to investigate in more detail the relationship between sleep and social context for those women whose life circumstances compromised their sleep patterns. Women who had indicated specific factors affecting their sleep during initial contact but were unable to attend focus group sessions, were telephoned by the researcher and invited to participate in an interview about their sleep. Table 4.7 gives background information on the twelve women interviewed.
Table 4.7: Profile of participants in interviews (Stage 1) (N=12)

<table>
<thead>
<tr>
<th>Interview #</th>
<th>Personal details</th>
<th>Factors affecting sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gina*: 56 years old, divorced, 2 adult children, working full time as lecturer, postgrad degree, post-menopausal</td>
<td>Chronic insomnia</td>
</tr>
<tr>
<td>2.</td>
<td>Francis: 57, widowed, 2 adult children, part-time artist, O-levels, post-menopausal</td>
<td>Chronic sleep problems following death of husband</td>
</tr>
<tr>
<td>3.</td>
<td>Emily: 57, married, 3 adult children, working part-time as a nurse, RGN, post-menopausal</td>
<td>Shift work</td>
</tr>
<tr>
<td>4.</td>
<td>Laura: 68, divorced, 2 adult children, retired nurse, RGN, post-menopausal</td>
<td>History of sleep problems -- referral to sleep clinic</td>
</tr>
<tr>
<td>5.</td>
<td>Bea: 66, married, 2 adult children, retired from teaching, post-menopausal</td>
<td>Full time carer for husband with Parkinson’s disease</td>
</tr>
<tr>
<td>6.</td>
<td>Jenny: 47, married, 3 teenage children (2 at home), full-time music teacher, pre-menopausal</td>
<td>Anxiety/panic attacks</td>
</tr>
<tr>
<td>7.</td>
<td>Sarah: 53, married, 3 teenage children, part-time midwife, peri-menopausal</td>
<td>History of shift work, suffers from Multiple Sclerosis</td>
</tr>
<tr>
<td>8.</td>
<td>Kate: 78, widowed, one adult son, retired welfare officer, grammar school, post-menopausal</td>
<td>Long-term addiction to sleeping pills</td>
</tr>
<tr>
<td>10.</td>
<td>Sophie: 40, married, young son, part-time clerical work, vocational qualifications (catering), pre-menopausal</td>
<td>Balancing the demands of motherhood and work</td>
</tr>
<tr>
<td>11.</td>
<td>Anne: 45, married, 3 young children, part-time work as local government officer, degree, pre-menopausal</td>
<td>Effect of partner on sleep - husband has Restless Legs Syndrome, irregular sleeping patterns</td>
</tr>
<tr>
<td>12.</td>
<td>Florence: 69, divorced, one son (deceased), retired receptionist, school certificate, post-menopausal</td>
<td>Death of son</td>
</tr>
</tbody>
</table>

* NB. All names used in excerpts from interviews are pseudonyms.

Interviews were conducted either in the researcher’s or respondent’s home, thus providing a relaxed environment in which to encourage positive rapport and to maximise interaction. A semi-structured interview guide based on the focus group
guide (Appendix D) was used for each interview, with more detailed probing of specific issues than had been possible during the focus groups.

4.2.3: An overview of qualitative interviews (Stage 2)

Recruitment of sample

The second phase of interviews was held almost a year after the initial interviews. At this stage of the research, analysis of Stage 1 focus group and interview data had revealed a strong association between sleep problems and changing roles and relationships across the life course. As in the first phase of interviews (see section 4.2.2 above), theoretical sampling was used as a means of recruiting participants to investigate this relationship in more detail. The researcher again used strategies of networking and snowballing (see focus group recruitment, section 4.1.2 above) to recruit an appropriate sample of women. Women aged 60 and over (N=23) were invited to take part in a one-hour interview using a sleep-life grid approach through which they could construct a narrative of their sleep in the context of life events. This age group was selected on the basis that it enabled reflection back on events, changes, and transitions in women’s lives from the age of 40 and the evaluation of the impact of these factors on current sleep patterns.

Participant profile

Respondents ranged in age from 61 to 83, with an average age of 68. Table 4.8 summarises the socio-demographic characteristics of the women interviewed. As this table shows, nearly half the women were married (N=11), although, as expected in this age group, seven women were widowed. The majority had had three or more children. Ten women were living alone, either as a result of never marrying, divorce, or widowhood. The women were in general well-educated with the majority (N=12) having qualifications at A-level or above. All women were retired, although five continued to work on a part-time basis. While most women owned their own home (N=20), three women rented from the local authority or housing association. In terms of household income, women were divided across the spectrum from those who had
an income of less than £10,000 per annum to those who had incomes of £30,000 or above.

Table 4.8: Profile of women aged 60 and over participating in interviews (Stage 2) (N=23).

<table>
<thead>
<tr>
<th>Socio-demographic characteristics</th>
<th>Number of women (N=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>13</td>
</tr>
<tr>
<td>70-79</td>
<td>9</td>
</tr>
<tr>
<td>80 and over</td>
<td>1</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
</tr>
<tr>
<td>Married/cohabiting</td>
<td>11</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>4</td>
</tr>
<tr>
<td>Widowed</td>
<td>7</td>
</tr>
<tr>
<td>Never married</td>
<td>1</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>A-level and above</td>
<td>12</td>
</tr>
<tr>
<td>O-level/vocational</td>
<td>6</td>
</tr>
<tr>
<td>Below O-level</td>
<td>5</td>
</tr>
<tr>
<td><strong>Household composition</strong></td>
<td></td>
</tr>
<tr>
<td>Lone household</td>
<td>10</td>
</tr>
<tr>
<td>Husband/partner only</td>
<td>11</td>
</tr>
<tr>
<td>Husband/partner + children</td>
<td>0</td>
</tr>
<tr>
<td>Children/tenant only</td>
<td>2</td>
</tr>
<tr>
<td><strong>Children (ever born)</strong></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>One</td>
<td>2</td>
</tr>
<tr>
<td>Two</td>
<td>7</td>
</tr>
<tr>
<td>Three or more</td>
<td>13</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
</tr>
<tr>
<td>Retired (working part-time)</td>
<td>6</td>
</tr>
<tr>
<td>Retired (not working)</td>
<td>17</td>
</tr>
<tr>
<td><strong>Home ownership</strong></td>
<td></td>
</tr>
<tr>
<td>Owns home outright or with mortgage</td>
<td>20</td>
</tr>
<tr>
<td>Rents from local authority/ housing association</td>
<td>3</td>
</tr>
<tr>
<td><strong>Household income (gross per annum)</strong></td>
<td></td>
</tr>
<tr>
<td>Less than £10,000</td>
<td>7</td>
</tr>
<tr>
<td>Between £10,000 and £19,999</td>
<td>6</td>
</tr>
<tr>
<td>Between £20,000 and £29,999</td>
<td>4</td>
</tr>
<tr>
<td>£30,000 and above</td>
<td>6</td>
</tr>
</tbody>
</table>
The sleep-life grid approach

According to Parry et al (1999: 1), the life grid is an 'accurate method for collecting retrospective data from elderly respondents' by reconstructing the life course as a 'mutual endeavour' between researcher and respondent. They outline five ways in which the life grid is useful in qualitative interviewing. The approach:

- facilitates recall in the area of research interest by referencing it to a range of events and experiences in the person's life;

- involves a high level of engagement from respondents as they reconstruct their biography, and encourages strong rapport between researcher and respondent;

- facilitates discussion by focussing on the accomplishment of a specific task;

- enables respondents to draw on personally traumatic experiences in the overall context of their lives, thus enabling diffusion of potentially emotionally charged areas; and

- allows respondents to take some control over both the course of the interview and the construction of their biographies (Parry et al., 1999: 11).

In addressing possible criticism that research involving retrospective accounts is coloured by recall bias and thus prone to inaccuracy, Parry et al (1999: 2) assert that all interview data reflects 'those stories which respondents wish either consciously or subconsciously to tell'. In this research, the sleep-life grid represents part of a multi-method approach which seeks to explore the multiple dimensions of women's experiences of sleep in relation to the social world. In the absence of longitudinal data which measures the changing nature of women's sleep over time, it thus provides new perspectives on the subject and the opportunity to examine in more detail women's understandings of the link between sleep patterns and life events.
According to Wallace (1994: 144), 'because the goal of life story research is a narrative account produced by the subject, life story interviews are usually unstructured', although he acknowledges that the researcher may seek to direct the story to 'ensure that the specific information being sought is conveyed'. In this case, the sleep-life grid format adopted for this research (Figure 4.2) emerged from the need to capture the relationship between women's sleep and life events. Replacing the interview guide used in Stage 1 interviews, this grid became the backbone of the interview, forming a focus of interaction between researcher and respondent, and a framework for the construction of sleep-life narratives.

Figure 4.2: Sleep-life grid used in interviews with women aged 60 and over

Conducting interviews using the sleep-life grid

At the beginning of the interview women were presented with the grid roughly drawn on large sheets of blank paper. The researcher explained how the grid would be used during the interview to capture some of the key events and transitions of the woman's life from the age of 40 and to highlight changing patterns of sleep across the life course. The interviewer then asked women to recall some of the events in
their lives which had taken place since the age of 40. These were written onto the upper half of the chart and acted as reference points for subsequent discussion. As the grid developed, women were asked to recall how each event or life circumstance influenced their sleep, with this information entered on the lower half of the sheet. Over the course of the interview, under the guidance of the interviewer, women constructed an historical narrative or trajectory of their sleep patterns in relation to their social context across the life course from the age of 40. A typed example of a completed sleep-life grid is given in Chapter Ten (Figure 10.1). In addition to the visual representation of the sleep-life grid on paper, the interview was tape recorded and later transcribed for further analysis.

The interaction between researcher and respondent in the construction of the narrative is illustrated in the following excerpt (Table 4.9). At this stage of the interview, the respondent, Vanessa, a 71 year old divorcee (IV009), has been discussing the traumatic events surrounding her divorce at the age of 57 and her enforced return to full-time work. As can be seen in the excerpt, the production of Vanessa’s sleep-life narrative involves collaboration between researcher and respondent. Rather than acting as a bystander to Vanessa’s narrative, the researcher is fully involved in facilitating narrative development through encouraging further elaboration of key points raised by the respondent.

At the end of the interview, respondents were asked to consider the grid as a whole and to indicate which periods of their lives were the most and least favourable in terms of their sleep. This activity provided respondents with an opportunity to review the completed grid as a tangible representation of their sleep patterns in relation to their experiences across the life course. In Table 4.10, an excerpt from Vanessa’s interview exemplifies the way in which respondents associated their sleep patterns with life events and circumstances.
Table 4.9: Example of collaboration between researcher and respondent in production of sleep-life narrative

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Purpose of interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanessa: It was a very happy time workwise. There was a lot of pressure but I enjoyed it.</td>
<td>Vanessa reflects on the positive nature of her work following her divorce.</td>
</tr>
<tr>
<td>Int: It was good you had that. What about living on your own suddenly? Had your children left by then?</td>
<td>The researcher probes further the changes in Vanessa's living arrangements following her divorce. She contextualises this by asking about Vanessa's children.</td>
</tr>
<tr>
<td>Vanessa: Yes, they were all gone, in different careers. My sleep went to pot. I remember that, but that is not surprising.</td>
<td>Vanessa highlights the aloneness of this period of her life and the adverse affects on her sleep. She validates her poor sleep in relation to her circumstances.</td>
</tr>
<tr>
<td>Int: No, not at all. So when you say it went to pot, tell me about it a little bit more.</td>
<td>The researcher affirms Vanessa's poor sleep as understandable and asks for further details.</td>
</tr>
<tr>
<td>Vanessa: I found sleep very difficult, not initially. Initially I just slept. But after a few weeks or so I began to be unable to sleep for very long.</td>
<td>Vanessa explains the changing patterns of her sleep during this period.</td>
</tr>
<tr>
<td>Int: So you couldn't get to sleep or ....?</td>
<td>The researcher asks for further information to gain a more accurate picture of Vanessa's sleep problems.</td>
</tr>
<tr>
<td>Vanessa: I got to sleep. I took a long while to get to sleep and I woke up a lot in the night. Very poor sleep. So I got used to going for long walks to get tired.</td>
<td>Vanessa elaborates on her sleep problems and outlines her strategy for dealing with the problem.</td>
</tr>
<tr>
<td>Int: And did that tire you out sufficiently? Did your sleep improve as a result of that?</td>
<td>The researcher asks Vanessa to evaluate the benefits of her strategy in terms of improved sleep outcomes.</td>
</tr>
<tr>
<td>Vanessa: My sleep did improve gradually and I can't just remember at what point, but within a couple of years it had improved.</td>
<td>Vanessa discusses the gradual improvement in her sleep over a two-year period.</td>
</tr>
</tbody>
</table>
Table 4.10: Example of use of the sleep-life grid in reviewing changes in sleep across the life course

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Purpose of interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Int: So over this period of your life, when do you think you were sleeping best?</td>
<td>The researcher asks the respondent to evaluate the best sleep period by reference to the life grid.</td>
</tr>
<tr>
<td>Vanessa: Definitely now.</td>
<td>Vanessa defines the present as the best time.</td>
</tr>
<tr>
<td>Int: Any other times when it was particularly good?</td>
<td>The researcher gives Vanessa the opportunity to nominate other periods when her sleep was good.</td>
</tr>
<tr>
<td>Vanessa: I think I don’t remember much about that. That (pointing to grid) was probably all right.</td>
<td>Despite having trouble remembering, Vanessa uses the sleep-life grid to highlight a period of good sleep.</td>
</tr>
<tr>
<td>Int: That was when you had your heart problems, though.</td>
<td>The researcher reminds Vanessa that this period coincided with her heart problems.</td>
</tr>
<tr>
<td>Vanessa: Well, that is right. After that was all done and settled, when I got better I slept well.</td>
<td>Vanessa clarifies this, acknowledging that her sleep improved after her heart operation.</td>
</tr>
<tr>
<td>Int: This period here (pointing to grid), you seemed to have a golden period.</td>
<td>The researcher seeks confirmation that Vanessa’s sleep was good during this period.</td>
</tr>
<tr>
<td>Vanessa: The times when I slept badly were the time of the break up of the marriage, that wasn’t a good thing, and before I had my heart valve replaced and until afterwards, that wasn’t so good.</td>
<td>Vanessa nominates two life events as contributing to poor sleep, establishing a link between adverse sleep and the break-up of her marriage and health problems.</td>
</tr>
</tbody>
</table>

The use of the sleep-life grid thus provided an important means of capturing women’s perceptions of the changing nature of their sleep in response to events and transitions across the life course. As part of a multi-method approach, data generated from the sleep-life grids were essential in constructing an overall picture of women’s sleep within the context of their everyday lives.
4.2.4: GP interviews

Interviews with five GPs in the Oxford area were held between April and July 2001. These interviews were designed to gain GP perspectives on the incidence and treatment of sleep problems among women within their practice. GPs were recruited by the researcher from personal contacts and through snowballing, with GPs recommending others who would be willing to participate. An example of the letter sent to GPs requesting an interview is given as Appendix G.

Interviews were held in GP surgeries and were approximately half an hour in duration to fit in with each doctor’s schedule. The interview covered five main themes: the relationship between sleep and health; consultation and treatment; women and sleep; sleep and ageing; and GP training in sleep. A copy of the interview guide showing the types of questions asked is attached as Appendix H.

Each interview was tape-recorded and later transcribed for analysis. These data provided a medical perspective, complementing the insights gained from women through both qualitative and quantitative methods.

While in-depth interviews with women and GPs provided a macro view of how women’s lives help structure their sleep patterns, the researcher also wanted to analyse the influence of social factors on women’s sleep on a night-by-night basis. The use of audio sleep diaries provided a unique method of accomplishing this goal of micro-level analysis.

4.3 Audio sleep diaries

4.3.1: Rationale

Sleep diaries are frequently used in scientific sleep studies as a means of recording people’s experiences of sleep. However, these diaries or sleep logs are generally quantitative in nature, with respondents writing in details such as time of going to
bed, time spent trying to get to sleep, number of night awakenings, time of getting up and total time spent asleep. While these details are particularly relevant to an examination of the physiological aspects of sleep, from a sociological perspective, they do not address the embeddedness of sleep within a social context. As Johnson and Bytheway (2001: 183) note, research that focuses on ‘everyday life’ has to be oriented to questions of ‘what happens in reality’. To overcome this gap, the researcher decided to modify the written sleep diary approach used by natural scientists to enable respondents to record their experiences of sleep in the context of their daily lives. Rather than ask women to write down their sleep experiences in diary form, the researcher provided each woman with a hand-held dictaphone and asked her to record an assessment of her sleep about 20 minutes after waking up each morning for seven consecutive days.

A total of 36 women completed audio sleep diaries during the study. The sample included 13 women who participated in preliminary qualitative developmental work on audio sleep diaries between March and May 2001 (Stage 1), and a further 23 women who participated in the sleep-life grid interviews in March and April 2002 (Stage 2). Data from both groups were subsequently transcribed for analysis and are coded throughout this thesis as SD001-SD036, followed by the participant’s age. Pseudonyms have been used to protect women’s identities.

4.3.2: Implementing the audio sleep diary method

Participant profile

Stage 1 comprised 13 women who were work colleagues or friends of the researcher and were thus in a position to illustrate through their diaries the relationship between women’s sleep and the complex roles and responsibilities which typify the lives of mid-life working women. Table 4.11 summarises the socio-demographic characteristics of this group.

Stage 2 comprised 23 women who were asked to complete audio sleep diaries following the Stage 2 sleep-life grid interviews. This group, aged 60 and over, were
able to provide through their diaries insights into the lived experience of sleep in later life, complementing data from focus groups and interviews. Table 4.8 (above) provides a profile of women who participated in the sleep-life grid interviews and who subsequently completed Stage 2 audio sleep diaries.

Table 4.11: Socio-demographic profile of women completing audio sleep diaries (Stage 1)

<table>
<thead>
<tr>
<th></th>
<th>Stage 1* (N=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>50</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married/cohabiting</td>
<td>8</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>4</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
</tr>
<tr>
<td>Never married</td>
<td>1</td>
</tr>
<tr>
<td>Children (ever born)</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>4</td>
</tr>
<tr>
<td>One</td>
<td>2</td>
</tr>
<tr>
<td>Two</td>
<td>5</td>
</tr>
<tr>
<td>Three or more</td>
<td>2</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
</tr>
<tr>
<td>Working full-time</td>
<td>10</td>
</tr>
<tr>
<td>Working part-time</td>
<td>1</td>
</tr>
<tr>
<td>Full-time post-graduate student</td>
<td>2</td>
</tr>
<tr>
<td>Household composition</td>
<td></td>
</tr>
<tr>
<td>Lone household</td>
<td>5</td>
</tr>
<tr>
<td>Husband/partner only</td>
<td>4</td>
</tr>
<tr>
<td>Husband/partner + children</td>
<td>4</td>
</tr>
<tr>
<td>Children/tenant only</td>
<td>0</td>
</tr>
</tbody>
</table>

* Note: information on education, household income, and home ownership is not available

Approach

Respondents were given verbal instructions on the use of the dictaphone, and brief guidelines on the types of information they might include (see Appendix I) in their audio sleep diary. These guidelines emphasised that respondents should feel free to record any points about their experiences of sleep or other factors, now or in the past, which may have influenced their current sleep patterns. Respondents were asked to
rate their sleep for each night on a scale of 1-5, with 1 being ‘very poor sleep’, and 5 being ‘very good sleep’.

As Elliott (1997: 11) notes, the value of diaries is their ‘potential to record events, over time, as close as possible to when they occur’. It was felt that the use of an audio rather than written diary approach would offer a novel and time effective way of recording sleep assessments on waking, and enable a more natural and detailed account of sleep in its social setting. While the majority of women felt comfortable using dictaphones, a few women chose to write their diaries. As the following excerpts show, the data generated by the audio sleep diaries were much more detailed and presented in the form of a story recounting women’s sleep experiences in relation to their roles and relationships. Written accounts, in contrast, listed facts in log form about the respondent’s sleep but provided little affective commentary and few links to everyday life.

Audio account:
Tina, age: 44 (SD009)
- living with partner, daughter aged 14, works part-time

Wednesday 2 May

Last night I slept very heavily, I had a very long night’s sleep. Today’s my day off so I tend to lie in on my day off. I went to bed about midnight, in fact I was so tired I fell asleep on the bed before I finished getting myself ready for bed so I had to wake up again and get into bed. I think I’d give my night’s sleep a rating of about 4 because I woke up with a bit of a headache this morning, probably too long asleep. I first woke, my partner woke me up about 7.50, he was anxious that my daughter was going to miss her bus so he woke me just to tell me that and then I went back to sleep again. A calm night — my partner has currently broken his ankle so he has tended to be rather restless but I didn’t notice last night at all. I wasn’t aware of dreams except that when he did wake me up at 7.50 I was dreaming about Paris for some reason. No strategies for getting ready for bed, I didn’t need them last night, just very tired, I’ve had a very busy fortnight including a house move and obviously extra work involved with looking after my partner because he can’t do all sorts of things around the house, I think it’s made me extra tired.

Oh, something I forgot to add — I went to sleep, my partner comes to bed later than me and I go to sleep with a small lamp on low down on the ground with a cover on it, so I went to sleep with that dim light on and he came to bed after an hour or so, I heard him coming, he’s on crutches so I heard the
crutches coming down the hallway and I was aware of him getting into bed but I just sort of came to and went straight back to sleep.

**Written account:**
Gloria, age: 71 (SD030)
- married, adult children

Monday 24/3

Scale: 4
Hours (time went to bed, time got up): 2300-0635
Quality (of sleep): sound, but aware of back aching near dawn
Strategies (what she did to help her sleep): short walk before going to bed
Factors (influencing the way she slept): restlessness late evening
Partner influence: none
Partner comment: none
Waking (how she felt when she woke up): naturally, rested
Other (comments about her sleep): none

Whereas the first (audio) excerpt provides fascinating insights into Tina’s life and her resultant sleep patterns, the second (written) excerpt relies heavily for structure on the guidelines given to respondents with very few embellishments. The audio excerpt provides not only information about Tina’s sleep but about social factors which impact on the quality of her sleep, including her roles as wife and mother, and the added responsibilities associated with her husband’s injury and moving house. While Tina has no problems sleeping, her exhaustion from these multiple roles and responsibilities leads to a heavy sleep pattern which leaves her feeling groggy the following morning. It is this detail which proved invaluable in exploring the relationship between women’s sleep and social context.

Respondents’ reactions to the use of audio sleep diaries was in general positive. The following comments provide insights into women’s response to this novel method of generating qualitative data, highlighting the possible effects of the audio sleep diary method on women’s sleep outcomes.
Mary, age 64 (SD014)
- married, three adult children, retired

Sunday 10 March

'...... I certainly haven’t slept very well this week. I’m wondering whether it is
because I am doing this sleep survey for you. You never know. ...... Anyway
I do hope that this will have been of help to you and I have quite enjoyed
doing it.' (my emphasis)

Tamara, age 71 (SD034)
- married, three adult children, retired

Monday 1 April

(final comment) 'I think the monitoring (of my sleep through the sleep diary)
had an effect (on my sleep) too. I was always aware of it.' (my emphasis)

Despite these concerns, the use of audio sleep diaries provided a rich source of data
reflecting the social context of women’s sleep. The next section examines ethical
issues associated with implementing qualitative methods in this study.

4.4 Ethical issues in implementing qualitative methods

The observance of ethical guidelines such as those developed by the British
Sociological Association (BSA, 2002) and the Social Research Association (SRA,
2002) underlies good research practice. Both these codes were adhered to in this
research. Ethics are a matter of balancing the researcher’s desire to uncover the
hidden dimensions of social life while protecting the rights and integrity of research
participants (Bulmer, 2001). In this study, ethical considerations included obtaining
informed consent; enabling participation; protecting the interests of participants; and
maintaining anonymity, privacy and confidentiality:

4.4.1: Obtaining informed consent

‘Inquiries involving human subjects should be based as far as practicable on the
freely given informed consent of subjects.’ (SRA, 2002: paragraph 4.2)
"The researcher should explain 'in appropriate detail, and in terms meaningful to participants, what the research is about, who is undertaking and financing it, why it is being undertaken, and how it is to be disseminated and used.' (BSA, 2002: paragraph 16)

In the qualitative phase of the study informed consent was based on voluntary participation in the focus groups and interviews, and willingness to complete audio sleep diaries. The researcher's role in gaining this consent included:

- providing details of the study and how participants could be involved on recruitment posters (Appendix A);

- providing contact details (phone and email) to enable women interested in the research to obtain further information;

- discussing details of the study, the research method, and issues of confidentiality with women by phone, and providing opportunities for women to ask questions;

- confirming details of focus groups or interviews by letter (Appendix B), including the date, time, location, and duration of the sessions; a statement of how the sessions would be tape-recorded and later transcribed, and a reassurance that following the focus group session individual identities would remain anonymous;

- reiterating details about the study, the structure of the session, issues of confidentiality and anonymity, and information relating to dissemination of data at the beginning of each focus group and interview, as well as offering participants a further opportunity to ask questions about the research or its implementation; and

- emphasising the right of participants at all times to opt out of answering specific questions or providing sensitive information.
4.4.2: Enabling participation

'Social researchers have a responsibility to ensure participation in research of those people who might like to take part, by dealing with potential barriers of communication, understanding, access or financial expense.' (SRA, 2002: paragraph 4.5)

In the qualitative phase of the study, issues of enabling participation included:

- holding focus groups in a convenient, central location and providing a map and details of public transport in a letter to participants in advance of the sessions (Appendix B);

- considering the mobility problems of older participants by holding focus groups for the 70 and over age groups in locations familiar and easily accessible to participants (in this case a local community centre where residents hold regular senior citizens events; and the home of one of the organisers of U3A classes);

- offering participants an honorarium of £20 to cover expenses and as a token of appreciation; and

- offering participants the choice of recording audio sleep diaries in writing rather than by dictaphone in instances where they expressed a reticence to use the equipment. This was particularly important for a small number of older participants uncomfortable with the use of a dictaphone.

4.4.3: Protecting the interests of participants

Researchers should 'consider carefully the possibility that the research experience may be a disturbing one and should attempt, where necessary, to find ways to minimise or alleviate any distress caused to those participating in research.' (BSA, 2002: paragraph 28)
Qualitative research has the potential to open up a ‘can of worms’ when it comes to examining women’s lives. Sleep is an intimate and very personal activity which impinges on every aspect of a woman’s life. In conducting focus groups and interviews, the researcher is unable to predict how women will respond to questions nor the emotional content and impact of interactions on both participants and the researcher. In creating an encouraging atmosphere in focus groups and interviews essential for the generation of data, the researcher is also responsible for managing the intimate revelations and confessions which may emerge during discussions. In the course of this study, participants freely revealed details of abusive relationships; marital infidelity; traumatic divorces; the death of children, parents, siblings and partners; the problems associated with caring for partners with dementia and terminal illness; and their own struggles with cancer and other illnesses. In a study which seeks to draw out the relationship between sleep and its social context, the emergence of these revelations is not to be discouraged despite requiring a great deal of sensitivity on the part of the researcher and other participants. In managing these situations, the researcher gave participants time to talk about issues if they raised them voluntarily before moving the discussion forward.

While in most cases the atmosphere of respect and trust built up during the focus groups and interviews created the intra-group empathy and support for revelations to take place, the researcher does not always have the breadth of experience to deal with the ethical dilemmas which may arise. The following example, from a focus group for women aged 48-52, illustrates the difficulty which researchers can face in trying to balance the need to protect the interests of participants while ensuring that the group as a whole, and the researcher herself, are not over-burdened with the traumatic experiences of others. One of the participants in this focus group, Tania, a woman in her early fifties, had lost her partner a couple of years previously and was still dealing with the consequences of bereavement including litigation by the children from her partner’s first marriage. For her, the focus group session represented an opportunity to unburden herself, with long explanations about the death of her partner and the subsequent court battles with his adult children over inheritance issues. Early in the focus group, the researcher allowed Tania to express
herself freely, however, as the session progressed, Tania’s intense grief and bitterness and her constant references to her husband’s death threatened to undermine the development of a positive atmosphere in the group.

For the researcher, managing the situation involved respecting the participant’s right to free expression while ensuring that her concerns did not dominate the group. In the following excerpt from the focus group data, the researcher shows sensitivity to Tania’s situation before diverting the conversation back to the topic of sleep and redirecting the discussion to another participant:

Tania: (long explanation of the process of litigation which followed her partner’s death)

Moderator: It is understandable. Your sleep would certainly be disrupted.

Julie (another participant), normal (sleep) for you is four hours?

Julie: Between four and five hours ......................... (FG2.1: 48-52)

By chance one of the other participants worked as a volunteer bereavement counsellor and was able to offer Tania support during the session, as well as offering to speak to her afterwards. This helped to deflect the focus of attention from the bereaved participant and enabled the researcher to continue the session as planned. While the session ultimately proved successful as a source of insights into women’s sleep, the experience reported by Tania was disquieting and outside the realms of the researcher’s previous experience as a focus group moderator. As a result, she made an appointment to see the counsellor herself during the following week for reassurance and guidance on how to manage in the event of similar situations in future. Thus while it is incumbent on researchers to protect the interests of participants, there are times when the researcher herself is also vulnerable to the traumatic circumstances of participants’ lives. The importance of opportunities for debriefing for researchers cannot be over-emphasised in research which encompasses potentially sensitive subject areas.
4.4.4: Maintaining anonymity, privacy and confidentiality

'The anonymity and privacy of those who participate in the research process should be respected. Personal information concerning research participants should be kept confidential.' (BSA, 2002: paragraph 34)

As part of the process of informed consent (see 4.4.1 above), participants were ensured that the principles of confidentiality and anonymity would be applied to the data generated through the focus groups, interviews, and audio sleep diaries. Transcriptions of tape-recorded data identified participants by their first name only. Pseudonyms were subsequently used to refer to participants, thus ensuring that ethical principles of anonymity were followed during the dissemination of findings at local, national and international conferences; through journal articles; through media coverage; and throughout this thesis.

4.5 Analysing qualitative data

4.5.1: Managing the data

The use of a multi-method approach in this study ensured the generation of a wide range of data that was analysed as a means of developing meaningful ideas, understandings and hypotheses about women’s sleep. Each of the 15 focus groups, 35 qualitative interviews, and 36 audio sleep diaries was tape-recorded and then transcribed in MS Word, producing in total more than 1000 A4 pages of data. Following transcription, a hard copy of each data set was produced and read through in its entirety to enable the researcher to become familiar with the ‘voices’ of the participants, and to ‘feel’ the data as a basis for analysis.

To facilitate preliminary analysis, data were imported into the CAQDAS (computer-assisted qualitative data analysis software) package QSR NVivo. According to Bryman (2001: 406), packages such as this ‘take over the manual tasks associated with the coding process’ by enabling the researcher to code data on-screen and then retrieve segments of text by downloading the data for each code. As Smith (1996:
notes, however, the use of software packages such as QSR NVivo can only support analysis, while the 'complex and multifaceted activities that are involved in interpretative analysis remain human functions'. Once coded, therefore, data segments were retrieved in hard copy for more detailed analysis of underlying meaning and as a basis for the development of hypotheses about the relationship between women’s sleep and its social context.

One of the perceived weaknesses of using CAQDAS can be the resultant fragmentation of text and the subsequent loss of the narrative flow of data (Bryman, 2001). This is of particular concern in the analysis of focus group data where the creation of meanings and understandings about sleep derive in part from group interaction. Thus while the use of QSR NVivo was effective in gaining an overview of women’s experiences of sleep from focus group, interview, and audio sleep diary data, it proved inappropriate as a vehicle for analysing interaction between participants and the researcher, particularly in the case of focus groups. To overcome this problem, analysis of interaction was carried out through manual tracking of group dynamics and communication using original transcripts of each focus group.

4.5.2: Approaches to data analysis

The method used in analysing the qualitative data in this study draws on aspects of the grounded theory approach first proposed by Glaser and Strauss (1967), and elaborated on in more recent works (Strauss and Corbin, 1997; Strauss and Corbin, 1998). Grounded theory is defined as:

‘...theory that was derived from data, systematically gathered and analysed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another.’ (Strauss and Corbin, 1998: 12)

In essence, the primary aim of the grounded theory approach is the generation of substantive theory. To accomplish this the researcher moves through an iterative process of data collection, coding, conceptualising and comparing. It is this process,
rather than the generation of theory about women’s sleep, which informs the analytic approach adopted in this study.

According to Pidgeon (1996a: 76), grounded theory emphasises ‘participants’ own accounts of social and psychological events and of their associated local phenomenal and social worlds’. In adopting a grounded theory approach, the researcher is involved in ‘unravelling the multiple perspectives and common-sense realities of the research participant’ (Pidgeon, 1996a: 77). As such, the modified grounded theory approach to data analysis used in this thesis lends itself to both the interpretivist framework which underlies the research, and to research aims which focus on broadening understandings of women’s actual experiences of sleep within its social context. The use of CAQDAS in data analysis, with its emphasis on coding and retrieving text, is compatible with a grounded theory approach (Bryman, 2001).

In keeping with the basic premises of grounded theory, the approach to data analysis in this study thus involved:

- collecting data from a range of sources (focus groups, qualitative interviews, audio sleep diaries) on an on-going basis throughout the study;

- coding the data following transcription by identifying and labelling concepts in the text considered to be of relevance to an understanding of the substantive research topic;

- asking questions about the data and developing provisional hypotheses about relationships between categories;

- comparing and reappraising hypotheses against incoming data to identify similarities and differences; and

- integrating these hypotheses to develop an overall understanding about the interrelationship between women’s sleep and the social context of their everyday lives.
4.5.3: Thematic analysis

The first stage in the process of analysis involved examining focus group data to provide insights into women’s sleep. Using QSR NVivo, data were coded on-screen into broad areas of descriptive interest based on initial readings of the data (Table 4.12):

Table 4.12: Examples of descriptive codes used in thematic analysis

<table>
<thead>
<tr>
<th>Descriptive code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>perceptions</td>
<td>how women perceive the importance of sleep</td>
</tr>
<tr>
<td>characteristics</td>
<td>how women describe good and bad sleep patterns</td>
</tr>
<tr>
<td>effect</td>
<td>how poor sleep impacts on daily lives</td>
</tr>
<tr>
<td>work</td>
<td>how work affects sleep</td>
</tr>
<tr>
<td>family</td>
<td>how children and partners affect women’s sleep</td>
</tr>
<tr>
<td>life crises and transitions</td>
<td>how factors such as divorce, menopause, retirement, and widowhood impact on sleep</td>
</tr>
<tr>
<td>health</td>
<td>how health status and physiological factors affect sleep</td>
</tr>
<tr>
<td>ageing</td>
<td>how physiological ageing impacts on sleep</td>
</tr>
<tr>
<td>strategies</td>
<td>what women do when they have poor sleep</td>
</tr>
</tbody>
</table>

This analysis generated preliminary descriptive codes for women’s experiences, opinions and attitudes towards sleep, thus informing understandings about the nature of women’s sleep across the life course and providing insights into the interrelationship between women’s experiences of sleep and their social context. This analysis provided a strong foundation for subsequent analysis of data from in-depth interviews and audio sleep diaries. Data from these sources were compared to focus group data and coded into existing or new categories as appropriate, providing further insights into emerging understandings about the lived experience of women’s sleep.
4.5.4: *From initial coding to conceptualising*

According to Strauss and Corbin (1998: 103), the process of conceptualising involves grouping ‘events, happenings, objects, and actions/interactions that are found to be conceptually similar in nature or related in meaning’ under more abstract concepts termed ‘categories’. Following the initial process of descriptive coding described above, data were re-examined to identify higher level, more abstract concepts underlying women’s experiences of sleep in its social context. On the basis of this, the following categories emerged as key concepts in this study (Figure 4.4).

**Figure 4.3: Key concepts in the study of women’s sleep**

<table>
<thead>
<tr>
<th>GENDER</th>
<th>LIFE COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>roles and relationships</td>
<td>life events and transitions (eg. menopause, divorce, retirement, widowhood)</td>
</tr>
<tr>
<td>inequalities</td>
<td>sleep trajectories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SLEEP MANAGEMENT</th>
<th>WOMEN’S SLEEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>strategies</td>
<td>institutional (eg. paid work)</td>
</tr>
<tr>
<td>medicalisation</td>
<td>relational (eg. family roles and responsibilities)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGEING</th>
<th>CONSTRAINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>physiological ageing</td>
<td>institutional (eg. paid work)</td>
</tr>
<tr>
<td>social ageing</td>
<td>relational (eg. family roles and responsibilities)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>socio-temporal factors</td>
</tr>
</tbody>
</table>

Drawing on relevant sociological literature where appropriate, these concepts are discussed in detail in the context of research findings throughout the following chapters.
4.5.5: Analysing interaction in focus groups

One of the main drawbacks of the grounded theory approach, however, is the fragmentation which may result from coding and categorising the data into discrete units (Bryman, 2001). While this approach is a valid process of uncovering major themes embedded in the data, from an interpretivist perspective, it overlooks the importance of the communicative process in formulating understandings about sleep as a lived experience. To use Catterall and Maclaran's (1997) photographic analogy, analysis of focus group data using grounded theory produces only 'snapshots' of the data, rather than giving holistic insights into how women structure their experiences of sleep through interaction with other participants. To overcome this dilemma, Catterall and Maclaran (1997: 8) suggest a dualistic approach to analysis:

‘When we work with focus group data, two separate codings, analyses and interpretation activities take place. We work on-screen when we are dealing with transcript content, for example, in what ways can participants’ experiences with a particular topic be categorised. We work off-screen when we are dealing with the interaction aspects of focus groups.’

Thus having completed an initial coding of data, an analysis of the hard copy of the focus group transcripts in their entirety was carried out as a means of analysing ‘the moving picture’ of the story of sleep as constructed by focus group dynamics. This involved manually tracking the development of ideas and understandings about sleep among participants as part of the group process. In so doing, the researcher was able to gain not only further valuable insights into women’s sleep experiences, but also into how women’s opinions, attitudes and beliefs about sleep are framed by their interaction with others and by a shared socio-cultural context. This approach was also used to capture the underlying narrative of sleep-life grid interviews in which women constructed a history of their sleep in relation to events, circumstances and transitions across the life course; and to analyse the influences on women’s sleep on a nightly basis over a one-week period as revealed in audio sleep diary transcripts. In this way the researcher was able to track changes in sleep patterns over time in response to social context, rather than relying solely on disjointed fragments of the sleep-life relationship available through thematic coding.
Blaikie (2003: 1) defines hypotheses as 'tentative answers to research questions'.

The generation of hypotheses is an important stage in answering the questions which frame this research and in developing sociological understandings of women’s sleep in the context of everyday life. In this case, the following hypotheses emerged from the analysis of initial focus group data:

- that the majority of women aged 40 and over experience sleep disruption;
- that women’s sleep takes place in a social context and that it is this context, with its institutional and temporal constraints, which influences the nature of women’s sleep;
- that women’s sleep reflects the gendered roles and relationships which underpin their everyday lives;
- that these roles and relationships may impose constraints on the quality and quantity of women’s sleep;
- that these roles and relationships change across the life course in response to life events and transitions, in so doing precipitating changes in the structuring of women’s sleep; and
- that women respond pragmatically to the socio-temporal constraints on their sleep, choosing strategies to help overcome sleep problems in accordance with their individual life circumstances.

These hypotheses were subsequently tested against incoming data from interviews, audio-sleep diaries, additional focus groups and the self-completion questionnaire.
4.6 Conclusion

In this study, qualitative methods form a core component of the multi-method approach used to record and interpret women’s experiences of sleep across the life course. The use of qualitative methods which focus on women’s accounts of their sleep, is in keeping with the interpretivist framework adopted in this thesis. By recording women’s accounts of their sleep through focus groups, in-depth interviews, and audio sleep diaries, the researcher has a wide range of data through which to explore, interpret and explain the relationship between women’s sleep and its social context.

Through participating in focus groups, women assume the role of sleep experts, informing the researcher by sharing their diverse experiences of sleep in relation to everyday life. It is these experiences, interpreted through a sociological lens, which contribute to the development of understandings about the nature of women’s sleep in its social context. As such, the focus group becomes a vehicle through which to tap into the vast resource of knowledge which women have about their sleep and to use this as a basis for generating understandings and explanations about why women experience sleep disruption. Through sharing their experiences of sleep, women also reveal aspects of their everyday lives, including the interplay of relational, institutional and life course constraints in structuring their sleep patterns. As such, the sleep period, once considered outside the scope of sociology, can be examined as a further site for research into gendered roles and relationships.

Moving from the initial broad understandings about sleep generated by focus groups, the use of qualitative interviews enabled a more individual, case study approach to the study of women’s sleep. Designed to allow more in-depth exploration of women’s experiences of sleep, interviews provided further insights into the relationship between sleep and social circumstances. The application of a sleep-life grid approach to interviewing was crucial in achieving an overview of continuity and change in women’s sleep patterns, through recording the impact of life events and transitions on women’s sleep from the age of 40 in the form of a sleep trajectory (see Chapter Ten).
The use of a novel qualitative method in the form of audio sleep diaries was a particular strength of this study. Simple in its design and implementation, the method required women to record their experiences of sleep on a dictaphone each morning for seven consecutive days. While sleep-life grids provided insights into the changing pattern of sleep from the age of 40 until the present, audio sleep diaries recorded changes over the short-term, revealing the importance of roles and relationships in the structuring of women’s sleep on a night-by-night basis.

While each of these data sources could be used on its own to generate insights into women’s sleep, the strength of this study was the utilisation of a multi-method approach, designed to capture the diverse range of factors influencing women’s sleep experiences across time. Qualitative data thus formed a key source in the development of knowledge and understanding about women’s sleep in its social context, as well as providing insights into the gendered roles and relationships which underpin women’s everyday lives.

These qualitative data were also essential in informing the development of a quantitative self-completion questionnaire, written in everyday language and reflecting the reality of women’s lives, as expressed by women in focus groups, interviews, and audio sleep diaries. Chapter Five examines the use of quantitative methodology in this study, focusing in particular on the use of the survey method in data generation.
Chapter Five

QUANTITATIVE METHODOLOGY

'I always find that statistics are hard to swallow and impossible to digest. The only one I can ever remember is that if all the people who go to sleep in church were laid end to end they would be a lot more comfortable.'

(Mrs Robert A. Taft)


Alongside the qualitative methods described in Chapter Four, the use of a self-completion postal questionnaire, the 2003 Women's Sleep in the UK Survey, was an important component of the integrated mixed method research approach adopted in this study. As Bryman (1992: 60) notes, quantitative research enables the researcher 'to plug the gaps in a qualitative study which arise because, for example, the researcher cannot be in more than one place at any one time'. Postal surveys are considered a cost-effective means of accessing the views of a large population over a wide geographic area (Frankfort-Nachmias and Nachmias, 1996; Simmons, 2001). In this case, the survey aimed to achieve a representative sample of approximately 2000 women aged 40 and over in the UK (England, Wales, Scotland, Northern Ireland), enabling the incorporation of the views and experiences of a wide cross-section of women. Rather than being a means of generalising results to the population as a whole, the self-completion questionnaire used in this research was seen as a complement to qualitative methods, designed to further 'highlight the fragmented and multi-faceted nature of human (un)consciousness' (Brannen, 1992: 31, my adaptation in brackets).

This chapter discusses the development and implementation of the 2003 Women's Sleep in the UK Survey. It considers:

- the postal survey method;
- the design and development of the questionnaire;
- the piloting process;
- the implementation of the survey;
• ethical issues; and
• the approach used to analyse data.

5.1 The postal survey method

In comparison to face-to-face interviews, postal surveys have a number of advantages including access to a broad geographic area, low cost administration, elimination of interviewer bias, and increased convenience for respondents (Bryman, 2001). However, as Frankort-Nachmias and Nachmias (1996) note, there are several disadvantages which the researcher must take into account when using the method, including the need to simplify questions to ensure the respondent can answer from written instructions alone; the lack of opportunity for probing to clarify ambiguous answers; and the lack of control over who completes the questionnaire. Yet, perhaps the major disadvantage of this method is the potential low response rate. According to Bryman (2001: 131), ‘surveys by mail questionnaire typically result in lower response rates than comparable interview-based studies’.

A review of the literature reveals little consensus on an acceptable response rate for postal questionnaires. According to Fowler (1989), the response rate for some mail surveys may be as low as 5%, while Simmons (2001) suggests that some do not achieve more than a 20% rate of return. At the other end of the scale, Saul and Payne (1999) report response rates of around 80% for postal surveys used in studies of morbidity in Rotherham and Sheffield in 1991 and 1994. Frankort-Nachmias and Nachmias (1996) report a typical response rate for postal questionnaires without follow-up of between 20-40%. Yu and Cooper (1983, cited in Chiu and Brennan, 1990), in their meta-analysis of 93 postal survey studies, reported an average response rate of 47%.

While a number of factors may influence response rates to postal surveys, it is clear that there is an increasing reticence in the population to complete questionnaires and survey interviews. As Frankort-Nachmias and Nachmias (1996: 232) observe, with the increased use of survey methods by research and marketing organisations as well
as national and local government, ‘some citizens ... may find themselves trying to
decide which and how many of the questionnaires they receive each year deserve a response’. This declining response rate is apparent even in government surveys which are expected ‘to yield a response rate higher than 75%’ (Frankfort-Nachmias and Nachmias, 1996: 232). The General Household Survey (GHS), a government survey conducted by face-to-face interview, is a prime example of this trend. The GHS 2000 achieved a response rate of just 67% from a set sample size of 13,250, down from 72% in 1998, and 83% in 1992. According to the GHS 2000 report:

‘The decline in response rate since the early 90s is due to an increase in the proportion of households refusing to participate rather than failure to contact people. This decline reflects a general trend in decreasing response experienced by all survey organisations.’

(Walker et al., 2001: 181)

Two recent surveys conducted by academic institutions and funded by the ESRC, throw some light on current trends in survey response. Robertson and Warr (2002), in their study of older people’s experiences of paid work, carried out a postal survey of 3500 people aged 50-75 years. The response rate, 34%, was considered ‘healthy’. In contrast, Gilhooly’s (2002) study of transport and ageing involving a postal survey of a sample of 5000 people drawn from the electoral roll achieved a response rate of only 23%; a result regarded as ‘unsatisfactory’. These surveys, comparable in scope to that used in this study, provide a realistic indication of the expected response rates from the 2003 Women’s Sleep in the UK Survey.

According to Sapsford (1999: 14), ‘survey research tends on the whole to require a higher degree of prior planning than other approaches’, with most surveys involving ‘a considerable investment in time and/or money to collect a large amount of data in a single ‘pass’ through the field’. This ‘investment in time and money’ comprised a four stage process over an 18-month period following completion of focus groups, interviews and audio-sleep diaries (Stage 1). The process involved:
• designing and developing the questionnaire;
• piloting the questionnaire;
• administering the 2003 Women's Sleep in the UK Survey; and
• analysing the data.

Each of these stages will now be examined in turn.

5.2 Designing and developing the questionnaire

5.2.1: Questionnaire content

According to Bryman (2001: 450), ‘the in-depth knowledge of social contexts acquired through qualitative research can be used to inform the design of survey questions’ for self-completion questionnaires. In this case, the development of the questionnaire was informed predominantly by data generated from focus groups, supplemented by data from qualitative interviews and audio sleep diaries. Morgan (1997: 25-26) identifies the following ways in which focus groups can contribute to the creation of survey items:

• by capturing all the domains that need to be measured in a survey, thus ensuring the researcher has as complete a picture of participants’ thinking as possible;
• by determining the dimensions that make up each of these domains through identifying the categories of items needed to cover each area of questioning; and
• by providing item wordings that convey the researcher’s intent to the survey respondent, thus minimising confusion and increasing validity.

The questionnaire was developed to collect both factual and behavioural information about respondents’ sleep within its social context, as well as socio-demographic attributes. As in most questionnaires, the survey contained both open and closed questions (see Appendix J). However, the majority of questions were closed, or fixed-choice, designed to facilitate completion by enabling respondents to select one
answer from a range of alternatives. A final open question, in the form of a boxed space on the back of the questionnaire, was designed to offer respondents the opportunity to record any other information about their sleep. Following receipt of completed questionnaires, responses to this question were typed as an MS Word document and exported into QSR NVivo for subsequent qualitative analysis. Throughout the thesis, these responses are coded with the prefix S, followed by the respondent’s age, for example: (S: age 45).

5.2.2: Format and layout

In determining the overall format and layout of the self-completion questionnaire, the researcher examined a range of models, including questionnaires used in commercial surveys and those used in more academic and professional settings. Factors taken into account in designing the questionnaire included:

- providing a cover letter on the front of the questionnaire containing information about the survey, issues of confidentiality, instructions for completion and return, and details of incentives;
- presenting the questionnaire in the form of a booklet, stapled down the middle, to ensure ease of use and to avoid the possibility of lost pages;
- using cream coloured paper to reduce the starkness of black-and-white;
- striking a balance between the number of questions asked and the overall length of the questionnaire;
- standardising the questions to ensure consistency of response;
- categorising questions into a number of clearly titled sections to indicate the type of information required;
- using sub-questions (a, b, c etc) to keep overall number of questions to a minimum;
- using 12 point font to ensure legibility of questions;
- providing clear instructions, repeated for each question;
- sequencing questions logically within each section;
using clear filters to direct respondents to relevant questions within each section;

locating personal attribute questions at the end of the questionnaire;

using shading to help distinguish parts of questions;

providing sufficient space on the back of the questionnaire to enable respondents to write free comments about their sleep;

providing space on the back of the questionnaire to enable the researcher to thank participants and to remind them of return instructions;

providing space in the bottom right corner of the back of the questionnaire for inclusion of a discrete respondent identification code; and

pre-coding responses by placing numeric codes beside each of the closed question alternatives, thus facilitating the subsequent data input process.

Early drafts of the questionnaire were developed using the software package Pinpoint. However, the number of questions involved and the amendments resulting from piloting the questionnaire made the package unwieldy and cumbersome. Despite the work involved, it was decided to re-type and re-format the questionnaire in MS Word. This greatly facilitated subsequent modifications and the transfer of the questionnaire electronically during the pilot process.

5.3 Piloting the questionnaire

5.3.1: Pre-pilot

Self-completion questionnaires are characterised by the lack of an 'intermediary between researcher and respondent to clarify ambiguities or explain intricacies' (Hoinville and Jowell, 1977: 130). Pre-testing, or piloting, is thus a crucial stage in the design and development of such questionnaires. According to van Teijlingen and Hundley (2001), pilot studies can be used for a range of purposes including to check the wording and the order of the questions in a questionnaire, to test the process of administering the questionnaire, and to gain an indication of the likely response rate
of the main survey. In this study, piloting was carried out on an on-going basis throughout the phase of questionnaire development as a means of refining the survey and testing implementation procedures.

As Simmons (2001: 102) notes, when developing a questionnaire you should first 'try your draft out on people you know'. In this case, three mini-pilots of drafts of the questionnaire and covering letter were conducted over a six month period between January and June 2002 with fifty women, including work colleagues, members of the EU Sleep in Ageing Women study team, and delegates at a conference on ageing held at the University of Surrey. Each person was given a letter outlining the nature of the research and inviting them to complete the questionnaire firstly as a 'participant', noting down how long it took to complete; and secondly, as a professional, commenting on factors such as instructions, question content, order of questions, routing of questions, ambiguity, spelling and grammar. Amendments to the questionnaire were made following each of these mini-pilots, including clarifying instructions, changing the wording of questions to increase clarity, deleting questions to reduce the overall length of the questionnaire, adding questions on environmental factors affecting sleep (for example, noise, pets, light etc), re-ordering questions to ensure a more logical flow to the questionnaire and re-formatting the text to improve overall presentation.

The draft of the questionnaire which emerged from this iterative process of testing and revision was then piloted on the 35 women participating in the qualitative sleep-life grid interviews (Stage 2). This provided an opportunity for the researcher to observe how women completed the questionnaire, the time taken, and any difficulties experienced in answering the questions. As a result of this process, a number of amendments were made prior to conducting the main pilot.
5.3.2: The main pilot

The sampling frame

According to De Vaus (2002: 117), ‘pretesting (or piloting) should be conducted with people who resemble those to whom the questionnaire will finally be given’. It was decided, therefore, to pilot the questionnaire on a representative sample of 500 women aged 35 and over from across the UK (England, Wales, Scotland, and Northern Ireland) drawn from a database prepared by Business Lists UK, a company specialising in the provision of mailing lists. In the absence of a single sampling frame for the target population, the sample was selected systematically from a list compiled from a combination of electoral register, census, and other data sources which are in the public domain. While the electoral register allows selection by geography and, to an extent by gender, selection by age was generated on a ‘bias’ system of estimations based on linking information from the census and other databases. According to a spokesman from Business Lists UK, ‘as with any profile based system, this does not guarantee absolute accuracy, but will nevertheless give a minimum of 95% (accuracy) on address details and between 80%-90% on the age selection’ (personal correspondence, 2/10/02). Although this study focuses on women aged 40 and over, the system used to create the database specifies selection on the basis of ten-year age bands from age 35+.

Administration

The main piloting of the questionnaire took place in August-September 2002. The aims of this pilot were to test the administrative procedures associated with the implementation of the questionnaire, including sampling, printing, mail-out, and recording responses; to do a final check on questionnaire content and format; and to ascertain the likely response rate. In order to find a balance between the number of questions which the researcher wanted to ask, and the need to ensure a good response rate, it was decided to trial the use of two versions of the questionnaire: a longer version containing 64 questions over 20 pages; and a shorter version with 42 questions over 14 pages. This enabled comparison of response rates and was
important in determining the length of the final questionnaire. Data from the pilot study were not analysed and were excluded from the final analysis because of differences in survey questions and questionnaire length.

The administration of the pilot questionnaire was carried out in-house. This included setting up an Access database to record names, addresses, questionnaire ID numbers, and date of receipt; ordering envelopes and stamps; preparing address and identification labels; organising printing of questionnaires and administering the mail out.

Each questionnaire was printed back-to-back on cream coloured A3 paper, and folded as a brochure with two staples down the middle. The mail out of questionnaires was carried out in three phases:

1. The first mail out comprised a copy of the long or short questionnaire with a cover sheet giving information on the study and instructions on completing the questionnaire, and a business pre-paid reply envelope addressed to the University for return. Incentives of a £10 Marks & Spencer voucher were offered for the first five completed questionnaires. Each version of the questionnaire was sent to a random half of the total sample of 495 women.

2. The second mail out, after two weeks, comprised a single page letter addressed to recipients who had not returned the questionnaire in the first mail out. In the form of a reminder, this letter stressed the importance of completing the questionnaire, and provided a contact number for replacement copies of the questionnaire if required.

3. The final mail out comprised a single A4 sheet reminder, together with a copy of the short questionnaire and business pre-paid reply envelope. Incentives were again offered as for the initial mail out.
Response rate

Of the 495 questionnaires sent, a total of 211 (43%) were returned, with 199 being completed and the remainder blank. Of the 199 completed returns, 156 (78%) were returned in response to the first mail out, with a further 43 questionnaires (22%) being returned after follow-up mail outs. Four of the target recipients were unable to complete the questionnaire as a result of having moved or died. This group were considered ineligible and were excluded from the sample when calculating the response rate. The overall response rate was thus calculated as follows:

\[
\text{completed returns} \quad 199 \times 100 = 41\%
\]
\[
\text{net sample (495-4)} \quad 491
\]

In view of response rates achieved by recent ESRC studies involving postal surveys (see section 5.1 above), this was considered a satisfactory result.

5.4 Implementing the 2003 Women’s Sleep in the UK Survey questionnaire

5.4.1: The final questionnaire

On the basis of the pilot, a number of changes were made to the questionnaire. The main changes included:

- the decision to proceed with a short version of the questionnaire to save administrative costs and to encourage completion. Response rates to the first mail out showed a return of 27% for the long questionnaires and 36% for the short;
- the use of sub-questions (for example, a, b, c) for related topics rather than separate questions;
- greater clarification in instructions to individual questions;
- a reduction in the number of ‘other? <Please specify>’ options; and
- reordering sections of the questionnaire to ensure more general questions applicable to all women preceded those relating to children and partners.
The final questionnaire (Appendix J) contained 48 items over 12 pages. It comprised five main sections:

1. About your sleep: quality, satisfaction, duration, problems, changes, and impact of poor sleep.
2. Influences on your sleep: environmental, physical, psychological, children, and partners.
3. Managing your sleep: strategies women use to cope with sleep loss, for example: self-directed activities, over-the-counter medications, alternative therapies, sleeping pills, and napping.
5. About you: socio-demographic information, for example: age, marital status, education, occupation, and household income.

5.4.2: Sampling frame

On the basis of the pilot it was decided to use Business Lists UK to compile the sampling frame for the questionnaire survey, using the procedure described in section 5.2.2 (above). The final list comprised a representative sample of 5142 women aged 35 and over from across the UK (England, Wales, Scotland, and Northern Ireland).

5.4.3: Administration

Given the number of survey forms to be sent, it was decided to contract out the printing and mail out of questionnaires to In2Print, a company in Aldershot. To encourage response, surveys were returned Freepost to the researcher at the University of Surrey rather than to In2Print. Once received, surveys were checked off against a database, with a list of non-respondents sent to In2Print for follow-up mail outs. As for the pilot, the administration of the survey comprised a principal mail out, followed by two follow-up mail outs designed to maximise the response rate. The first mail out comprised a copy of the questionnaire and a business pre-paid
reply envelope addressed as before to the University. The front page of the questionnaire (Appendix J) contained a letter inviting recipients to participate, explaining the importance of the research, outlining issues of confidentiality, and offering a £10 Marks & Spencer voucher to the first ten completed questionnaires returned. The first follow-up comprised a short personally addressed single page letter reminding women to complete the survey (Appendix K); the second follow-up contained both a longer personally addressed single page letter (Appendix L) as well as another copy of the questionnaire and a business pre-paid reply envelope.

The schedule for mail out of questionnaires and the number of completed returns is shown in Table 5.1.

Table 5.1: Schedule for mail out of questionnaires and completed returns

<table>
<thead>
<tr>
<th>Mail out</th>
<th>Date</th>
<th>Completed returns</th>
<th>% of original mail out (N=5142)</th>
<th>% of completed returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal mail out</td>
<td>28/10/02</td>
<td>1131</td>
<td>22</td>
<td>62</td>
</tr>
<tr>
<td>Follow-up 1</td>
<td>19/11/02</td>
<td>204</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Follow-up 2</td>
<td>10/01/03</td>
<td>495</td>
<td>10</td>
<td>27</td>
</tr>
</tbody>
</table>

As can be seen from Table 5.1, the highest proportion of completed questionnaires (62%) was returned following the first mail out, with follow-up mail outs producing a further 38% of completed returns. The response to the first follow-up was disappointing, representing only 4% of the original mail out. In hindsight, this figure may well have been higher had another copy of the questionnaire been included with the follow-up letter, as was the case with the second follow-up mail out. Although response to the second mail out represented 10% of the original mail out, problems with the layout of the re-printed questionnaire may have prevented a higher response rate.

5.4.4: Response rate

From a mail out of 5142 questionnaires, a total of 2066 (40%) were returned. Of these, 1830 questionnaires were completed, and 189 were returned blank (the second
follow-up asked recipients to return blank questionnaires if they preferred not to participate in the survey). However, as a result of sampling frame error, nine percent of respondents (N=169) were in fact aged under 35, and thus outside the target sample of women aged 35 and over. As a result, only 1661 of completed questionnaires were eligible for inclusion in response rate calculations. A further 32 questionnaires were considered ineligible for inclusion in the final response rate calculation as a result of the target recipient moving (N=17) or dying (N=15), as notified on returned questionnaires.

The overall net response rate was thus calculated as follows:

\[
\text{completed returns} \quad 1661 \times 100 = 33\%
\]

Despite following the suggested procedures for improving response rate, (for example, piloting the questionnaire, a cover letter, incentives, reply paid envelopes, and two follow-ups), the response rate (33%) was less than the anticipated response of around 40% based on the pilot survey. This response rate was considered satisfactory in terms of research objectives and in line with comparable surveys (see section 5.1 above). However, a number of respondents returned blank questionnaires with comments which provide insights into possible reasons for non-completion. These ranged from polite disinclination to take part, anger at unsolicited mail and frustration at questionnaire overload, through to concerns with the perceived intrusiveness of some questions and about the anonymity of the questionnaire. These factors are considered in more detail in the discussion of ethical issues in section 5.5 below.

5.4.5: Representativeness of sample

While response rate is an indicator of the potential for bias in a sample, the key issue in determining the generalisability of survey results to a population is the representativeness of the sample. As Hoinville and Jowell (1977: 130) note: 'the most daunting problem in a postal survey is to ensure that the response level will be
high enough to give confidence that the respondents are reasonably representative of the total population sampled'. In studies which seek to generalise results to the population as a whole, low response rates can be problematic. As Frankfort-Nachmias and Nachmias (1996) note:

'Nonrespondents are usually quite different from those who answer a questionnaire...consequently, the group of respondents is not likely to accurately represent the population originally defined by the investigators, and this will undoubtedly introduce bias into the study' (p.226) .... which 'may limit the investigator's ability to make generalisations about the entire population.' (p.232)

One method of assessing the representativeness of a sample involves 'comparing the achieved sample against known population characteristics such as by age, sex and social class, obtained from the population census or large government surveys' (Arber, 2001: 76). To ascertain the representativeness of the 2003 Women's Sleep in the UK Survey, comparisons were made against population data from the Census 2001 and against data from the British Household Panel Survey (BHPS) 1999 for the variables age, marital status, education, and social class.

As Table 5.2 shows, when compared to the population of women as a whole, the sample represents the population fairly closely in terms of age despite a slight over-representation of women in the 50-59 age group, and an under-representation of those in the age group 70 and over.

Table 5.2: Representation of survey respondents by age

<table>
<thead>
<tr>
<th>Age group</th>
<th>% of sleep survey respondents</th>
<th>% of female population aged 40 and over (Census 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>50-59</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>60-69</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>70 &amp; over</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>N =</td>
<td>1445</td>
<td>14604009</td>
</tr>
<tr>
<td>(%)</td>
<td>(100%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

Table 5.3 shows the comparison of survey respondents against data from the BHPS for marital status, education, and socio-economic group.

Table 5.3: Representation of survey respondents by marital status, education and socio-economic group (Women aged 40 and over)

<table>
<thead>
<tr>
<th>Socio-demographic variable</th>
<th>% of sleep survey respondents</th>
<th>% of female population aged 40 &amp; over (BHPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/cohabiting</td>
<td>75</td>
<td>62</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Widowed</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Never married</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-level and above</td>
<td>36</td>
<td>32</td>
</tr>
<tr>
<td>O-level/vocational</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>No qualifications</td>
<td>29</td>
<td>43</td>
</tr>
<tr>
<td>Socio-economic group*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial and professional</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>Intermediate</td>
<td>33</td>
<td>35</td>
</tr>
<tr>
<td>Routine and manual</td>
<td>32</td>
<td>38</td>
</tr>
</tbody>
</table>

*Based on current or last occupation

Overall, although representative of the underlying population in many respects, the sample profile favours women in their 50s, married women, women educated to A-level or above, and women of higher socio-economic class. The under-representation of widows and women with no formal qualifications can be partly explained by the fact that widows (because of age), and those with poor educational backgrounds may be less likely to respond to self-completion surveys (Frankfort-Nachmias and Nachmias, 1996).

However, given that the major aim of the survey was to gain insights into factors influencing women's sleep across the life course as a complement to the findings from qualitative research, the observed biases in the sample were not considered problematic. Rather than generalising to the population of women as a whole, the survey results reflect the sleep experiences of the sample. For the purposes of this thesis, survey results were considered sufficiently representative, however, to enable the researcher to highlight key statistical associations between age and characteristics.
of women's sleep, thus increasing understanding of changes in women's sleep patterns across the life course.

5.5: Ethical issues in implementing the survey

5.5.1: Obtaining informed consent

In the quantitative phase of the study, issues of informed consent were different than in the qualitative stage. By its very nature, the use of a postal questionnaire to obtain data from a representative sample of women in the UK excludes the possibility of informed consent in advance and leaves itself open to accusations of invasion of privacy. Informed consent is gained only *ipso facto* when participants return completed questionnaires. While data from the electoral roll, the census and other databases from which the sampling frame was compiled are in the public domain, people can feel affronted when their perceived 'right to privacy' is compromised through unsolicited mail. In this case, the researcher and her colleagues had to deal with a number of abusive phone calls and comments on returned questionnaires from women who were unhappy about being contacted, for example:

Please take my name off your list and do not send any more correspondence to this address.

While women who contacted the researcher were advised how their name and address were obtained, in retrospect it may have been possible to overcome the negative reaction of some respondents had reference been made on the questionnaire as to the specific origin of the names in the sampling frame.

5.5.2: Enabling participation

In terms of the postal questionnaire, enabling participation is more difficult as recipients are unknown to the researcher. However, attention was paid in designing the questionnaire to ensure that language was kept simple and that instructions and...
layout were as clear as possible given the constraints of questionnaire length. It is accepted that among the disadvantages of self-completion questionnaires is the fact that older women, those with disabilities, and those from non-English speaking backgrounds may be unable to participate in the survey, thus introducing bias into the sample.

5.5.3: Protecting the interests of participants

While the presence of the researcher in focus groups and interviews enables an on-the-spot response to sensitive situations, this interface is not applicable when using postal questionnaires as a data collection method. In this case, the postal questionnaire contained a small number of sensitive questions, which, although justifiable in terms of the research focus, proved upsetting to some recipients. These questions included those designed to elicit socio-demographic information such as age, household income, and education; and questions about whether sex had any impact on the respondents’ sleep (see q19i, q21h, q22c).

From a sociological perspective, socio-demographic information is important in understanding relationships between variables; in this case, to highlight how aspects of sleep change across the life course in relation to factors such as age, class, health and marital status. The qualitative research showed that for couples, sleep is intimately connected with interaction between partners. To ask about sleep is thus to ask about aspects of the couple relationship. During the focus groups, some women reported sex as one of the activities which helped them sleep. While aware of the potential risks involved in asking questions about sex to an unknown audience, the researcher decided to include these in the postal questionnaire.

It is not possible to know the extent to which sensitive questions affect the overall response rate to postal questionnaires. However, the following respondent’s comment highlights how questions perceived as personal can detract from the willingness of some people to return completed questionnaires:
What does this (husband’s job) have to do with my sleeping?? Most of it has nothing to do with sleeping, ie. our wages and how many children we have had and education.

5.5.4: Maintaining anonymity, privacy and confidentiality

The issue of anonymity and privacy was a major consideration for the researcher in carrying out the postal survey. In implementing a postal survey, the researcher needs to balance the need to ensure anonymity against the need to track respondents. In this case, while participants were assured in the covering letter that the information given ‘will be anonymous and will be strictly confidential’, a small identification number in the bottom right-hand corner of the back page of the questionnaire was included to enable the researcher to check off returned questionnaires against the master database. This device ensured that follow-up letters and questionnaires would be sent only to those who had not returned the questionnaire in response to previous mail outs. This method proved successful overall in administering the questionnaire, however, it could have been seen by some potential respondents as invalidating the promise of anonymity. This possibility was highlighted by four respondents who returned questionnaires with ID numbers crossed out to preserve their identity.

Another problem faced in this area was the use of an incentive to encourage participation. The covering letter on the front of each questionnaire (Appendix J) stated:

‘If your completed survey is among the first ten received, you will be sent a £10 Marks & Spencer voucher.’

This seemed to encourage early returns, with some recipients putting a first class stamp on their pre-paid envelopes to ensure success. The ID code from the back of the questionnaire was used to identify the recipients of the first ten questionnaires received and £10 Marks & Spencer vouchers were subsequently sent. However, comments from some participants highlight the ethical dilemma faced by the researcher in balancing the goal of maximising response rates through the use of incentives and the need to respect participants’ right to true anonymity. The
following comments made by some respondents on returned blank questionnaires show the concern felt by recipients that either the offer of an incentive betrayed the promise of anonymity, or that the offer itself was bogus since the researcher could not, under the terms of anonymity, know who to send the voucher to or where.

Considering this form does NOT mention my name or address, how can a voucher for M&S be sent? DO NOT send me any more b...... rubbish. I have more to do with my time than answer a very personal and idiotic survey.

I did complete the questionnaire – then destroyed it. You claimed vouchers would be sent to some early replies, but, as there was no name or number indicator on the questionnaire this would not seem possible – so I concluded the whole thing could well be somewhat ‘dicey’. I imagine other people must have thought similarly.

Once returned, survey data were entered into an Excel file by a professional data input company who had access only to the ID number on the back of each questionnaire. Data were then imported into an SPSS database, maintaining the ID reference to enable the researcher to cross-check data against the original questionnaire if necessary. This information is, however, only available to the researcher, thus ensuring the maintenance of confidentiality.

The issue of ethical responsibility is thus complex. As Bulmer (2001: 56) notes:

‘There are no cut-and-dried answers to many ethical issues which face the social researcher. Very often the issues involved are multifaceted and there are contradictory considerations in play..... The best counsel for the social researcher is to be constantly ethically aware.’

In this study, the researcher has attempted to balance the desire to incorporate a range of research methods to obtain as far-reaching an understanding of sleep in its social context as possible against the need to protect the rights and interests of participants. With the best intentions, however, it is inevitable that in studying a topic which encroaches on all aspects of life, some questions may regrettably at times cause offence and influence overall response rates.
5.6 Analysing survey data

5.6.1: Preparation of data

The analysis of survey data involved a number of stages, including manually checking each questionnaire for missing or unclear data, developing a set of coding rules to ensure consistency, following-up missing data with respondents to maximise response, data entry, and the creation of an SPSS data file. On receipt of the surveys, questions regarding occupation (q43b-c, and q47b-c) were coded into NS-SEC classes in a two stage process involving reference to the Standard Occupational Class 2000 Volume 2 Coding Index and the Socio Economic Classification User Manual.

The inputting of data was contracted out to Quest Analysis Ltd, a company specialising in data entry. This process took place in stages after each mail out following receipt, checking, and coding of questionnaires. The data were entered into an Excel file by Quest Analysis Ltd and then imported into the prepared SPSS data file. Missing values were left blank in the files and thus treated as system missing and excluded from analyses.

5.6.2: Analysis

Survey data were analysed using SPSS for Windows version 11. The main analysis was performed on a subset of the data for women aged 40 and over (N=1445). To facilitate analysis, variables identified in the data file by their question number were renamed to provide new variable names reflecting question content. In addition, categories were collapsed as necessary on analytic grounds by recoding.

According to De Vaus (2002: 208), the use of descriptive statistics ‘is the most productive in terms of understanding any phenomenon’. The descriptive approach adopted in analysing the survey data reflects the researcher’s focus on using the questionnaire as a complement to qualitative methods, designed to increase overall understanding of women’s sleep in its social context. In this case, through
summarising and exploring survey data through univariate and bivariate analysis, the researcher was able to identify patterns and associations in the way women responded to survey questions. These patterns and associations were used to confirm, reformulate, or contradict hypotheses which emerged from the qualitative data.

Univariate analyses were carried out to produce frequency distributions for all questionnaire variables. In addition to providing data on socio-demographic characteristics of the sample, the distributions provided an overview of the experiences of sleep for the sample, highlighting, for example, the extent to which women experience sleep problems; the effect of poor sleep on daily life; the degree to which partners, work, children, psychological, physiological, and health factors impact on sleep; and the effectiveness of a range of strategies for improving sleep. Bivariate analyses of survey data were used, for example, to identify associations between sleep variables and age, health, marital status, and menopausal status. As shown in Chapter Six, the results of these analyses are presented in tabular form as frequencies and tables; or in graphical form as bar charts, histograms, pie charts, or line graphs.

According to Blaikie (2003: 2) inferential analysis is used ‘to generalise the results obtained from a sample back to the population from which the sample was drawn’. He stresses that this is only appropriate when response rates are very high. As such, the results of the 2003 Women's Sleep in the UK Survey are discussed primarily in relation to the sample of women aged 40 and over who completed the questionnaire with the aim of producing descriptive data to supplement qualitative findings. However, as the sample is representative of the population of women in terms of age, tests of statistical significance (chi-square) were used in bivariate analysis to give an indication of the generalisability of identified relationships between age and selected sleep variables.
5.7 Conclusion

Informed by understandings of women’s sleep gained from preliminary analysis of qualitative data, the 2003 Women’s Sleep in the UK Survey was an important part of the multi-method approach adopted in this research. Although costly and time-consuming in terms of development, implementation and analysis, the use of a postal questionnaire enabled the researcher to access the views of a representative sample of just under 1500 women aged 40 and over throughout the UK, thus contributing to an overall picture of the nature of women’s sleep and the socio-temporal constraints which may lead to sleep disruption. As a complement to qualitative methods, the survey data provided further insights into women’s sleep in its social context, validating and enriching hypotheses which emerged from analysis of focus groups, interviews and audio sleep diaries.

Designed primarily as a method to describe statistically the nature of women’s sleep in the UK within its social context rather than to extrapolate findings to the population of women as a whole, the survey provided insights into aspects of women’s sleep in the context of their everyday lives. Part III (Chapter Six) reports in detail on the findings from the survey. As a description of women’s sleep in the UK, Chapter Six provides an overview of sleep characteristics in relation to age for women aged 40 and over. In terms of this thesis, these findings are used to reinforce understandings of women’s sleep derived from the qualitative methods, facilitate the explanation of sleep disruption in terms of the multi-faceted aspects of women’s lives (see Part IV), and provide a basis for discussion of sleep management strategies in Part V.
PART III

CHARACTERISTICS OF WOMEN’S SLEEP
Chapter Six

WOMEN’S SLEEP ACROSS THE LIFE COURSE: INSIGHTS FROM THE 2003 WOMEN’S SLEEP IN THE UK SURVEY

'We sleep, but the loom of life never stops, and the pattern which was weaving when the sun went down is weaving when it comes up in the morning'.

(Henry Ward Beecher, 1813-1887)
http://www.quotationspage.com

This chapter uses data from the 2003 Women’s Sleep in the UK Survey to present an overview of women’s sleep in the UK. The purpose of the chapter is to describe the sleep patterns experienced by women aged 40 and over within their normal sleeping environments, to identify the types of sleep problems they experience and the factors which impact on sleep, and to establish possible correlations between sleep patterns and age. Using excerpts from survey comments to illustrate women’s sleep experiences, the chapter comprises the following sections:

- socio-demographic profile of respondents by age;

- an overview of women’s sleep, including sleep quality and satisfaction, sleep duration, sleep problems, effects of poor sleep on daytime performance, and incidence of sleep disorders;

- factors influencing women’s sleep, including environmental factors, psychological and physiological factors, health, and family relationships;

- sleep management, including self-help strategies, the use of non-prescription products, the use of prescription medication, naps, and GP consultations; and

- a summary of survey findings.
For reference, a copy of the questionnaire is included as Appendix J.

6.1 Socio-demographic profile of survey respondents

The 2003 Women's Sleep in the UK Survey was designed to gain insights into the nature of women's sleep against a backdrop of socio-demographic factors, including age, marital status, education, household composition, household income, children, employment status, social class, and home ownership. In this chapter, data are analysed for women aged 40 and over (N=1445). Table 6.1 shows the socio-demographic characteristics by age of these respondents.

6.1.1: Age (q352)

Respondents ranged in age from 40 to 99 years, with a mean age of 58 years. For the purposes of analysis, respondents were divided into four age groups: 40-49, 50-59, 60-69, and 70 and over. As Table 5.2 in Chapter Five shows, when compared to the population as a whole (Census 2001, my analysis), the sample represents the population fairly closely in terms of age despite a slight over-representation of women in the 50-59 age group and an under-representation of those in the age group 70 and over. Given the focus of the study on changes in sleep patterns across the life course, we can feel fairly confident therefore that survey results in relation to age can be generalised to the wider population.

Bivariate analyses were carried out to analyse associations between age and the socio-demographic variables marital status, education, income, household composition, education, income, children, employment status, socio-economic group, and home ownership. As Table 6.1 shows, all variables showed a statistically significant association with age group.

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2 the bracketed number refers to the survey question as contained in the 2003 Women's Sleep in the UK Survey (see Appendix J)
Table 6.1: Socio-demographic profile of survey respondents by age (N=1445)
(Women aged 40 and over)

<table>
<thead>
<tr>
<th>Age</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70 &amp; over</th>
<th>Total %</th>
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<tbody>
<tr>
<td><strong>Marital status</strong>*</td>
<td></td>
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<tr>
<td>Married/cohabiting</td>
<td>83</td>
<td>84</td>
<td>77</td>
<td>47</td>
<td>75</td>
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<tr>
<td>Separated/divorced</td>
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<td>11</td>
<td>7</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Widowed</td>
<td>0.2</td>
<td>3</td>
<td>12</td>
<td>40</td>
<td>11</td>
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<tr>
<td>Never married</td>
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<td>2</td>
<td>5</td>
<td>7</td>
<td>4</td>
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<td><strong>Education</strong>*</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>A-level and above</td>
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<td>36</td>
<td>32</td>
<td>25</td>
<td>36</td>
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<tr>
<td>O-level/vocational</td>
<td>37</td>
<td>38</td>
<td>30</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>No qualifications</td>
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<td>27</td>
<td>38</td>
<td>46</td>
<td>29</td>
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<tr>
<td><strong>Household composition</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lone household</td>
<td>6</td>
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<td>20</td>
<td>50</td>
<td>19</td>
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<td>Husband/partner only</td>
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<td>58</td>
<td>71</td>
<td>44</td>
<td>47</td>
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<tr>
<td>Husband/partner + children</td>
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<td>27</td>
<td>6</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Children only</td>
<td>11</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td><strong>Household income</strong>*</td>
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<tr>
<td>Under £10,000</td>
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<td>17</td>
<td>35</td>
<td>58</td>
<td>25</td>
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<td>41</td>
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<td>£20,000-£29,999</td>
<td>24</td>
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<td>6</td>
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<td>£30,000 and above</td>
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<td>5</td>
<td>30</td>
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<td><strong>Children (ever born)</strong>*</td>
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<td>Two</td>
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<tr>
<td>Three or more</td>
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<td>34</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Full-time</td>
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<td>6</td>
<td>0.7</td>
<td>25</td>
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<tr>
<td>Part-time</td>
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<td>13</td>
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<td>Not working</td>
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<td><strong>Reasons not working</strong>*</td>
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<td></td>
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<tr>
<td>Looking after family/home</td>
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<td>34</td>
<td>3</td>
<td>3</td>
<td>14</td>
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<tr>
<td>Retired</td>
<td>3</td>
<td>30</td>
<td>95</td>
<td>96</td>
<td>75</td>
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<tr>
<td>Unemployed</td>
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<td>3</td>
<td>0.4</td>
<td>0.4</td>
<td>2</td>
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<tr>
<td>Long-term sick/disabled</td>
<td>24</td>
<td>33</td>
<td>2</td>
<td>0.7</td>
<td>9</td>
</tr>
<tr>
<td><strong>NS SEC 2000 socio-economic classification</strong>(woman's own, based on current or last occupation)***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Managerial and professional</td>
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<td>34</td>
<td>32</td>
<td>25</td>
<td>35</td>
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<tr>
<td>Intermediate</td>
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<td>33</td>
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<tr>
<td>Routine and manual</td>
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<td>37</td>
<td>32</td>
<td>32</td>
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<td><strong>Home ownership</strong>*</td>
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<td></td>
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<td></td>
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<tr>
<td>Own home (outright or with mortgage)</td>
<td>86</td>
<td>89</td>
<td>87</td>
<td>75</td>
<td>85</td>
</tr>
<tr>
<td>Rent (privately or from local authority)</td>
<td>14</td>
<td>11</td>
<td>13</td>
<td>25</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N = 1445</th>
</tr>
</thead>
<tbody>
<tr>
<td>(%)</td>
</tr>
</tbody>
</table>

Statistical significance of association with age: * p<.05, ** p<.01, *** p<.001
6.1.2: Marital status (q36)

As Table 6.1 shows, the majority of women overall (75%) were married or cohabiting, with 11% widows, 10% separated or divorced, and 4% never married. As expected, bivariate analysis of marital status by age showed a decline in the percentage of married women across the life course, from a peak of 84% of women in their 50s to 47% of women aged 70 and over. This corresponds with the increase in widowhood, from 0.2% of women in their 40s to 40% in the 70 and over age group. The incidence of separation/divorce declined with age from 14% among respondents in their 40s to 5% of those aged 70 and over, reflecting the liberalisation of divorce laws following the *Divorce Reform Act* (1969), and the subsequent increase in divorce rates among younger cohorts of women.

6.1.3: Household composition (q15)

In terms of household composition, 47% of women were living with their husband/partner only, 29% with their husband/partner and children, 6% in single parent households, and 19% in lone person households. The percentage of women living in lone households increased with age from a low 6% of women in their 40s to 50% of those aged 70 and over. Households comprising a couple and children showed a marked decline with age from 65% of respondents in their 40s to 2% in those aged 70 and over. Women living with their husband or partner only were the dominant household type in this survey; a pattern which reached a peak of 71% for women in their 60s before declining to 44% as a result of widowhood for women aged 70 and over.

6.1.4: Education (q38)

In terms of education, respondents overall were evenly split between those with high level qualifications (educated to A-level or above) (36%), and those educated to O-level (GCSE) or having vocational qualifications (for example, secretarial, hairdressing) (35%). A further 29% had no formal qualifications. The relationship between age and education is reflected in the decline in high level qualifications with
age. The proportion of respondents with A-level or higher qualifications fell from 47% of respondents in their 40s, to 25% in their 70s. The high percentage of respondents aged 70 and over with no formal qualifications (46%) is indicative of the cohort effect of prevailing attitudes to educational opportunities and employment which characterised the early lives of this group of women.

6.1.5: Household income (q40)

While almost one third of respondents overall reported a household income of £30,000 or more per annum, one quarter of respondents had a household income of less than £10,000 per annum. In terms of household income, respondents aged 70 and over had the lowest income resources, with 58% living on less than £10,000 per annum, compared to 11% of those in their 40s. In contrast 47% of respondents in their 40s had household incomes of £30,000 and above, compared with just 5% of those aged 70 and over. While this can be partly explained by differences in employment status with age, it may also mirror both underlying inequalities in pension provision and employment opportunities for the older cohort of women represented in this study, as well as differences in household composition.

6.1.6: Children (q37)

Although 11% of respondents overall were childless, the remainder had had at least one child. Falling fertility rates in the population are reflected in the distribution of children between pre-retirement and post-retirement age respondents. Women aged 60 and over were more likely to have had three or more children (36%) than women in their 40s (24%). Similarly, there was a higher percentage of women under 60 with two children (51%) than in the older age group (38%).

6.1.7: Employment status (q41-43)

Half the respondents overall were not working at the time of the survey, with the remainder almost equally divided between full-time (25%) and part-time (24%) employment. Of those who described themselves as currently not in paid
employment, 75% were retired, 14% were looking after the family/home, 9% were long-term sick or disabled, and 2% were unemployed. Employment status, mediated by the policy of state retirement at 60 for women in the UK, has a direct relationship with age. Of the pre-retirement age group (N=852), 41% were working full-time and 35% part-time. Of those not working in this age group (N=191), the majority were looking after the home/family (44%), or were long-term sick or disabled (29%). As expected, the majority of respondents aged 60 and over were not working, with 96% describing themselves as ‘retired’.

6.1.8: Socio-economic group (q43)

In terms of socio-economic group (based on the respondent’s own current or main lifetime occupation), the women were almost equally divided between Class 1 managerial and professional occupations (35%), Class 2 intermediate occupations (34%), and Class 3 routine and manual occupations (32%) according to the National Statistics Socio-Economic Classification (NS SEC 2000) analytic classes. Bivariate analysis revealed a statistically significant association between socio-economic group and age (p<.01). As shown in Table 6.1, the percentage of respondents in Class 1 declined from 42% of women in their 40s to 25% in the 70 and over age group; a factor attributable to cohort differences in education and employment patterns for women across these age groups.

6.1.9: Home ownership (q39)

The vast majority of respondents (85%) owned their own home, either outright or with a mortgage, with the remaining 15% renting either privately or from a local authority. A comparison of home ownership across the age groups showed that women aged 70 and over were less likely to own their own home than those in other age groups. Those in this later age group were consequently more likely to rent (25%) than respondents in their 40s (14%), 50s (11%), and 60s (13%).
As Table 6.1 shows, respondents represented a broad cross-section of women. In summary:

- respondents were evenly spread throughout the age groups 40-49, 50-59, 60-69, and 70 and over; with the highest proportion of women in the 50-59 age group;

- the majority of respondents were married or cohabiting (75%), although 11% were widowed and 10% separated or divorced;

- respondents were almost evenly divided between those educated to A-level or above, those with O-level or vocational qualifications, and those with no formal qualifications;

- the majority of respondents were living with their husband or partner, either with children (29%) or without (47%), although almost one in five women was living alone;

- respondents reported a range of household incomes, although slightly over half the women reported an income of less than £20,000 per annum;

- the majority of respondents had children (88%);

- slightly less than half the respondents (49%) were working, on either a full-time or part-time basis;

- of those not working, the majority were retired (75%);

- in terms of socio-economic group (based on respondent’s own occupation), respondents were almost equally divided across the three class groups: managerial and professional, intermediate, and routine and manual; and
the majority of respondents owned their own home either outright or with a mortgage (85%).

Section 6.2 provides an overview of women’s sleep in the UK based on an analysis of survey findings. It considers perceived sleep quality and satisfaction, sleep duration, sleep problems and disorders, and the effects of poor sleep on daytime performance.

6.2 An overview of women’s sleep

6.2.1 Sleep quality and satisfaction (q1-2, q9)

I am a great sleeper. (S: age 83)

The above comment acts as a testimony to the possibility of good sleep in old age. It does not however reflect the realities of the majority of women in this study. While 43% of respondents described the overall quality of their sleep as ‘good’ or ‘very good’, the majority of women (57%) reported that their sleep quality was either ‘fair’, ‘poor’, or ‘very poor’. Almost 40% of respondents were ‘dissatisfied’ or ‘very dissatisfied’ with the overall quality of their sleep. Bivariate analysis of sleep quality and satisfaction by age showed no statistically significant correlation, however. Self-assessed quality of sleep and women’s sleep satisfaction appears to remain relatively constant across the life course from the age of 40.

While the majority of women (72%) reported experiencing no change in the quality of their sleep during the past 12 months, 22% reported a deterioration in their sleep. Deterioration in sleep quality, while showing a statistically significant association with age (p<.001), was more likely to be reported by women in their 40s (26%) and 50s (27%) than by those aged 70 and over (13%).
6.2.2: Sleep duration (q3-5)

When I have to work the next day I try to ensure that I go to bed at a reasonable time. I feel that I catch up with sleep at the weekends. (S: age 40)

Sleeping patterns differ during the week and at weekends. Excluding the 5% of respondents doing shift work, the median time for women going to bed is 10.45pm on week-nights and 11pm on weekends. On average they reported getting up at 7.15am on weekdays, and 8am on weekends. Although this suggests that on average women sleep 8.5 hours on week-nights and 9 hours on weekends, these figures show the reported time women spend in bed rather than the actual time they spend asleep. When asked how long they usually spend asleep at night (q5a, b), women reported a median of 6.5 hours on week-nights and 7 hours on weekends. Almost half the respondents described themselves as ‘morning’ persons (larks), compared to 29% who preferred to go to bed late and get up late (owls).

Bivariate analysis showed a statistically significant relationship between age and actual sleep time during the week and at weekends. These results are shown in Tables 6.2 and 6.3.

Table 6.2: Time spent asleep (week-nights) by age (q5a)
(Columns percentages)

<table>
<thead>
<tr>
<th>Time spent asleep (Weekdays)</th>
<th>Age</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40-49</td>
<td>50-59</td>
<td>60-69</td>
<td>70 &amp; over</td>
<td>Total</td>
</tr>
<tr>
<td>&lt; 6 hours</td>
<td>19.0%</td>
<td>22.0%</td>
<td>19.0%</td>
<td>28.0%</td>
<td>22.0%</td>
</tr>
<tr>
<td>6 &lt; 7 hours</td>
<td>27.0%</td>
<td>34.0%</td>
<td>28.0%</td>
<td>28.0%</td>
<td>29.0%</td>
</tr>
<tr>
<td>7 &lt; 8 hours</td>
<td>33.0%</td>
<td>25.0%</td>
<td>31.0%</td>
<td>26.0%</td>
<td>29.0%</td>
</tr>
<tr>
<td>8 hours or more</td>
<td>22.0%</td>
<td>19.0%</td>
<td>22.0%</td>
<td>18.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
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<td>100.0%</td>
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<tr>
<td>(N=)</td>
<td>(400)</td>
<td>(441)</td>
<td>(301)</td>
<td>(269)</td>
<td>(1411)</td>
</tr>
</tbody>
</table>

* p<.05

While the median reported time spent asleep for respondents during the week was 6.5 hours, there was considerable variation when age was taken into consideration. As Table 6.2 shows, the largest proportion of women in their 40s (33%) and in their 60s (31%) slept 7 < 8 hours per night during the week. However, women in their 50s...
and those aged 70 and over had less sleep, with 56% in each age group sleeping for fewer than 7 hours per week night. Women in the 70 and over age group were more likely to sleep fewer than 6 hours per week night than any other age group. Approximately one in five women in each age group reported sleeping 8 hours or more per night.

Table 6.3: Time spent asleep (weekends) by age (q5b)
(Women aged 40 and over)

<table>
<thead>
<tr>
<th>Time spent asleep (Weekends)</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70 &amp; over</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>(N=)</td>
<td>(396)</td>
<td>(441)</td>
<td>(301)</td>
<td>(266)</td>
<td>(1404)</td>
</tr>
</tbody>
</table>

*** p<.001

Overall, the survey statistics show that on average women spent a longer time asleep at weekends (7 hours) than during the week (6.5 hours). This difference was particularly apparent in the 40-49 and the 50-59 age groups. As Table 6.2 shows, 72% of women in their 40s spent 7 or more hours asleep on the weekend compared to 55% on week nights. Similarly, women aged 50-59 slept longer on weekends, with 64% sleeping 7 or more hours compared to 44% during the week. While women in the older age groups also slept longer at weekends, the difference was not so marked. In fact, for women aged 60 and over, time spent asleep remained relatively constant throughout the week, suggesting a merging of the week/weekend dichotomy following retirement. For working women, survey results suggest that the weekend provided an opportunity to catch up on the sleep debt of the working week.

Contrary to the findings of natural scientists (see Chapter One), there was no statistically significant relationship in diurnal preference (larks vs owls) by age. Women were more likely to describe themselves as ‘morning’ rather than ‘evening’ persons across all age groups, with no increase in this preference with increased age.
6.2.3 *Sleep problems and disorders* (*q7*-8, *q10*, *q31*)

**Frequency of sleep problems**

I have no problems with my sleeping. The only problem is getting enough sometimes. (S: age 45)

To ascertain the extent of women's self-assessed sleep problems in the survey, women were asked to choose from a five-point scale (never, seldom, sometimes, often, all the time) in response to question 7 *'Do you ever have problems sleeping?'*. Figure 6.1 shows the frequency of sleep problems for survey respondents.

**Figure 6.1: Frequency of sleep problems (q7)**

![Pie chart showing frequency of sleep problems](image)

N = 1432

As Figure 6.1 shows, for the majority of women in the study, sleep problems are a characteristic of women's sleep patterns, with just over three quarters of women having problems sleeping at least 'sometimes'. In the past week, 60% of women had experienced problems sleeping. Only 4% of women said they 'never' had problems sleeping.
Bivariate analysis showed a statistically significant association between reported sleep problems and age (p<.001). However, contrary to expectations, perceived sleep problems did not increase sequentially across the life course. As Figure 6.2 shows, sleep problems affected 71% of women in their 40s at least ‘sometimes’; a figure which increased to a peak of 81% for women in their 50s, before declining to around 75% for women in their 60s and 70s. These figures may suggest a link between sleep problems and the menopause. Interestingly, the proportion of women who reported ‘never’ experiencing sleep problems was higher in the 70 and over age group than at any other age. This was offset, however, by the fact that the older age group also reported the highest proportion of sleep problems ‘all the time’.

**Figure 6.2: Frequency of sleep problems by age (q7)**
Chronic sleep problems

For the past 25 years I’ve found it very difficult to get to sleep. I usually sleep quite well once I doze off. Sometimes I stay awake all night, though seldom. (S: age 78)

For the purposes of this analysis, women were classified as having chronic sleep problems if they responded either ‘often’ or ‘all the time’ to the question ‘Do you ever have problems sleeping?’ (q7). To facilitate analysis, this five category variable (frequency of sleep problems) was collapsed and recoded as a dichotomous variable ‘problem’ (0=No, 1=Yes), with cases classified as having chronic sleep problems if they reported problems sleeping ‘often’ or ‘always’.

According to this definition, one third of respondents (33%) experienced chronic sleep problems (CSP). However, bivariate analysis showed no statistically significant correlation between age and the incidence of CSP (p>.05).

Types of sleep problems

I often suffer from initial insomnia, and then I am very tired in the morning. (S: age 65)

Sleep problems are classified in the sleep literature according to their timing and nature during the sleep period. Table 6.4 shows the types of sleep problems reported by respondents. Sleep disruption during the night is a key feature of women’s sleep in this study. As Table 6.4 shows, sleep maintenance problems (waking up several times during the night) affected 73% of respondents at least one or two nights a week, with half of the respondents having disrupted sleep on three or more nights a week. Over half the respondents experienced disturbed, restless sleep one or more nights a week. The implications of these problems on the ability to perform effectively during the day are reflected in the percentage of women who reported feeling sleepy during the day (64%) and/or woke up feeling unrefreshed (57%) at least once or twice a week.
Table 6.4: Types of sleep problems (q10)
(>Women aged 40 and over)

<table>
<thead>
<tr>
<th>Type of problem</th>
<th>% of women affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rarely</td>
</tr>
<tr>
<td>Waking up several times during</td>
<td>27</td>
</tr>
<tr>
<td>the night</td>
<td></td>
</tr>
<tr>
<td>Feeling sleepy during the day</td>
<td>36</td>
</tr>
<tr>
<td>Waking up unrefreshed</td>
<td>44</td>
</tr>
<tr>
<td>Disturbed, restless sleep</td>
<td>47</td>
</tr>
<tr>
<td>Waking up too early</td>
<td>54</td>
</tr>
<tr>
<td>Sleep onset</td>
<td>54</td>
</tr>
<tr>
<td>Difficulty waking up</td>
<td>93</td>
</tr>
</tbody>
</table>

(N= 1442)

Bivariate analysis was carried out to analyse the effects of age on different types of sleep problems. Types of sleep problems which showed a statistically significant association with age were sleep onset (difficulty falling asleep at night) (p<.01), difficulty waking up (p<.01), and waking up feeling tired and unrefreshed (p<.001). As Figure 6.3 shows, the proportion of women who experience problems with sleep onset, increases from 37% for women in their 40s, to 51% for those aged 70 and over. Although not a major source of sleep disruption, difficulty waking up becomes more problematic with age, with 12% of women aged 70 and over experiencing this problem, compared to just 4% of those in their 40s. Women are more likely to wake up feeling tired and unrefreshed in their 40s (66%) and 50s (60%), rather than their 60s (47%) or 70s (45%). Problems with waking up during the night (sleep maintenance), and feeling sleepy during the day, both identified as key factors in sleep disruption, appear to be unrelated to age, with the incidence of these problems remaining relatively constant across age groups.

Specific sleep disorders

I have a problem with snoring and wake myself and my partner up on a regular basis. I have already had a sleep study and am waiting for a further one to be done within the next 6 months. (S: age 40)

Women were asked whether they had ever been diagnosed by a doctor as suffering from specific sleep disorders. Only 1% reported a diagnosis of obstructive sleep
apnoea (OSA) and less than 1% narcolepsy, while 7% had been diagnosed with restless legs syndrome (RLS), and 5% with insomnia. These findings are similar to those reported by natural scientists. As reported by Dzaja et al (forthcoming), OSA occurs in 1-2% of the general population and narcolepsy in less than 1% of the population. Prevalence estimates for RLS range from 5-10% with no consistent differences between men and women. The sleep survey figures for diagnosed insomnia are lower than the estimated 10% of the population suffering from chronic insomnia (Zorick and Walsh, 2000), however, this may result from women’s preference for self-managing sleep problems rather than consulting their GP for treatment (see Part V).

While there was no statistically significant association between age and obstructive sleep apnoea and narcolepsy (p>.05), the incidence of diagnosed insomnia showed a statistically significant association with age (p<.01), increasing from 3% for women in their 40s to around 6% for women in their 50s and 60s, and 8% for those aged 70 and over. Restless legs syndrome showed an almost four-fold increase with age from 3% of those aged in their 40s to 11% of women aged 70 and over (p<.001).
6.2.4: Effects of poor sleep on daytime performance (q11)

I normally sleep very well. However, on the rare occasions I don’t, I feel I don’t cope so well the following day. (S: age 66)

In the survey, women were asked to comment further on the effects of disturbed sleep on their daily lives. As Table 6.5 shows, poor sleep can impact heavily on women’s ability to function effectively during the day. Women reported moderate-severe effects on energy levels (51%), levels of stress and anxiety (43%), mood (33%), and concentration levels (31%).

Table 6.5: Effects of poor sleep on daytime performance (q11)  
(Women aged 40 and over)

<table>
<thead>
<tr>
<th>Problem</th>
<th>% of women affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No/mild effect</td>
</tr>
<tr>
<td>Energy levels</td>
<td>49</td>
</tr>
<tr>
<td>Stress and anxiety levels</td>
<td>57</td>
</tr>
<tr>
<td>Mood</td>
<td>66</td>
</tr>
<tr>
<td>Ability to concentrate</td>
<td>69</td>
</tr>
<tr>
<td>Ability to keep awake</td>
<td>77</td>
</tr>
<tr>
<td>Appearance</td>
<td>77</td>
</tr>
<tr>
<td>Relationships with people</td>
<td>78</td>
</tr>
<tr>
<td>Appetite</td>
<td>87</td>
</tr>
</tbody>
</table>

Bivariate analysis showed a statistically significant association between the reported daytime effects of poor sleep and age. In general it appears that as women get older, poor sleep has less effect on their daytime performance. For example, twice as many women in their 40s (40%) reported experiencing moderate-severe effects of poor sleep on their concentration levels compared to those aged 70 and over (20%). This could reflect the decreased responsibilities and greater time flexibility in later life following retirement, with less pressure on women to perform multiple tasks at optimum efficiency. The relationship between sleep and performance, so crucial to mid-life women, may become less relevant in later life.
The next section examines factors which may impact on the quality of women’s sleep, including the sleep environment; psychological, physiological and health factors; and family relationships.

6.3 Factors influencing the quality of women’s sleep

6.3.1: Environmental factors (q12a-d)

My sleep is very often disturbed by aircraft noise through the night. We live approximately 400 yards from X Airport. (S: age 62)

Women were asked to assess the frequency with which their sleep was disturbed by external factors including pets, light, street noise, lodgers or neighbours. In each case, these factors had little bearing on sleep disturbance for the majority of respondents, with fewer than 5% of women experiencing serious disruption (three or more nights a week) from any of these potential intrusions. This suggests that the source of disruption lies more within the immediate social context of women’s sleep than in external disturbances.

6.3.2: Psychological factors associated with life circumstances (q12e-k)

I worry about my parents who are both in their late 70s ... I also worry about street crime and violence. I think these worries affect my quality of sleep. (S: age 47)

Women were asked a series of questions relating to the possible impact of life circumstances on their sleep, including concerns about work, family, relationships, safety, money, the future, and loneliness. As Table 6.6 shows, concerns about the family (35%) and about the future (20%), as well as concerns about work (18%) were the main factors affecting women’s sleep at least one or two nights a week.
Table 6.6: Psychological factors associated with life circumstances impacting on sleep (q12)
(Women aged 40 and over)

<table>
<thead>
<tr>
<th>Psychological factor</th>
<th>Rarely or never</th>
<th>1-2 nights a week</th>
<th>3 or more nights a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns about family</td>
<td>66</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Concerns about the future</td>
<td>81</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Concerns about work</td>
<td>82</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Concerns about relationships</td>
<td>86</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Financial concerns</td>
<td>87</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Feelings of loneliness</td>
<td>88</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Concerns about safety</td>
<td>92</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

As life circumstances can vary considerably across the life course, bivariate analysis was carried out to analyse the effects of age on the above factors (Figure 6.4).

Figure 6.4: Effect of psychological factors associated with life circumstances on sleep by age (q12)
(Women aged 40 and over)
Bivariate analysis showed a statistically significant relationship between age and work stress (p<.001), concerns about the family (p<.05), financial concerns (p<.01), and feelings of loneliness (p<.001). As expected, Figure 6.4 shows a marked decline in the impact of work stress on sleep after retirement. Interestingly, concerns about the family continue to affect women’s sleep across the life course from the age of 40, declining only slightly for women aged 70 and over. Despite the low income resources of the 70 and over age group, financial concerns had a bigger impact on sleep for the younger age group, with 18% of women in their 40s reporting sleep disruption one or more nights a week from money worries, compared to 11% of the older age group. Sleep disruption from feelings of loneliness increase after retirement, with 14% of women in their 60s and 19% of those aged 70 or over citing this as a contributing factor to poor sleep compared to just 9% in each of the younger age groups. The increase in loneliness may be attributable to the increase in widowhood in later life.

6.3.3: Physiological factors (q13)

I have found that I can’t relax when I go to bed sometimes .... I get an aching cramping feeling in my arms and legs and find it difficult to get comfortable. (S: age 42)

Physiological factors can have a serious impact on women’s sleep. As Figure 6.5 shows, the three main physiological factors which disrupted women’s sleep on three or more nights per week were going to the toilet (48%), feeling too hot (23%), and experiencing creeping sensations in the legs (11%).

Bivariate analysis was carried out to identify possible associations between age (5-year age groups) and going to the toilet and feeling hot (Figure 6.6). Both variables showed a statistically significant relationship with age (p<.001).
Figure 6.5: Physiological factors affecting women’s sleep (q13)

<table>
<thead>
<tr>
<th>Physical factors</th>
<th>% affected 3 or more nights a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to the toilet</td>
<td>50</td>
</tr>
<tr>
<td>Feeling too hot</td>
<td>40</td>
</tr>
<tr>
<td>Having cold feet</td>
<td>30</td>
</tr>
<tr>
<td>Bad dreams</td>
<td>20</td>
</tr>
<tr>
<td>Leg cramps</td>
<td>10</td>
</tr>
<tr>
<td>Creeping legs</td>
<td>10</td>
</tr>
</tbody>
</table>

Figure 6.6: Sleep disruption from going to the toilet and feeling hot by age (5-year age groups) (q13a, b)
As Figure 6.6 shows, as women age, there is an increased likelihood of sleep disruption from going to the toilet. Compared to women in their 40s, women aged 70 and over are almost twice as likely to have sleep disruption three or more nights per week from this cause. The relationship between age and feeling hot, however, parallels the hot flushes associated with menopausal changes. In the early 40s, fewer than 10% of women experience sleep disruption from feeling hot. However, this problem increases from the mid-40s, reaching a peak of around 34% for women in their 50s. This dramatic increase may reflect the decline in oestrogen levels at this age with the transition to menopause. The menopause may thus be a key factor in sleep disruption for women in this age group. Interestingly, although sleep disturbance from feeling hot declines in the post-menopausal period, one in four women in their 60s, and 14% of women aged 70 and over continue to experience problems three or more nights a week.

6.3.4: Health factors (q14)

I find it difficult to go back to sleep once I’ve woken because of aches and pains. It’s a problem getting comfortable. (S: age 57)

To ascertain the extent to which poor health contributes to sleep disruption, women were asked to assess the impact of a range of health conditions on their sleep. As Figure 6.7 shows, psychological and physical health problems were both implicated in sleep disruption. Stress, and pain from conditions such as arthritis and backache each affected the sleep of almost one third of respondents at least once a week.

Bivariate analysis of the correlation between age and adverse effects of stress and pain on sleep (Figure 6.8) showed statistically significant associations (p<.001). Figure 6.8 shows the effect of stress on women’s sleep linked to age. The incidence of stress affecting women’s sleep three or more nights a week was highest among pre-retirement age women, with 15% of women in their 40s and 16% of women in their 50s reporting sleep disruption arising from stress. The problem then declined after retirement from the age of 60 to just 8% in women aged 70 and over. These figures suggest a link between stress, sleep disruption, and the complexity of women’s lives as they balance multiple roles and responsibilities as workers,
partners, and/or mothers during their 40s and 50s, with stress levels falling after retirement. However, as Figure 6.8 shows, the incidence of sleep disturbance from pain increased steadily across the life course from 8% for women in their 40s to 26% for those aged 70 and over. This may suggest a relationship between declining physical health and poor sleep in later life.

Figure 6.7: Health factors affecting women’s sleep (q14)

Figure 6.8: Sleep disruption from stress and pain by age (q14a, g)
6.3.5: Family relationships (q16-20)

The majority of women in this study (81%) live with either a partner and/or children. The survey examined the effect of children and partners on women’s sleep.

Children (q16-17)

My only problems are because my younger children regularly wake during the night and the 11 year old sleep walks (rarely), a problem which hopefully will pass. (S: age 41)

For women with children aged under 25 living at home, the impact on women’s sleep differed according to the age of the child. As expected, younger children disrupted women’s sleep more in terms of their needs during the night and coming into the parent’s room, while older children created disturbances in the home environment from coming home late and playing loud music. Of the 492 women in the study with children under 25 living at home, 17% complained of sleep disturbances at least one night a week from children coming home late, 12% from children coming into their room, and 10% from children playing loud music/using the internet/or watching TV.

Husbands/partners (q18-20)

My husband had a bad spell of ill health over the last 18 months which has made him a very restless sleeper. (S: age 56)

Women living with husbands/partners were asked a range of questions regarding their sleeping arrangements and the impact of their partner’s sleep-related behaviour on their sleep. Although 86% of partnered women in the study slept with their partner in a double bed, 14% slept apart, either in twin beds in the same room (3%) or in separate bedrooms (12%). One in four women reported moving to another room when their partner was disturbing their sleep, while one third of respondents said they moved to another room when they thought they were disturbing their partner’s sleep.
Bivariate analysis showed a statistically significant relationship between age and sleeping arrangements (p<.001). Although sleeping arrangements remained relatively constant for women in their 40s and 50s, there was a dramatic rise in the number of couples sleeping apart from the age of 60. While only 7% of couples in their 40s were sleeping apart, 28% of those aged 60 and over did so, with 7% in twin beds and 21% in separate rooms. Partnered women aged 70 and over were almost twice as likely to be sleeping in separate rooms (39%) as those in their 60s (22%).

Figure 6.9 shows the influence of partner behaviour on women’s sleep. The main partner behaviours impacting on women’s sleep at least once a week were: partner snoring (45%), partner going to the toilet (30%), and partner sleeping restlessly (26%).

Figure 6.9: The influence of partner behaviour on women’s sleep (q19) (Partnered women only)

Partner behaviour

Bivariate analysis was carried out to ascertain whether there was a relationship between certain partner behaviours impacting on sleep and women’s age. Figure 6.10 illustrates the results of this analysis, showing a statistically significant association
As Figure 6.10 shows, partner snoring has a major impact on sleep for women aged 50-59, with 29% of women in this age group experiencing sleep disruption three or more nights a week, regardless of whether they slept with their partner in the same bed, in twin beds in the same room, or in another room. Partner snoring appears to become less of an issue for women 60 and over, declining to only 11% for partnered women aged 70 and over. This tallies with sleep studies which show that snoring reaches a peak for men in their 50s and early 60s and then declines.

The incidence of partners disturbing their wife’s sleep three or more nights a week from going to the toilet increases sequentially across the life course. As Figure 6.10 shows, while only 6% of partnered women in their 40s are affected, 22% of women
aged 70 and over experience disruption. This suggests that women’s sleep may be affected by the declining health of their partners, and the increase in prostate problems in ageing men.

Section 6.4 considers the survey findings in relation to the strategies women use to manage sleep disruption. It examines pre-bed activities, activities during the night, the use of non-prescription products, and medical intervention.

6.4 Strategies for managing sleep disruption (q21-25)

6.4.1: Pre-bed activities (q21)

For a sound sleep, leave all your worries until next morning and, when young, have sex before going to sleep. (S: age 77)

As Table 6.7 shows, women carry out a range of pre-bed activities to help them sleep. More than half the respondents read (76%), watched TV/listened to music/radio (71%), had a hot drink (67%) or had a bath/shower (57%) before going to bed. Bivariate analysis showed a statistically significant association between pre-bed activities and age. Older women were less likely to carry out these activities than younger women. Women in their 40s, for example, were more than twice as likely to have a bath or shower and four times more likely to have sex before going to sleep than women aged 70 and over.

Women were asked to rank the effectiveness of pre-bed activities in helping them sleep. As Table 6.7 shows, more than 80% of women who read or practised relaxation techniques before going to bed found these strategies effective in helping them sleep.
Table 6.7: Pre-bed activities considered effective in helping sleep (q21) (Women aged 40 and over)

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of women who do this activity</th>
<th>% of these women finding activity effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>76</td>
<td>85</td>
</tr>
<tr>
<td>Watching TV/listening to music/radio</td>
<td>71</td>
<td>67</td>
</tr>
<tr>
<td>Having a hot drink</td>
<td>67</td>
<td>72</td>
</tr>
<tr>
<td>Having a bath/shower</td>
<td>57</td>
<td>79</td>
</tr>
<tr>
<td>Having sex</td>
<td>47</td>
<td>76</td>
</tr>
<tr>
<td>Drinking alcohol</td>
<td>34</td>
<td>71</td>
</tr>
<tr>
<td>Having something to eat</td>
<td>34</td>
<td>52</td>
</tr>
<tr>
<td>Practising relaxation techniques</td>
<td>29</td>
<td>83</td>
</tr>
<tr>
<td>Exercising</td>
<td>13</td>
<td>62</td>
</tr>
</tbody>
</table>

N = 1445

6.4.2: Activities during the night (q22)

I am up at least once a night as I wake up and cannot get back to sleep. I get up and have perhaps a drink of hot milk, go back to bed and can usually get to sleep. (S: age 61)

Sleep maintenance was a widespread problem for women aged 40 and over, with 73% of respondents waking up more than once during the night at least one night a week. As Table 6.8 shows, women utilised a range of strategies to help them get back to sleep when they woke up during the night, including getting up and having something to eat or drink (40%), reading (36%), and getting up and doing something (32%). While bivariate analysis showed no statistical association between age and reading (p>.05), the proportion of women having sex, getting up and doing something, having something to eat, and practising relaxation techniques as strategies for getting back to sleep declined with age. The majority of women using strategies from the range of options given found them effective in helping them get back to sleep.
Table 6.8: Activities undertaken during the night and their effectiveness in restoring sleep (q22)
(Women aged 40 and over)

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of women who have tried this activity</th>
<th>% of these women finding this effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having something to eat or drink</td>
<td>40</td>
<td>84</td>
</tr>
<tr>
<td>Reading</td>
<td>36</td>
<td>89</td>
</tr>
<tr>
<td>Getting up and doing something</td>
<td>32</td>
<td>84</td>
</tr>
<tr>
<td>Practising relaxation techniques</td>
<td>32</td>
<td>86</td>
</tr>
<tr>
<td>Watching TV/listening to music/radio in bed</td>
<td>22</td>
<td>85</td>
</tr>
<tr>
<td>Having sex</td>
<td>16</td>
<td>76</td>
</tr>
</tbody>
</table>

N = 1445

6.4.3 Use of non-prescription products (q23)

For several years I have without fail woken at 3.30-4.30 for 1-2 hours unless I take Nytol. (S: age 43)

Women were asked to identify which non-prescription products they had tried and to evaluate their effectiveness in improving their sleep. As Table 6.9 shows, almost one in four women had tried over-the-counter sleep aids and paracetamol to help them sleep. Lavender pillows and herbal teas had been tried by one in five women. More than 80% of women who had tried antihistamines and paracetamol considered these products effective in improving sleep outcomes. The use of melatonin, a product widely used in the US to improve sleep, is at present unauthorised for use in the UK. However, only half of the 2% who had tried it found that it improved their sleep.

Table 6.9: Non-prescription products tried and their perceived effectiveness in improving sleep (q23)
(Women aged 40 and over)

<table>
<thead>
<tr>
<th>Product</th>
<th>% of women who have tried this product</th>
<th>% of these women finding product effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-the-counter products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(eg. Sleepeaze, Kalms, Valerian)</td>
<td>24</td>
<td>63</td>
</tr>
<tr>
<td>Paracetamol</td>
<td>23</td>
<td>81</td>
</tr>
<tr>
<td>Lavender pillows</td>
<td>20</td>
<td>65</td>
</tr>
<tr>
<td>Herbal teas</td>
<td>19</td>
<td>62</td>
</tr>
<tr>
<td>Relaxation tapes</td>
<td>10</td>
<td>66</td>
</tr>
<tr>
<td>Homeopathic remedies</td>
<td>10</td>
<td>64</td>
</tr>
<tr>
<td>Antihistamines</td>
<td>7</td>
<td>84</td>
</tr>
<tr>
<td>Melatonin</td>
<td>2</td>
<td>50</td>
</tr>
</tbody>
</table>

N = 1445
Bivariate analysis showed a statistically significant association between age and the use of paracetamol \( (p<.001) \) and herbal teas \( (p<.05) \). The use of paracetamol to improve sleep increased with age from 22\% of women in their 40s to 40\% of those aged 70 and over. Improvements in sleep from paracetamol may be a by-product of the use of this medication as a pain reliever. The use of herbal teas declined with age from around 20\% of those in their 40s, 50s and 60s to 14\% of those aged 70 and over. Over-the-counter products were least popular with women aged 70 and over. Only 14\% of women in this age group had tried these products, compared to around one quarter of women in each of the younger age groups.

6.4.4: Medical intervention (q24a-c, q30)

I’ve taken sleeping tablets for the last 30 years. (S: age 65)

Despite the levels of dissatisfaction with sleep and the high incidence of reported sleep problems, only 13\% of respondents had consulted their GP about a sleep problem in the past 12 months. Cross-tabulations showed no significant association between age and visits to the GP about sleep problems.

One in five women in the sample had taken sleeping pills at some stage during their lives, with 5\% reporting current usage. Sleeping pills were considered at least 'somewhat effective' in improving sleep outcomes for 61\% of the women who had ever taken them. Only 6\% felt they had not been effective.

Bivariate analysis was carried out to ascertain possible associations between sleeping pill use and age. As Figure 6.11 shows, there was a statistically significant association between sleeping pill use and age \( (p<.01) \), with almost twice as many women aged 70 and over having taken sleeping pills at some stage compared to women in their 40s. Interestingly, while only 13\% of women in their 40s reported having ever taken sleeping pills, this number rose to 19\% for those in their 50s before increasing gradually to 22\% for women aged 70 and over.
6.4.5: Naps (q25)

I am a very light and sometimes restless sleeper, but I often nap during the day or evenings. (S: age 79)

Napping was a regular feature of sleep patterns for women in this study, 44% of whom napped at least once a week. One in five women took naps three or more times a week. Just over 50% of women who took naps did so for between 20 minutes and an hour, while 44% preferred a shorter nap of less than 20 minutes. Napping appears to have a therapeutic effect for the majority of women, with 58% of women reporting that they felt better afterwards, compared to 12% who felt worse.

As expected, bivariate analysis showed a strong association (p<.001) between age and napping. As Figure 6.12 shows, while only 13% of women aged under 60 took naps three or more times a week, a third of women aged over 60 did so, implying a link between retirement and increased flexibility in sleep patterns.
6.5 Conclusion

This analysis of the 2003 Women’s Sleep in the UK Survey provides a range of insights into the experiences of sleep for 1445 women aged 40 and over in the UK. To summarise:

- Women may spend on average 8-9 hours in bed on week-nights and weekends but they report spending only about 6.5-7 hours asleep. Women in their 50s and those in their 70s report sleeping less than other women.

- Fewer than half the women describe their sleep as ‘good’ or ‘very good’. This assessment remains fairly constant across the life course. Poor sleep patterns are not necessarily problematic for all women, however. The majority of women (60%) are satisfied with the overall quality of their sleep.

- Sleep problems are endemic. Three quarters of women experience problems sleeping at least ‘sometimes’. Sleep problems do not appear to increase sequentially across the life course, but peak for women in their 50s before declining for women in their 60s and 70s.
• One third of women have chronic sleep problems (that is, problems three or more nights a week), however there is no statistically significant association between chronic sleep problems and age.

• The main type of sleep problem experienced by women across the age groups is waking up frequently during the night (sleep maintenance).

• Diagnosed sleep disorders such as obstructive sleep apnoea, narcolepsy, restless legs syndrome, and insomnia are rare. The incidence of restless legs syndrome and insomnia appear to increase with age.

• Poor sleep has a negative effect on women’s daytime performance, especially on energy, stress and anxiety levels. This is particularly apparent in mid-life women as they seek to balance multiple roles and responsibilities.

• Physiological factors such as going to the toilet and feeling too hot may disrupt women’s sleep. Sleep disruption from going to the toilet increases sequentially across the age groups, while disruption from feeling hot reaches a peak for women in their 50s and is likely to be associated with menopausal symptoms.

• Health conditions are also implicated in sleep disruption. Stress affects the sleep of around one third of respondents at least once a week and is a particular problem for women of working age. Pain from arthritis similarly disrupts the sleep of around one third of women, with this problem increasing sequentially across the age groups.

• Sleep takes place in a social context: women’s roles, relationships, and life circumstances have a major impact on their sleep. Concerns about the family, children coming home late, and partner behaviour, all feature as key factors disrupting women’s sleep.

• Partner behaviour affecting women’s sleep such as snoring and going to the toilet are age-related. While partner snoring causes most disruption for women in their 50s, disruption caused by their partner going to the toilet increases linearly across the age groups.

• Sleeping arrangements are associated with age, with almost one in three couples over the age of 60 sleeping apart. Women aged 70 and over are almost twice as likely to be sleeping in separate rooms as those in their 60s.

• Women use a range of self-help strategies before going to bed to try to improve their sleep, including reading, watching TV/listening to music/radio, having a hot drink, and practising relaxation techniques. They find reading and practising relaxation techniques particularly beneficial in helping them sleep.

• When they wake during the night women use a range of strategies which they consider effective in helping them get back to sleep. These include
having something to eat or drink, reading, and getting up and doing something. While reading remains constant across the age groups, younger women are more likely to use strategies to help them get back to sleep than older women.

- Post-retirement age women are less likely to use strategies to help them sleep than younger women. This possibly reflects the multiple roles and responsibilities of mid-life women and the need to function well in the daytime.

- In addition to self-help strategies, around one in five women have tried alternative products such as herbal teas and lavender pillows to help them sleep. Over-the-counter medications such as paracetamol and antihistamines, used as a sleep aid by 23% and 7% of women respectively, are considered very effective in improving their sleep. While the use of paracetamol increases with age, older women are less likely to drink herbal tea.

- One in five women have taken sleeping pills at some stage in their lives, with the majority finding them effective in improving their sleep. Older women are more likely to have taken sleeping pills than younger women.

- Napping is popular, with 44% of respondents taking naps at least once a week. The majority of women report that naps make them feel better. Napping is more common in post-retirement age women, suggesting that the increased time flexibility in retirement may encourage napping behaviour.

In addition to describing the characteristics of women’s sleep, this chapter also represents a starting point from which to examine conceptually the relationship between social context and women’s sleep in subsequent chapters. Part IV aims to explain why many women experience sleep disruption in terms of the socio-temporal constraints on their everyday lives.
PART IV

UNDERSTANDING SLEEP DISRUPTION
Chapter Seven

SOCIO-TEMPORAL CONSTRAINTS ON WOMEN’S SLEEP IN EVERYDAY LIFE

"Finish each day before you begin the next, and interpose a solid wall of sleep between the two."

(Ralph Waldo Emerson, 1803-1882)
http://www.quotationspage.com

Emerson’s simplistic formula for life incorporating a ‘solid wall of sleep’ between consecutive days of work belies a more complex reality for the majority of women in this study. As discussed in Part III, the 2003 Women’s Sleep in the UK Survey bears witness to the extent of sleep disruption in women’s lives, with 75% of women aged 40 and over experiencing disruption at least ‘sometimes’, and one third reporting chronic sleep problems. Implicit in these statistics is the question ‘Why?’. What is it about women’s lives that renders them so susceptible to sleep disruption?

This chapter proposes that competing socio-temporal demands on women’s lives may contribute to poor sleep. It:

• considers women’s perceptions of the importance of sleep;

• examines the changing nature of socio-temporal constraints on women’s lives in mid-to-later life;

• discusses the normality of sleep disruption as a characteristic of women’s sleep patterns; and

• identifies the main socio-temporal dynamics implicated in the structuring of women’s sleep, including institutional, relational and life course factors.
7.1 Women’s perceptions of the importance of sleep

Women’s sleep is inextricably linked to time. It takes place in a social context and as such is temporally bound by social roles as well as by the institutional structures and gendered relationships which underpin women’s lives. ‘Moulded from the different spheres of their lives, wound and bound together’ (Davies, 1990: 226), women’s sleep reflects the interaction of their participation in the labour market and family responsibilities, set against a background of events and transitions across the life course.

How women perceive sleep and its importance in their lives provides insights into the interrelationship between sleep and everyday life. For women in this study, sleep is the thread which binds day-to-day roles together and ensures the continuity of paid work and family relationships. Using images and language of repair, renewal, rejuvenation, restoration and rebirth, women describe sleep as an opportunity to ‘make good’ the physical and mental effects of everyday life, in so doing enabling a recycling of activities the following day. To use the language of Goffman’s dramaturgical metaphor (1959), sleep takes place back stage and represents a time during which women, in theory at least, can recover from the exertions inherent in front stage roles and prepare for the next day:

It’s rejuvenating. It’s what you need and I think it will solve all my problems and I will start again the following day and often with problems sorted out. There’s obviously something going on – processing time or something. (IV001: age 56)

You get away from everything (when you sleep). You don’t have to cook or find the next meal. Once you go to bed you don’t get up until the next morning and it all starts again. It’s like a merry-go-round. (FG4.2: 60-69)

Women describe the purpose of sleep in functional terms, suggesting an interrelationship between sleep and wake times. Quality sleep is seen as being intrinsically related to women’s performance of daytime roles. Waking up refreshed, rested and ‘wanting to get up and get on with the next day’ is central to effective
performance. Poor sleep is inconsistent with women’s ability to carry out their front stage roles at work and in the home:

You feel you can cope (if you’ve slept well), that is the difference. You can get through the next day and it’s not a problem. (FG2.2: 48-52)

When you are tired everything is a huge effort. It is like being nine months pregnant really, not being able to get onto the floor, you know to clean the floor. (FG2.2: 48-52)

Furthermore, women stress the importance of good sleep in terms of their appearance and manner. In the interactional environment of the workplace, for example, there is a societal expectation that in front stage roles women will be competent, ‘look good’ and behave in a manner conducive to the creation of positive relationships. Poor sleep ‘marks’ this preferred role; the ‘out of sync’ behaviour associated with tiredness produces a mismatch of performance and expectation:

[I feel] lethargic, snappy, can’t concentrate. (FG1.2: 40-47)

I tend to work more slowly, much more slowly. And I am much more irritable and my temper is harder to keep. (FG2.2: 48-52)

It’s important to have a good night’s sleep if you are wanting to look your best. (FG2.2: 48-52)

Yet while women accept that sleep is essential to good health and effective functioning, the reality of their lives dictates the extent to which they can access adequate sleep to meet their needs.

7.2 Socio-temporal constraints on women’s sleep in mid-to-later life

‘A woman’s work is never done’

(Title of a ballad, 1629, cited in Thomas, 1999: 276)

For many women, modernity has brought a ‘pluralization of lifeworlds’ (Lyon, 1994: 30) in which sleep has become a scarce resource, offering little respite from the
demands of everyday life. Hochschild (1997) speaks of a ‘time bind’ in which the
demarcation between work and home life no longer applies. Within this time bind,
sleep-time is becoming increasingly squeezed as women seek to balance the temporal
demands on their lives against their own sleep needs. Moreover, the emergence of a
24/7 society (see Chapter Eight), in which time delineation has become more fluid,
has added further pressure on women to deprioritise their sleep needs:

It’s a great shame these days, people have to belong to the rat race, you know
get ahead in careers, go on courses, take work home. And I think it’s bad that
people are generally getting less sleep than our parents and grandparents.
(IV002: age 57)

There is less time for us as women. I’m a working mum with a husband who
works very long hours. There are more demands on us being mums and
working and I think with our parents, old people are living longer and we’re
expected perhaps to look after our aged parents a little more than we ever
used to, and also families these days tend to be much more spread – we don’t
have a close social network. (IV010: age 40)

At mid-life (defined here as ages 40-59), for example, women are often juggling
multiple roles which impact significantly on their sleep. They may be caring for
young children and/or teenage or adult children; or they may be re-entering the
workforce on a full-time basis after parenting and occupying responsible positions
with increased stress and pressure. In some cases women may be experiencing the
effects of redundancy and early retirement, or supporting partners through periods of
workplace change; or they may be suffering the effects of broken relationships. As
daughters of ageing parents, they may be experiencing increased caring
responsibilities and the stresses of bereavement. The gendered nature of these social
roles may contribute significantly to sleep disruption, with women fulfilling their
commitment to the well-being of their families often to the detriment of their own
sleep needs and rights (see Chapter Nine):

I returned to employment 12 months ago after a number of years at home
with children and doing voluntary work. Before I returned to paid work I
rarely had any sleep problems and very rarely felt fatigued.... unlike now! (S:
age 44)
I worry about my father in America. He’s quite old, 79 now, and has got a lot of health problems and I sort of look after him from over here. I worry all the time. (FG1.1: 40-47)

For many mid-life women in this study, the maintenance of good sleep patterns is consistently downplayed as they concentrate on balancing the socio-temporal demands of roles, commitments and responsibilities at home and/or at work:

Problems just seem enormous. Our mothers (my husband’s and mine) have been recently widowed and are now on the state pension, either end of the country. We haven’t got a car, and they are quite demanding. My son ..... is a disaster. (I’ve got) a job that is becoming more and more stressful. There seems less and less time for me. To grab it then you pay for it in other ways. You feel you are squeezed, really. (FG3.1: 53-59)

I had an early menopause between 42 and 43. It was about the time that my husband left and I thought it was just anxiety because I felt terribly tired. It was the kind of tiredness you get in pregnancy and I thought I was just stressed. (FG1.1: 40-47)

In later life (defined here as age 60 and over), changes in sleep physiology may lead to lighter more fragmented sleep, with nighttime and early morning awakenings contributing to poor sleep quality (see Chapter One). Women in this study consistently correlate shorter sleep duration, sleep disruption, early awakening and decreased sleep needs with increasing age:

I wake up at four or five if I’m lucky and I won’t go back to sleep again. (FG4.1: 60-69)

As I get older I’m needing less sleep, at least one hour less a night. (S:62)

Yet while age-related changes in sleep physiology partly explain the deterioration in women’s sleep in later life, social factors and declining health also play a major role in determining sleep quality at this stage of the life course. Women’s sleep disruption may reflect changes in status and identity, as well as psychological stress as women make the transition from work to retirement, from good health to poor, from an active to a more sedentary lifestyle, from caring for children to caring for elderly parents or a partner, and from partner to widow. These factors may individually or in
combination produce a fertile environment for the emergence of compromised sleep patterns in later life:

My sleep problems began when I had to look after my husband who was frequently ill in the night and then I had a tablet called Tamoxifen after having a mastectomy and this disturbed my sleep considerably. (S: age 64)

I had not had any sleep problems whilst I was working. The month after I retired my mother died, and within six months my father died and my husband was made redundant at the age of 61 years. It seemed that all these upsets were the start of my sleep problems. (S: age 75)

Given the interplay of socio-temporal demands throughout women’s lives it is not surprising that access to sleep may be compromised. If good sleep is predicated on the achievement of harmony and balance in all aspects of women’s lives, then the possibility of disrupted and poor quality sleep is high.

7.3 The ‘normality’ of sleep disruption

In the pressurised society in which we live, sleep for many women has become a disposable resource; a low order priority which may compete unfavourably with the often conflicting temporal demands of motherhood, career, marriage and caring for ageing parents or partner. While expressing a wish for more sleep-time, women accept that this may be at odds with the realities of their lifestyles and the expectations of contemporary society, driven by capitalist production and consumption:

Ideally I think I would like possibly an hour more (sleep) but I can’t schedule it in though. (FG1.2: 40-47)

You are always made to feel as if you are inadequate if you need your eight hours sleep. It’s like these politicians like Maggie Thatcher who manage to keep going on four hours sleep. We’re somehow made to feel that we’re not in the swim because we need our eight hours. (FG3.2: 53-59)
Indeed, Aubert and White's (1959b: 7) assertion that 'most adult humans sleep uninterrupted for about 7-8 hours every night', bears little relationship to the reality of women's sleep in this study. According to the 2003 Women’s Sleep in the UK Survey women rarely enjoy eight hours of unbroken sleep; averaging 6.5 hours per night during the week and 7 hours on weekends (see Chapter Six). Rather than sleep being a continuous link between periods of wakefulness, sleep disruption is a fact of life. Women describe their sleep as 'broken', 'fragile', 'erratic', 'irregular', 'disturbed', 'fragmented', 'interrupted', and 'unpredictable'; vulnerable to changing life patterns and societal pressures. Disruption is a source of annoyance and frustration which is seen as inconsistent with the predominant work-focused patterning of society and with the need for on-going efficiency across all sectors of life:

If you have problems at work, if you have had a good night’s sleep you can laugh them off or you can deal with them but you can have the same problem when you haven’t slept and it will really get you down. It seems like it is an insurmountable problem. (FG1.3: 40-47)

I had a very bad night’s sleep last night. I ended up with only about three and a half hours. I feel very tired today and I really can’t get on with doing very much at all. (SD017: age 64)

While for some women these disturbances may become problematic, for the majority of women they become normalised over time. Though unwelcome, women have come to expect a degree of disruption as an inevitable outcome of the complex nature of their lives with its competing demands on their time.

In this context, ‘normal’ sleep has become an individual construct. Women may judge the quality of their sleep and its effects against a personal continuum of ‘acceptable normality’, based on the expected range of contingencies relevant to their social context, rather than on an externally imposed sleep norm. Thus, depending on personal circumstances, a ‘normal’ night’s sleep for women in this study may range from an undisturbed eight hours of sound sleep to as few as three hours of disrupted sleep and early awakening. As the following examples from a focus group of women in their fifties show, the range of sleep patterns considered normal can deviate
considerably from the prescribed norm of eight hours. For the few women in the study who report good sleep, there is a sense that this is unusual and ‘outside the norm’ experienced by most women:

I wake up a number of times, this is an ageing thing I think too. I might have to go to the loo at least once, but I also wake up and turn over. I wake up I would say half a dozen times. I don’t like that fact, but that’s a normal night’s sleep for me. (FG3.1: 53-59)

It varies. Sometimes I sleep right through quite well, but I mean like last night I have been awake since 4 this morning and could just not get back to sleep. The night before it was lovely. (FG3.1: 53-59)

I do sleep well. My head is on the pillow and I am asleep. Honestly, head down and I have gone. I really am. I feel so privileged that I have that facility. I really do feel privileged. I didn’t realise how lucky I am. (FG3.1: 53-59)

Moreover, while some women may enjoy a consistent pattern of sleep nightly throughout the week, for others sleep quality and duration may change from night-to-night, reflecting the changing realities of women’s lives. Women completing sleep diaries were asked to rate their sleep on a scale of 1 to 5 (1 being very poor sleep, 5 being excellent sleep) each night over a seven day period. The excerpts from audio sleep diaries in Tables 7.1 and 7.2 highlight the changing nature of ‘normal’ sleep over a three day period:

Table 7.1: Excerpts from audio sleep diary: Gloria
(aged 71, married, adult children)

<table>
<thead>
<tr>
<th>Day</th>
<th>Rating</th>
<th>Sleep description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>4</td>
<td>Slept well without waking, as far as I know unbroken sleep. Woke naturally. Felt quite enthusiastic about getting moving.</td>
</tr>
<tr>
<td>Friday</td>
<td>3</td>
<td>Took a long time to go to sleep. Legs uncomfortable, tossed and turned, felt very exhausted. Several attacks of cramp. Felt a bit drained when I got up.</td>
</tr>
<tr>
<td>Saturday</td>
<td>5</td>
<td>Went to sleep almost at once and slept through until 7. Woke naturally.</td>
</tr>
</tbody>
</table>
Table 7.2: Excerpts from audio sleep diary: Maya
(aged 51, married, three children)

<table>
<thead>
<tr>
<th>Day</th>
<th>Rating</th>
<th>Sleep description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>1</td>
<td>Very poor. Went to bed about 11.30, didn't get to sleep for an hour or so. Bit restless, wasn't really awake but mad things going through the brain. Alarm went off at 7.15 and woke us up – still feel very tired. Would prefer not to get up but not a lot of choice in these matters.</td>
</tr>
<tr>
<td>Friday</td>
<td>3</td>
<td>Slept a bit better than I have for a few days. Went to bed 11.45, woke up 6.15, got up 7.15. Slept pretty soundly, went to sleep quite quickly. Feel somewhat more rested than usual.</td>
</tr>
<tr>
<td>Saturday</td>
<td>1-2</td>
<td>Feel really tired. Sleep poor. Went to bed 11.45, woke about 4ish, not doing much, just lying around and brain active. Went to loo about 6 then just lay around. Got up at 7.45.</td>
</tr>
</tbody>
</table>

As these excerpts suggest, women’s sleep patterns are highly individualised and responsive to a range of socio-temporal factors which influence the structuring of sleep both on a nightly basis and across the life course. Despite women’s willingness to accept fewer hours of sleep as ‘normal’ given the socio-temporal constraints of their lives, there remains, however, a perceived pressure to conform to an eight hour ideal and a sense of deviation from the norm associated with fewer than eight hours sleep. Women have been socialised into an expectation of eight hours sleep, even though the pressures of their everyday lives act as a barrier to the sleep resource. It is this gap between societal norms and personal realities which may contribute to a feeling of dissatisfaction with individual sleep duration:

As a group we are completely different and yet in every magazine you read you should get 8 hours a night, all these shoulds and things like that. (FG1.2: 40-47)

We have all got this idea that eight hours is the norm. So if you don’t get it you think you have not had a good night’s sleep. (FG5.3: 70 and over)

I think we are a bit conditioned. My mother always used to say ‘if you don’t have 8 hours sleep you’re going to be fit for nothing in the morning’, and I’ve still got that in my head all these years later. I know I don’t actually need 8 hours sleep to function but I’ve still got that measurement which is a bit of a
Moreover as one woman suggests, failure to adhere to an externally imposed measure of sleep can create yet another hang up and source of guilt in women’s lives:

I think too many people get hung up on the time we sleep. It’s the quality of sleep not the time that’s important.... I’m extremely healthy, so it (4-5 hours per night) can’t be doing me any harm. (FG2.1: 48-52)

Women’s sleep is thus located at the centre of a complex interplay of socio-temporal factors which characterise women’s everyday lives and create the potential for sleep disruption across the life course. The next section outlines a model through which to examine these factors in more detail.

7.4 A socio-temporal model of women’s sleep

In discussing the gendered nature of time in everyday life, Davies (1990: 15) states that ‘men and women make use of time differently due to their different life situations’. She contends that society is structured on a ‘dominant male temporal consciousness ..... where linear and clock time are particularly prevalent’ (1990: 38, my emphasis). This linear perspective, epitomised by the compartmentalisation of time around the institutionalised structures of paid work, is intrinsically incompatible with the cyclical nature of what Davies calls female time. While for some women the sleep period can be seen as an individual time of rest which separates successive wake periods, for others, their identity, and the time available for sleep, is determined in part in relation to the needs and well-being of significant others. According to Odih (1999: 10), women’s time is relational, ‘shared rather than personal and thus sensitive to the contextuality and particularity of interpersonal relations’. Focused on caring and domestic tasks, female time is characterised as ‘bereft of boundaries or limits, with no clear beginning and end points, with no guaranteed space for leisure’ (Odih, 1999: 26).
Davies argues that linear and cyclical time co-exist in modern society, 'weaving complicated patterns in individuals' lives' (1990: 19). In fulfilling their multidimensional roles, women's engagement with time reflects a tension between the linear and cyclical as they seek to balance their responsibilities in the public sphere of paid work with household tasks. It is this 'dual temporal burden' (Odih, 1999: 26) of paid work and domestic responsibilities which may limit women's access to quality sleep, particularly at mid-life. Sullivan (1997: 221), in her analysis of time-use diary data in relation to the use of leisure time, concludes that women's time is 'fragmented' or 'interruptible':

'Women's time is not only more pressured in terms of the intensity of domestic tasks, but the more enjoyable aspects of their time, such as leisure time, tend to be more fragmented than that of men.' (Sullivan, 1997: 221)

Sullivan (1997: 221) suggests that this gender differential in time use may have implications for the quality of women's lives, with women twice as likely to have their leisure periods interrupted by domestic tasks. The social structuring of women's time as such may significantly inhibit 'their power to make decisions about their own time' (Odih, 1999: 11); and by association, their ability to determine the temporal parameters of their sleep. According to this understanding, women's sleep can be seen as enabling a continuing cycle or repetition of everyday tasks and processes which have the potential to fragment sleep patterns and perpetuate the status quo of gendered divisions of labour and inequalities.

Yet while the tension between linear and cyclical expressions of time are implicated in the structuring of women's sleep, there is a further temporal dynamic which ensures that the 'flow of experience continues in an irreversible and directional way' Adam (1990: 27). In addition to the routinised patterning of sleep in response to everyday practices, women have a sleep trajectory which extends in a linear fashion across the life course. This trajectory is fashioned by the events and transitions which characterise each woman's life and which ensure 'biographical continuity and coherence' (Alheit, 1994: 305). These events and transitions, I contend, create the potential for change in women's sleep patterns. During motherhood, for example, women may sleep more lightly as a result of their commitment to their children.
After retirement, women may have more time for naps or to sleep-in in the morning, but caring for an ailing partner in later life may limit their access to a good night’s sleep. Failure to recognise the impact of these lifestyle changes on sleep and adjust sleep expectations accordingly may create a gap between expectation and reality which may increase dissatisfaction with sleep.

This thesis contends that women’s sleep patterns are structured by the interaction of three main socio-temporal dynamics: the institutional time frames of paid work (both for women and their significant others); the relational time frames of the home; and the biographical events and transitions which take place across the life course (Figure 7.1):

**Figure 7.1: Socio-temporal factors impacting on women’s sleep**
These dynamics play a key role in structuring women's sleep across the life course by imposing constraints on women's access to sleep, by increasing the potential for sleep disruption, and by initiating change in sleep patterns. In this sense, sleep becomes a mirror which reflects both the constant and changing relationships between the self and the constraints of social time across the life course.

7.5: Conclusion

Sleep is essential for women to carry out effectively their roles and relationships in the public and private spheres. Yet the high incidence of sleep disruption reported by women in this study is indicative of the gap between sleep needs and the reality of their lives. For the majority of women, a 'normal' night's sleep often falls far short of the prescribed eight hours, reflecting the constraints inherent in their everyday lives. This chapter suggests that it is the complex, multi-faceted roles and relationships which underpin women's lives and impose constraints on their time which may explain the emergence of sleep disruption as a fact of life for many women in mid-to-later life.

In proposing a socio-temporal model of women's sleep, the chapter highlights the gendered dimensions of time as women balance domestic tasks alongside paid work. The structuring of women's sleep is responsive to both institutional time, associated with the demands of paid work, and relational time required to fulfil family commitments and responsibilities. It is the incompatibility of these temporal dynamics, I suggest, which is particularly likely to create a sleep environment conducive to disruption. Moreover, as the influence of these factors changes over time, so too does the structuring of women's sleep. Individual sleep trajectories record the changing patterns of women's sleep in relation to transitions in roles and relationships across the life course. Examining the interrelationship between sleep and the socio-temporal constraints inherent in women's roles and relationships across the life course may help explain the potential for sleep disruption among women.
In everyday life it may not be possible to disentangle these socio-temporal dynamics. However, to enable a more insightful analysis of the impact of socio-temporal factors on the structuring of women's sleep, Chapters Eight and Nine will examine separately both the institutional and relational constraints on women's sleep across the life course. Chapter Ten will then highlight the interaction of these dynamics by examining the sleep trajectories of a number of women who completed sleep-life grids.
Chapter Eight

THE INSTITUTIONALISATION OF WOMEN’S SLEEP ACROSS THE LIFE COURSE

‘As long as we remain part of a society that is structured to the time of clocks and calendars our activities and interaction with others can only escape its pervasive hold to a very limited extent.’ (Adam, 1990: 107)

As Chapter Seven has shown, time (or the lack of it) is a crucial factor implicated in the structuring of women’s sleep. In contemporary society, sleep may be deprioritised as women are caught between the temporal demands of paid work and commitment to the needs of their family. Paid work, with its emphasis on schedules and deadlines, is a key factor in determining the parameters of women’s lives including the time available for domestic responsibilities, and more importantly in terms of this thesis, for quality sleep.

This chapter considers the institutionalisation of women’s sleep through paid work. It examines:

- how women’s sleep patterns are structured by the institutional constraints associated with their paid work;

- how these constraints are compounded by the institutionalised schedules imposed by significant others around whom women define their domestic role;

- how sleep patterns may become de-institutionalised in the work-retirement transition with the loss of routines and schedules around which to organise sleep-time; and

- how in retirement, women may need to adjust their expectations of sleep in accordance with changing lifestyle patterns.
8.1 The institutionalisation of sleep

For women in this study, good sleep is defined *inter alia* as ‘a continuous and regular amount of sleep’; ‘being able to just drift off, relax and have a full night’s sleep without waking up’; ‘not being disturbed’; and ‘waking up naturally without the alarm’. Yet this focus on consolidated sleep at night, is, according to the historian Ekirch, an ‘unnatural’ product of the modern era:

‘Until the close of the early modern era, Western Europeans on most evenings experienced two major intervals of sleep bridged by up to an hour or more of quiet wakefulness .... The initial interval of slumber was usually referred to as “first sleep”, .... The succeeding interval of slumber was called “second” or “morning” sleep. Both phases lasted roughly the same length of time, with individuals waking sometime after midnight before ultimately falling back to sleep.’ (Ekirch, 2001: 364-5).

Rather than an imposition, segmented sleep was, in pre-industrial times, considered a natural part of the sleep cycle; a time of activity and/or contemplation to be positively anticipated. According to Ekirch’s thesis, the sleep disruption experienced in present-day society may arise from the ‘natural pattern of human sleep breaking through into today’s artificial world’ (Ekirch, 2001: 385). In support of his claim of the normalcy of sleep segmentation, he draws on the work of Wehr (1996; 1999). Wehr recreated the conditions of the pre-industrial age in his laboratory, depriving subjects of artificial light for up to fourteen hours each night for several weeks. He found that his subjects ‘first lay awake in bed for two hours, slept for four, awakened again for two to three hours of quiet rest and reflection, then fell back asleep for four more hours before finally awakening for good’ (cited in Ekirch, 2001: 367-8).

Ekirch (2001) contends that the shift from segmented to consolidated sleep patterns took place with the introduction of artificial lighting and industrialisation in the early nineteenth century. According to Giddens (1990: 17), the invention of the mechanical clock in the late eighteenth century enabled the social organisation of the day into distinct ‘zones’ of work, leisure and sleep. With the subsequent emergence of the industrial era, paid work time, with its emphasis on clock time and production schedules, became the dominant focus of everyday life, serving ‘to structure and
polarize the entire temporal architecture of society' (Sue, 1994; cited in Leccardi, 1996: 171). According to Dr Neil Stanley, the Director of Sleep Research at the HPRU Medical Research Centre at the University of Surrey, the division of the day into eight hours work, eight hours recreation and eight hours rest became enshrined in the ‘eight hour day movement’ which began in 1856 with the agreement between stonemasons and their employers for a 48 hour week in Melbourne (personal correspondence). It is this institutionalisation of time around paid work which has increasingly colonised ‘the natural and biological forms of temporality’ (Mills, 2000: 92); and which, by association, has had a profound influence on sleep patterns and behaviour:

‘As the tempo of modern life has continued to accelerate, we have come to feel increasingly out of touch with the biological rhythms of the planet, unable to experience a close connection with the natural environment.... Instead, humanity has created an artificial time environment punctuated by mechanical contrivances and electronic impulses: a time plane that is quantitative, fast-paced, efficient, and predictable.’ (Rifkin, 1987: 12; cited in Adam, 1990: 104)

The institutionalisation of sleep-time as an eight hour period of respite from consecutive days of work has become a cornerstone of sleep patterning today. This temporal division has been effective in establishing a conventional norm of sleep duration which meets the requirements of the labour market. Reinforced through socialisation and parental control during childhood, as well as by fixed work and educational schedules throughout the life course, the institutionalisation of sleep as an eight hour ‘norm’ is widely accepted as being necessary for good health and well-being, as well as being essential to the effective functioning of society. Citing Parsons (1951: 302), Schwartz (1973: 21) states that one of the primary functions of institutionalisation is ‘to help order .... different activities and relationships so that they constitute a sufficiently coordinated system, to be manageable by the actor and to minimise conflicts on the societal level’. The synchronisation of sleep at night enables the effective functioning of society by ensuring that people will be available to interact during the day; a prerequisite for the accomplishment of paid and unpaid work tasks.
Yet while the eight hour norm remains as a standard for sleep duration, there is a simultaneous pressure in society to get by with less sleep. In the transition from a society structured around workers and production to one focused on consumers and consumption, the delineation of day-night time boundaries has become blurred (Lyon, 1994), creating what has become known as a 24/7 society. As Melbin (1978: 20) states:

‘We change from a diurnal into an incessant species. We move beyond the environmental cycle – alternating day and night – in which our biological and social life evolved, and thus force novelty on these areas.’

Melbin (1987: 3) contends that in ‘replacing our cyclic community with activities that never stop ..., society has broken from the boundaries of daytime’. To meet the demands of this 24/7 society, there is a sense that virtue lies not in eight hours sleep per night but in much less: ‘Today, if you get by on short hours of sleep, it’s often considered dynamic, a take-charge approach to work and life’ (Graber and Gouin, 1995: 23). Indeed, the sleeping patterns of Margaret Thatcher and Winston Churchill who survived on around four hours sleep per night are held up as role models of sleep restraint. People are thus caught in the middle of two opposing schools of thought: one which recommends the eight-hour ideal, and the other which supports shorter sleep periods.

8.2 Paid work and the structuring of women’s sleep

‘Work tends to be a structuring element in people’s psychological make-up and the cycle of their daily activities ....... the day is usually organized around the rhythm of work. While this may sometimes be oppressive, it provides a sense of direction in daily activities.’ (Giddens, 1997: 306)

8.2.1: Paid work and women’s lives

For the majority of women in this study, paid work is, or has been, intrinsic to their life world, structuring not only their day-to-day lives but also their sleep patterns. It is part of the ‘dual temporal burden’ (Odih, 1999) which sees women balancing the
competing temporal demands of the public sphere of paid work with the private sphere of unpaid domestic labour essential for the upkeep of the home and the well-being of the family:

Sleep is restricted by work load. Finish at school by 5.30pm, home by 6pm. Start work again (ie. marking or preparation for the following day) at 8pm. Finish at 9pm. Get up at 4.30am to finish prep before getting children to school. (S: age 47)

I think competitiveness in the job market especially for women with children (interferes with our ability to find time for sleep). They have to lead a double life. I think that’s really hard. (FG2.1: 48-52)

Sleep-time is defined by paid work. The ever-present reality of the clock and the intrusion of the alarm are a constant reminder of the lack of control women have over their sleep during their working life. Women feel alienated from their natural sleep rhythms by societal structures which erode their ability to organise their sleep patterns according to personal needs. As the following excerpt shows, it is this loss of agency which is implicated in the dissatisfaction which working women feel about their sleep:

Int: What changes do you think we can make to our lifestyle or behaviour to make us sleep better?
A: Stop working.
B: Being in control, rather than someone else being in control.
C: Being in control, and having some time to just not be doing anything.
B: Yes, the being as well as the doing.
D: I quite like some structure.
B: But structure that you have imposed upon yourself. (FG3.2: 53-59)

8.2.2: Desynchrony in family schedules

There is a constant tension between sleep needs and the institutional and relational constraints of women’s lives. The time available for sleep is dictated by externally
imposed work schedules and by the schedules of family members, thus alienating women from their own sleep needs. As Adam (1990) states, ‘people at home are influenced in their timing by their own habits and those of the people around them’. Women are required to balance their own needs against those of their family and the contingencies of paid work:

I have to get up very early to take my daughters off to school. I get up about 6.30, 6.45 and I actually don’t get enough sleep. (FG1.1: 40-47)

I find I’m very constrained by having to go to bed at a certain time and getting up at a certain time. I’d like just to be able to go to bed at my own time and wake up when I’ve had enough sleep. (FG1.2: 40-47)

Shift work, with its irregular time schedules and patterns of work, can lead to desynchrony in interpersonal time relationships which can have a detrimental effect on sleep. While for some women it is the impact of their own shift patterns which creates disrupted sleep; for others, it is the incompatibility of their partner’s shift patterns with their own work routines which compromises their sleep:

My sleep pattern is poor due to 2 weeks day shift and 2 weeks night shift rota. I work 12.5 hour shifts plus travelling time. I find nights more difficult to cope with as I get older, only manage to sleep for 4-5 hours during the day. Often have quick turn around, off nights onto days again. Just get back into better sleep pattern, then nights again. (S: age 47)

My sleep patterns have to change on a monthly basis due to my partner working shifts. He relies on me to get him to and from work. Earliest is 6.45am-3pm, latest is 11pm-7.30am. My working hours are 8am-4pm. (S: age 54)

8.2.3: The psychological impact of paid work

Paid work may also transgress the boundary between public and private roles, filtering into the sleep period in the form of worries and concerns which interfere with sleep continuity. Women cite the changing culture of the workplace, including longer hours, greater accountability, less support, and new technology as increasing stress levels and impacting on their sleep. In many cases sleep disruption arises from the inability to switch off from work at night, with worries and concerns about work
filtering into the time dedicated to sleep. Rather than representing a time of rest between two consecutive days, the sleep period becomes an extension of the working day; a time to reflect on and process the proceedings of the previous day, and a space to plan and organise activities for the next. It is this rumination at night which is cited by a number of women in this study as interfering with sleep:

(Work’s) making people anti-social. People sit in offices and send each other emails. I find this bewildering. If you don’t have time to talk to people, then you don’t sleep as well because you have to process it all at night. (FG3.1: 53-59)

Towards morning I tossed and turned, looked at the clock and felt rather tense, probably unconsciously thinking of an imminent important lecture I have not yet prepared. (SD024: age 65)

Yet while paid work may impact on the time available for sleep, it is not work per se which is the problem. It is the incompatibility of work with women’s roles within the family which creates the increased potential for sleep disruption. Retirement, however, may offer women a unique opportunity to restructure their sleep.

8.3: Retirement and the restructuring of women’s sleep

‘A nap, my friend, is a brief period of sleep which overtakes superannuated persons when they endeavour to entertain unwelcome visitors or to listen to scientific lectures.’

(George Bernard Shaw, 1856-1950)
http://www.thinkexist.com

8.3.1: Sleep problems in later life

Later life is often considered synonymous with a deterioration in sleep patterns, an increase in napping, and an increase in sleep problems. Dement (2001) suggests that 50-90% of people over 65 get irregular sleep. He asserts that, with ageing, sleep gets lighter and more fragmented; falling asleep and staying asleep are more difficult;
nighttime awakenings last longer and are more disruptive; and sleep becomes less efficient, with more time in bed for less sleep. Indeed this expectation that sleep will get worse is reflected in the following data excerpts, with women accepting a less than satisfactory sleep outcome in later life as an inevitable consequence of ageing:

I don’t sleep well and I put this down to old age. I have gradually just got less and less good nights’ sleep. (FG4.2: 60-69, my emphasis)

Most people my age don’t sleep particularly well, do they? (IV008: age 63, my emphasis)

Yet while from a physiological viewpoint changes in sleep may be unavoidable (see Chapter One), this study refutes the idea that sleep will necessarily become more problematic. Indeed, according to the 2003 Women’s Sleep in the UK Survey (see Chapter Six), the percentage of women experiencing sleep problems at least ‘sometimes’ fell slightly from a peak of 81% for women in their 50s to around 75% for women in their 60s and 70s. Thus rather than women’s sleep necessarily deteriorating with ageing, the gradual removal of institutional and relational constraints imposed by the ‘dual temporal burden’ as children leave home and women retire from full-time paid work may in some cases contribute to the establishment of better sleep patterns. The social changes accompanying retirement may initiate a reassessment of previous sleep patterns and the formulation of new ways of structuring and thinking about sleep. Expectations of sleep, forged during working life, may no longer be applicable as women move through the work-retirement transition.

8.3.2: Regaining control of sleep in later life

According to Atchley (1992), retirement involves a shift in responsibility for decision making from the employer to the retiree. In taking over management of one’s life, retirees must now control decisions about their personal lives ranging from when to get up in the morning to what to do for recreation. It is the shift in control from the institutionalised structures of work to the individual which is of interest in examining the restructuring of women’s sleep-time in later life. I suggest that, rather
than merely being a product of physiological ageing, the perceived changes in the patterning of women’s sleep in later life arise in part from temporal shifts in sleep structuring following retirement.

In retirement, women may experience greater control over their sleep, with increased time flexibility to structure their sleep patterns according to their lifestyle. The perceived need to sleep for eight hours to enable women to perform effectively in the dual tasks of domestic and paid work may no longer be a strong motivating force in structuring sleep patterns as women age. It is this sense of personal choice in sleep times which women report as a feature of post-retirement sleep patterns. Retirement may thus represent an opportunity to focus on individual needs and to reclaim the right to sleep according to one’s own biological rhythms:

When you are working you are more organised so you know you have got to get to bed at a decent time to get your sleep otherwise you’d be no good the next day. Now if I stay up until 1 or 2 o’clock it doesn’t matter. (FG4.2: 60-69)

Sleep seems to get squeezed when you work full time in somebody else’s employ. And I don’t think it does us any good. There must be enormous numbers of people who survive on too little sleep. I noticed when I gave up work as an employee that I was free to choose my own sleeping times and I slept more. I was in charge and not doing that ridiculously long day. I grabbed back the sleep I had been missing. (FG3.2: 53-59, my emphases)

In restructuring sleep patterns, sleeping-in and napping may become features of women’s sleep after retirement, replacing the focus on a single (monophasic) period of sleep at night.

8.3.3: Restructuring sleep patterns after retirement

The polyphasic pattern of shorter sleep at night, sleeping-in and naps during the day characterises the sleep of a significant number of older women in this study. As the 2003 Women’s Sleep in the UK Survey shows, napping is strongly associated with retirement, with one third of women aged 60 and over taking naps three or more times a week compared with only 13% of those aged under 60 (see Chapter Six). The
increase in napping in post-retirement age women suggests that work and life schedules may play a key role in restricting napping behaviour. Napping in retirement may be more the result of greater time flexibility than a reflection of changing sleep needs:

I had a nice nap yesterday in the garden, then followed by a nice cup of tea. That’s what retirement is for. (FG4.2: 60-69)

While working women tended to try to catch up on sleep loss by sleeping-in at weekends, for women aged 60 and over, time spent asleep remained relatively constant throughout the week, suggesting a merging of the week/weekend dichotomy following retirement. For these women, increased flexibility of time may enable them to sleep-in during the week as well as at weekends:

Everyday is a weekend really when you’re retired because there are choices. (FG4.2: 60-69)

We don’t set the alarm, it’s just whoever gets up first in the morning goes up and gets the newspaper. So lately I don’t get up until about half past eight or nine. (FG4.2: 60-69)

Thus for some women retirement brings opportunities to restructure sleep according to personal needs. Yet despite the increased freedom from work constraints which retirement brings, a number of women find the transition to a more flexible sleep pattern difficult.

8.3.4: The impact of loss of routine on sleep in later life

In her study of how older women manage their time, Le Riche (2002: 5) states:

‘Older women’s lives continue to be shaped by the impact of paid work and subsequent retirement. For many of them paid work and caring had been significant means of ordering time.’
While for many women, retirement represents an opportunity to regain control over their sleep, for others it is paradoxically this lack of institutionalised structure which may give rise to sleep problems. It may be that the sleep problems women experience in later life arise in part from difficulty in restructuring sleep patterns in accordance with new lifestyle parameters. For the following women, the loss of the routines, status and identity associated with work has led to significant changes in their sleep patterns and in their ability to deal with sleep disruption:

I notice my sleep has got worse since I retired two years ago. I think now I have got all day to do whatever it is. I’ve got no routine with my life and I’m bored by the time I go to bed. (FG4.2: 60-69)

Six months ago I would have gone to work and worked through it (tiredness). I think the routine drives you – that routine of having to go through the door (to work) meant that I would get up on a Monday morning and go through that door with my make-up on and my hair done. Now I sit there and watch TV. I’ve even gone to sleep in the chair which I think is awful. (FG3.3: 53-59)

Moreover, as the balance of time in later life shifts from a focus on relational and institutional to the individual, women may feel a sense of guilt as they adjust from a ‘doing’ mentality which prioritises the needs of others, to a ‘being’ mentality which becomes possible as patterns of responsibility change. Women may also wrestle with the shift in identity and status associated with retirement, choosing to distance themselves from behaviours, such as napping, associated with old age:

I think the biggest problem has been giving myself permission to do that (sleep-in). I think that is what comes of getting older. You have to say, this is my time, some of the time is my time. (FG3.2: 53-59)

It’s learning not to feel guilty any more. This is the thing. I feel guilty having a rest in the day. It’s what old people do. (FG4.1: 60-69)

When I was working there was the feeling that when I got back from work that I’d earned it, I could relax, I could do what I wanted. Whereas now I’ve got all this time and I see all these things I ought to do, but I can’t get organised. I have an alarm that goes off at seven and then I get up. I just feel completely out of kilter if I lie in. (FG4.1: 60-69)
Understanding sleep disruption in later life is thus complex. It involves examining not merely physiological changes in sleep patterns but also the influence of social factors as women adjust to life outside the organisational structures of paid work. In adjusting to new lifestyle parameters, women are inevitably forced to re-evaluate their existing expectations about sleep and formulate new sleep realities.

8.4: Conclusion

‘Even in its absence, work is pivotal in the assessment of time.’ (Fairhurst, 2000: 20)

The birth of the industrial era marked a period of intense change in people’s lives and in their sleep patterns. With the introduction of electricity, segmented patterns of sleep and seasonal patterns of work which characterised the pre-industrial era were replaced, in theory at least, by the division of each day into eight hour periods of work, leisure and sleep. In the post-industrial era, this pattern is in transition, with advances in technology and communication ushering in a 24/7 society in which sleep no longer has a clearly defined and anticipated place at the end of each day. Women’s sleep is a reflection of this change; normatively structured around an eight hour model, yet subject to the pressures of changing work patterns affecting both themselves, their partner and their families. For many women, sleep disruption is the inevitable outcome as they seek to locate sleep within this new temporal framework.

As Fairhurst points out (above), institutionalised structures which define sleep during women’s working lives continue to influence sleep patterns after retirement. Paid work, with its clock-time schedules, punctuated by bells, whistles and alarms, creates a pattern of sleep which may be difficult to change. While for some women, retirement offers an increased time flexibility, for others it casts them adrift in unaccounted time. Without the structuring of time imposed by paid work, women may find their expectations of a good night’s sleep are not met. The sleep disruption which follows retirement for many women may be the result of the destructuring of
sleep time, in which women must assume responsibility for their sleep in accordance with their needs and emergent lifestyles.

In the social context of women's sleep, however, institutional factors rarely exist in isolation. Chapter Nine examines the impact of relational dynamics, which may interact with institutionalised structures, to determine the nature of women's sleep. Following a discussion of the impact of gendered roles and relationships on women's sleep at mid-life, it examines how the changing nature of the couple relationship in later life affects the quality and patterning of women's sleep.
Chapter Nine

SLEEPING AS A SHARED EXPERIENCE: THE IMPACT OF FAMILY RELATIONSHIPS ON WOMEN’S SLEEP

‘Heathrow night noise breaches human rights’
(The Times; London; Oct 8, 2001)

Women’s right to a good night’s sleep is, in theory, beyond dispute. Williams and Bendelow (1998: 182), for example, draw on Parsons’ (1951) conceptualisation of the sick role, to define the rights of a sleeper as: freedom from noise and interference from others, except in times of emergency; exemption from normal role obligations; and no loss of waking role status whilst asleep. Moreover, in October 2001 the European Court of Human Rights (2001, Hatton and Others vs the United Kingdom) upheld a claim under Article 8 of the European Convention of Human Rights that night flights at Heathrow airport infringe nearby residents’ rights to a good night’s sleep. According to this ruling, a good night’s sleep is a human right.

This chapter proposes, however, that in everyday life, women’s right to a good night’s sleep may be compromised by their roles and relationships within the home. For the majority of women in this study, sleep takes place within a family environment, and it is women’s identity as partners and/or mothers which will predominantly structure their experiences of sleep. These identities are defined by culturally determined gender roles and obligations which ensure that women will be responsible for the welfare of their families during the sleep period. The constraints embedded within this duty to care may impede women’s access to quality sleep and be responsible for the widespread disruption which characterises their sleep.

According to McKie et al (1999: 5), the roles and relationships which people enact within family life provide ‘a central feature of theoretical and empirical research on gender, power and the household’. Thus to analyse household roles and relationships during the sleep period from a gender perspective is to comment not only on sleep disruption but also to expose possible underlying inequalities. The chapter draws on
data from focus groups, interviews, audio sleep diaries and survey comments to illustrate the interrelationship between gender roles and women's sleep disruption. It examines:

- the gendered nature of family relationships;
- the impact of children on women's sleep; and
- partners and sleep disruption.

The chapter suggests that sleep may represent a further arena in which gender inequalities are manifest. In this context, a woman's right to a good night's sleep may be more a myth than a reality.

9.1: The gendered nature of family relationships

9.1.1: 'Doing' sleep in the family environment

West and Zimmerman (1987: 140) contend that a person's gender is 'not simply an aspect of what one is, but, more fundamentally, it is something that one does, and does recurrently, in interaction with others'. Similarly, Morgan (1999: 29) argues that the household with its focus on the family is a 'site of particular importance' for the 'doing of gender and gendered practices'. He states that 'gender is not incidental or formally irrelevant to family practices but, on the contrary, is built into these practices and routine understandings of them' (Morgan, 1999: 30). For most women in this study, sleep is an interactional activity, with children and/or partners impacting on the nature and quality of their sleep. As such, sleep is a site for doing gender; in the same way as the domestic division of labour which structures day-to-day life reinforces the underlying power dynamics which define male-female relationships. In this context, the doing of sleep involves carrying out a range of gender-appropriate duties and obligations which not only reinforce gender divisions within the household but may as a consequence constrain women's access to a good night's sleep.
Sleep may be influenced by women’s roles both within the public sphere of the workplace and the private domain of the home. For some women, especially those who live alone, finishing the day’s paid work may represent a retreat from the public sphere of work with its demands and expectations to the private space and relative sanctuary of the home where they can relax and recover from the day’s work. As shown in the following sleep diary excerpt (Table 9.1), Fran, a 40 year old single woman with no children, can expect a ‘normal’ night’s sleep of around eight hours with minimal disruption to follow her working day:

**Table 9.1: Excerpts from audio sleep diary: Fran**

<table>
<thead>
<tr>
<th>FRAN (SD004)</th>
<th>40, single, no children, lives alone, full-time employed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wednesday</strong></td>
<td>'I went to bed at 11 last night <em>same as usual</em> and went to sleep after about a quarter of an hour same as usual. I woke up once in the night to go to the loo and went straight back to sleep again. Woke up at 7.15 when the alarm went off. Had a <em>normal night’s sleep</em> but I normally sleep well so it’s a good night’s sleep.'</td>
</tr>
<tr>
<td><strong>Thursday</strong></td>
<td>'Had an <em>average night’s sleep</em>, went to bed at 10.45, went to sleep about 11.30, woke up once to go to the loo and went straight back to sleep, woke up by the <em>alarm</em> clock at 7.15. <em>Slept soundly as usual</em>, felt fine when I woke up.'</td>
</tr>
</tbody>
</table>

( *my emphases)

For the majority of women in this study, however, going home may represent the start of what Hochschild (1990) terms the ‘second shift’, an extension of their daytime working role in which they assume the responsibilities and expected behaviour patterns of partner and/or mother.

Over two-thirds of women aged between 40 and 59 work either on a full-time or part-time basis (General Household Survey, 1998, my analysis). Yet, as Pilcher (2000: 70) explains, ‘despite women’s increased participation in paid work, they continue to bear primary responsibility for the completion of housework and caring work’. Rather than relaxing back stage as Goffman (1959) suggests, a woman may simply step out of the character of working woman and into that of housewife and mother. Moreover, rather than enjoying the right to ‘exemption from normal role
obligations’ (Williams and Bendelow, 1998) during the sleep period, women’s domestic roles may extend into a ‘third shift’ in which their own sleep needs are subjugated to those of their family. In this sense, Goffman’s description of the bedroom as a place from which ‘the audience can be excluded’ (1959: 124) and where people may ‘attempt to buffer themselves from the deterministic demands that surround them’ (1959: 116) in everyday life may not hold true for these women.

This is clearly illustrated in the following sleep diary excerpt (Table 9.2) in which Eileen, a 46 year old married woman with three children, describes the interactional effects of family life on her sleep:

Table 9.2: Excerpts from audio sleep diary: Eileen

<table>
<thead>
<tr>
<th>EILEEN (SD005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>46, married, 3 children (aged 10-13), employed part-time</td>
</tr>
</tbody>
</table>

**Wednesday**

‘Went to bed at 11.15, got up this morning at 6.15. Didn’t have a very good night* basically because my son woke me up to tell me he couldn’t sleep at 1.30 and my husband came to bed late after an all-night conference meeting. He came to bed about 3 and tossed and turned from that point on and snored. Managed to fall asleep absolutely fine within about 3 seconds and after each time I got woken up I fell asleep again quite quickly. It was just the fact that I was woken up several times that I didn’t have a very good night. The other thing that woke me up at about 5.45 was the milkman bringing the milk.’

( *my emphases)

**Thursday**

‘I actually slept pretty well last night. Went to bed at 11.30 again, slept very deeply and very well till about 5. Didn’t actually sleep in my own bed because my husband had gone to bed at 9 and was in full snore by the time I got there so I went and slept in another bed which probably explains why I slept very well until about 5 – there isn’t actually a curtain in my daughter’s room so I think it was pretty bright, then I did manage to get back to sleep quite quickly and woke again about 6. Dozed till about 6.40 because I didn’t actually want to get up at all. Oh, I’ve just remembered my daughter woke me up at about 2 in the morning because she’d had an accident in her bed and wet herself so I was awake for a few minutes trying to deal with that but went straight back to sleep.’

Eileen’s pivotal role as a wife and mother and the responsibilities which this entails, as well as her husband’s demanding job and erratic hours, have a significant impact on her sleep and take precedence over her own sleep needs. While Fran (Table 9.1) experiences no external disturbances during the night, Eileen’s sleep is characterised by regular disruption. Eileen evaluates her sleep relative to the degree of ‘normal’
interruption and disturbance she expects to face each night in her family context, rather than in relation to an eight-hour norm. Thus she describes her sleep on Thursday night as ‘pretty good’, despite being displaced from her bed by a snoring husband, sleeping only 5.5 hours, and attending to her daughter’s needs during the night.

For Eileen, and for women in similar situations in this study, her relationship with her children and partner are two primary factors impinging on her sleep. These relationships, with their inherent responsibilities and expenditure of physical and emotional labour, define Eileen’s sleeping context and as such have the potential to disrupt her sleep. Moreover, by enacting these roles, Eileen reinforces both her identity as wife and mother and existing gender divisions in the household. As Gregory (1999: 62) observes, ‘the interrelationship between gender and the family is embodied in the responsibilities undertaken by women through domestic and child caring tasks’. Disrupted sleep during the night resulting from attending to children’s and partner’s needs may interfere significantly with a woman’s ability to exert control over her sleep. The extension of caring responsibilities into the sleep period may thus provide a further exemplification of the gendered nature of family relationships.

9.1.2: The invisible dimension of caring

Caring responsibilities are multi-dimensional, and involve an interweaving of physical tasks as well as emotional labour. Building on Graham’s (1983: 13) description of caring as ‘a concept encompassing that range of human experiences which have to do with feeling concern for, and taking charge of, the well-being of others’, James (1989: 15) defines emotional labour as ‘the labour involved in dealing with other peoples’ feelings’. It involves the often unremarked tasks of organising, managing, trouble-shooting, worrying, and anticipating and attending to the needs of others to ensure the well-being of the family unit. The nature of this work dictates the need for women to be available and flexible in responding to the divergent needs of those within their orbit of care. As Duncombe and Marsden (1995: 150) assert, it is women who are ‘left with emotional responsibility for the private sphere’ while men
retain their role of breadwinner as their ‘central life interest’. Women construct their identity through their connection to others, and are therefore ‘more mindful of the consequences of an action rather than just the principles by which an action is judged right or wrong’ (Gilligan, 1982; cited in Freedman, 2001: 19). Their right to sleep, therefore, may be subsumed by perceptions of how their behaviour will impact on others in the household and of the consequences of not fulfilling culturally defined gender roles. To ignore a crying child, for example, may not only be at odds with the socially prescribed role of mother, but may disturb the sleep of others in the household for whom the woman feels equal responsibility.

Mason (1996a) extends our understanding of the caring role by introducing the concepts of ‘active sensibility’ and ‘sentient activity’. She suggests that caring is relational and involves ‘inter alia morality, feeling and thought’ (1996a: 26). Mason describes the feelings of commitment and responsibility which operates in the context of family and kin relationships as ‘active sensibility’. She argues that in accepting this commitment, people engage in a range of ‘sentient activities’ which reinforce their roles within the family, provide the motivation to carry out the multifaceted tasks associated with caring, and ensure the continuity of the caring role throughout the life course. The thinking and feeling aspects of this role are highly skilled activities rather than passive sentiment, yet they remain to a large extent invisible. As De Vault (1991: 142) states: ‘When one person takes responsibility for the work, others rarely think about it. Even the one who does it – because so much of her thought about it is never shared – may not be fully aware of all that is involved.’ Thus Eileen (Table 9.2) mentions attending to her daughter during the night as an afterthought to her sleep diary: ‘Oh, I’ve just remembered my daughter woke me up at about 2 in the morning....’; reflecting perhaps the subliminal, taken-for-granted nature of her duties as mother. While Mason rejects the idea that carers are necessarily women, she acknowledges that empirically this is more often the case. In the household, therefore, it is predominantly women who assume the role of carers in response to active sensibility, and carry out sentient activities intertwined with the more visible physical tasks which characterise housework and childcare.
These activities continue across the life course, with the period of sleep providing a valuable resource for understanding the changes in gender roles and relationships which accompany transitions in later life.

9.1.3: Caring in later life

While the duty of care associated with motherhood which influences women’s sleep during mid-life may diminish when children leave home, it may be replaced by an increasing commitment to care for an ageing partner suffering from physical and/or mental frailty. According to Arber and Ginn (1995: 13), ‘gender roles and identities which have developed in earlier phases of the life course through patriarchal practices in the family, labour market and state, continue to structure women’s and men’s relationships in later life’. For the majority of couples born prior to World War 2, their relationship has been structured according to a traditional gendered division of labour, with men as providers and protectors balancing women’s role as servicers and carers within the home.

The role of women in caregiving in later life is further reinforced by the government’s policy of community care (for example, \textit{NHS and Community Care Act of 1990}; \textit{Carers [Recognition and Services] Act of 1996}) which encourages a sharing of caring roles between family and statutory authorities. As an extension of existing domestic roles, caring is gendered and remains primarily ‘a woman’s job’, which is seen as ‘normal and natural to women, but something special when performed by men’ (Rose and Bruce, 1995: 127). The task-based orientation of the carer’s role in providing a range of personal, physical and practical services for their partner, may conceal the contribution of emotional labour through which the carer reassures and provides psycho-social support for their partner (James, 1992). In the case of sleep, this ‘invisible layer of care’ may contribute as much to sleep disruption among women caregivers as the personal and physical tasks associated with caring, and the restlessness and disturbed sleep of care recipients. Moreover, the carer’s own health problems, symptoms of stress and depression associated with caring for a partner, the deterioration of the marital relationship, and the lack of adequate respite care, may increase the propensity for sleep disruption among caregivers. A study of
sleep in family dementia caregivers in the US, for example, found that 68% of caregivers (N=93) reported some type of sleep problem at least three times during the previous week (McCurry and Teri, 1995; cited in Wilcox and King, 1999: 190).

Structured and reinforced by active sensibility and the marriage vow of 'in sickness and in health' (Davidson et al., 2000), the provision of caring services thus remains a constant commitment as women age. In the 'bridge between marriage and widowhood' (Davidson, 1999: 141), caring responsibilities can grow in intensity as their partner’s health declines, impacting significantly on women’s sleep (see for example, McCurry and Teri, 1995; Wilcox and King, 1999; Mahler and Green, 2002). A recent study of carers in the UK, for example, showed that 34% of carers reported tiredness and 31% reported disrupted sleep arising as a consequence of their caring responsibilities (Mahler and Green, 2002: 25). For many women the bedroom becomes an ‘invisible workplace’ where they carry out the sentient activities associated with their caring responsibilities, rather than a sanctuary providing respite from the day’s activities.

The impact of caring in later life is highlighted in the following excerpts from a sleep diary (Table 9.3) in which Mary, a 64 year old married woman with grown up children, describes the relationship between her husband’s illness and the quality of her sleep. She speaks of her concerns about her husband’s illness, of the intrusive nature of his symptoms during the night, and of the effect of her own health problems on her sleep:
Mary’s access to sleep is thus structured by the interplay of active sensibility, in which, as a wife, she assumes a sense of commitment and responsibility for her husband’s well-being during the night; and by the sentient activities which characterise this role, including awareness, apprehension, checking, and concern.

The caring role, with its gendered dimensions, thus provides a focus for examining the interaction of roles and relationships on women’s sleep. The next section examines how women’s role as mother may contribute to the structuring of sleep.

### 9.2 The impact of children on women’s sleep

“**Yes, there is a Nirvanah; it is leading your sheep to a green pasture, and in putting your child to sleep, and in writing the last line of your poem.**”

(Kahlil Gibran)

http://www.quotationspage.com

<table>
<thead>
<tr>
<th>Table 9.3: Excerpts from audio sleep diary: Mary</th>
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<tbody>
<tr>
<td><strong>MARY (SD014)</strong></td>
</tr>
<tr>
<td>64, married, 3 adult children,</td>
</tr>
<tr>
<td>employed part-time</td>
</tr>
<tr>
<td><strong>Tuesday</strong></td>
</tr>
<tr>
<td>‘Quite a good night* - my husband wasn’t having</td>
</tr>
<tr>
<td>any problem with his breathing and so he didn’t</td>
</tr>
<tr>
<td>disturb me at all.’</td>
</tr>
<tr>
<td><strong>Wednesday</strong></td>
</tr>
<tr>
<td>‘I didn’t sleep very well last night, very poor</td>
</tr>
<tr>
<td>sleep. I went to bed at the usual time about ten</td>
</tr>
<tr>
<td>o’clock and read for half an hour which is what</td>
</tr>
<tr>
<td>I usually do. I was quite happy and lay down</td>
</tr>
<tr>
<td>at half past ten but I just could not sleep. I</td>
</tr>
<tr>
<td>was still awake at 1 o’clock, a bit restless,</td>
</tr>
<tr>
<td>not too bad and I really put it down to being a</td>
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<tr>
<td>bit apprehensive about today because my husband</td>
</tr>
<tr>
<td>has to go to hospital and get some results of</td>
</tr>
<tr>
<td>tests. So I suppose it is a bit of stress......</td>
</tr>
<tr>
<td>My husband coughed quite a lot during the night</td>
</tr>
<tr>
<td>which I was concerned about, and that of course</td>
</tr>
<tr>
<td>didn’t help me to sleep either.’</td>
</tr>
<tr>
<td><strong>Sunday</strong></td>
</tr>
<tr>
<td>‘Very poor sleep last night.....My husband didn’t</td>
</tr>
<tr>
<td>come to bed straight away and I suppose I was</td>
</tr>
<tr>
<td>aware that he was downstairs. He was coughing a</td>
</tr>
<tr>
<td>bit and I got up and just checked to make sure</td>
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<tr>
<td>he was alright...... My knees were aching, I</td>
</tr>
<tr>
<td>suppose it’s a bit of old age or arthritis or</td>
</tr>
<tr>
<td>something ... I feel very tired this morning</td>
</tr>
<tr>
<td>and I obviously didn’t rest easily during the</td>
</tr>
<tr>
<td>night.’</td>
</tr>
</tbody>
</table>

( *my emphases)
9.2.1: Motherhood and sleep disruption

Women’s commitment to the care and well-being of their children is a significant factor in sleep disruption particularly during mid-life. As shown in the 2003 Women’s Sleep in the UK Survey, of the 492 women in the study with children under 25 living at home, 17% complained of sleep disturbances at least one night a week from children coming home late, 12% from children coming into their room, and 10% from children playing loud music, using the internet, or watching TV. While the effect of young children and babies on women’s sleep is widely acknowledged, there has been much less attention on the effect of teenagers and young adults on parent’s sleep:

I have no normal sleep pattern, it has gone. I have a baby that sleeps two hours less than any other baby, and then I get woken up by my (teenage) daughter who comes stumbling in drunk in the middle of the night, knocking things over and turning her music on too loud. (FG1.1: 40-47)

Now the children have left home I’m a bit freer. I used to stay up until they got back from the pub, so through their teenage years my sleep was really disrupted. (FG1.1: 40-47)

A woman’s consideration of her children’s needs may involve her in a wide range of physical and emotional labour during the night. To take one example, the incident of Eileen’s 10 year old daughter’s bed-wetting (Table 9.2), may entail the following tasks:

- being alert during the night to her children’s needs;
- responding to her daughter’s calls for help;
- comforting her daughter in an embarrassing situation;
- changing her daughter’s clothing and bed linen;
- reassuring the child and getting her back to sleep; and
- worrying about possible psychological or physical reasons for the child’s bed-wetting.
In carrying out activities such as these, women fulfil their role as carers and their responsibility to their children even though it impinges on their own need for sleep. Caring for your child is simply one of the expectations of the role of motherhood. In accordance with a woman’s role as provider of physical and emotional labour in the home, a woman is always considered as ‘being available’ and ‘on duty’, and responsive to the needs of her children at a time regarded by others as a period of rest and recuperation. Intrinsic to women’s descriptions of their sleep during motherhood is a perception of caring tasks and emotional labour as predominantly women’s work:

My husband never woke up when they were little and I would be up far quicker than he was. (FG2.2: 48-52)

Well, having a young child brings the effects of sleep deprivation out of the realms of research and ‘into your face’. Constant broken nights up until 12 months ago really took a toll on my physical health and mental functioning (and, not unusually, no support from partner). I was utterly exhausted. (S: age 46)

In some communities, sleeping with children on an on-going basis may be the source of sleep disruption. One GP, whose practice serves a large Asian community, sees patients suffering the effects of stress arising from different cross-cultural sleeping arrangements:

In Asian houses there may be a lot of people in the bedroom and so the children will often be in the bedroom with the mum and it’s more likely they’ll have a more disturbed sleep pattern. (GP001)

It is not surprising, therefore, that poor sleep, both while children are young and during their teenage and adult years, is regarded as just part of ‘a woman’s lot in life’. For Eileen, and women like her, the bedroom thus becomes an ‘invisible workplace’, a control room from which the well-being of her family is managed. In the silent world of sleep, the highly skilled tasks she performs, while reinforcing her role as ‘mother’, are largely unnoticed and unacknowledged. While for others, sleep may represent a back-stage position where they can recover from the day’s work, for many women sleep is a continuation of the more visible domestic roles they play.
during the day. In the working environment of the bedroom, opportunities for sleep are often sublimated to the needs of others, as well as to the worries associated with paid work in the public domain.

Yet despite gender and power imbalances in the household, women often display an attitude of acceptance of their roles. As Connell (1987: 123) states, ‘one way of handling a strong power imbalance is to build a praxis of compliance.’ In her study of the impact of chronic illness on family relationships, Gregory (2000: 1) found that disruptions were ‘absorbed and managed, usually by wives and mothers, in ways which sought to minimise perceptions of the burden involved’. Similarly, Baxter and Western (1998) found a strong sense of acceptance of the gendered inequalities inherent in the household division of labour in regard to childcare. They conclude that women in general may be pragmatic enough to resign themselves to accepting a division of labour where men’s participation in household duties is minimal. In this study, women appear to accept that their children will interrupt their sleep and that they will need to attend to this disturbance through physical and/or emotional labour. In a situation which is largely outside women’s control, to accept the reality of sleep disruption is a realistic response. In terms of sleep, women may accept a duty to care for their family out of a sense of commitment despite its incursions into their sleep.

9.2.2: Motherhood: A lifetime commitment

Women agree that to have children is to accept an on-going degree of disruption to their sleep. While the day-to-day burden of caring for children may decline over time, women are never completely free from the ties of motherhood, nor the worries which this entails. Although the caring role may end when children leave home, for some women the role is extended into retirement through inter-generational obligations to care for grandchildren either while their daughters work or during holiday periods. To have children is to relinquish a sense of control over the patterning and quality of sleep over the life course:
If you don't actually have children then you don't realise what sleep deprivation is about. Under normal circumstances you can actually go to bed and catch up on your sleep, because you don’t have those dependent, shrieking babies. (FG1.1: 40-47)

My children worry me, particularly my son. He doesn’t seem to be able to hold a job and may need financial assistance. (IV001: age 56)

Because I’m caring for grandchildren on a regular basis, on average three days per week, I have become very overtired (all are under 5 years old). (S: age 67)

The degree to which children influence women’s sleep may become evident in later life when women reflect back on how the responsibilities of motherhood affected their sleep. For some, sleep may improve when the obligations of raising children have been fulfilled; for others, however, the pattern of sleep which developed during motherhood has remained a constant feature in their lives:

Now the children have left home, life is more sedate and quiet, but as a busy working mum in the past I have had many spells of not being able to go to sleep due to family pressures; how to fit in everybody’s needs and of course financial worries – but it does get better. (S: age 59)

I’m a very light sleeper. My son was born prematurely and I think from that point onwards, I know it was 34 years ago, I lay about listening to his breathing the way you do with premature babies, and ever since then I waken at the least sound. (IV001: age 56)

Yet while responsibilities for children may contribute to poor sleep patterns throughout the life course, a woman’s relationship with her partner also plays a significant role in the structuring of her sleep patterns.
9.3: Partners and sleep disruption

9.3.1: Partner behaviour

"Laugh and the world laughs with you, snore and you sleep alone."

(Anthony Burgess)
http://www.quotationspage.com

For the majority of women in this study, sleeping is, or has at some time during their lives, been a shared experience, with sleep patterns determined to some extent by their interaction with their partner during the sleep period. Sleeping as a couple, while considered by some to be symbolic of a loving relationship, is fraught with the potential for sleep disruption. In their study of 46 couples aged between 23 and 67, Pankhurst and Horne (1994) found evidence that men are more likely to adversely affect their partner’s sleep than women, with women reporting significantly more awakenings because of their partner than men. Research conducted in the UK by the Sleep Council (2002) into the sleep patterns of 1000 couples provides insights into how sleep disruptions can impact on the couple relationship. Although focusing primarily on the sleep patterns of younger couples (only 5% of the sample were aged 55 and over), the survey found that 49% of respondents complained about being awakened by their partner during the night. Partner’s snoring, tossing and turning, hogging the bed covers, waking them up to chat, reading, watching TV or listening to the radio were cited as contributing to sleep disturbances. Partner snoring was ranked as the major cause of complaint by women in the survey, with 63% of women citing this as a problem compared to just 32% of men.

Similarly, women responding to the 2003 Women’s Sleep in the UK Survey reported a strong association between deterioration in their sleep quality and their partner’s snoring, going to the toilet and restlessness. They cited snoring (45%), going to the toilet (30%), and restlessness (26%) as the main partner behaviours impacting on their sleep at least once a week (see Chapter Six). An examination of each of these factors in turn reveals that for some women, the reality of sleeping with a partner can be more a ‘bed of thorns’ than a ‘bed of roses’.
Snoring

While the impact of partner snoring on women’s sleep may decline in later life, it can have a significant impact on the sleeping environment of couples across the life course. Although often portrayed in a humorous vein, women’s accounts reveal the frustration and irritation which accompany snoring. The romance of sleeping together is lost as the bedroom becomes the site of dehumanising behaviour:

He used to make a lot of noises, like a farmyard he was. (FG5.2: 70 and over)

(My husband’s) one of those people who can go to bed quite happily at 10pm, so by the time I come stumbling up the stairs, it is sort of a snoring heap. (FG1.1: 40-47, my emphasis)

As part of their commitment to care for the well-being of their families, women may act as mediators between partners and the medical profession in an attempt to overcome the source of their sleep disruption. This is illustrated in the following excerpt in which a woman takes responsibility for ensuring her partner seeks medical advice for his snoring:

He’s a bad snorer. I did persuade him to go to the doctor. The doctor said you can have half your upper palate removed or you can take this (a steroid spray). He did actually take the spray for a while but you’re not supposed to take that for more than three months at a time. And he just went back to normal (ie. snoring). (FG1.2: 40-47, my emphasis)

Going to the toilet

For most men and women frequent getting up to go to the toilet during the night will be a feature of their sleep patterns as they age (see Chapter One). As one GP in this study said:

I think older people have more interrupted nights and so feel tireder because the old men are getting up to wee from their prostates and the old women are getting up because they also have uro-genital ageing and can’t sleep through the night without weeing, or they have arthritis in their hips, back, neck that wakes them up. (GP002)
While for most women going to the toilet during the night is a source of inconvenience, the increasing incidence of prostate diseases in ageing men is a major source of sleep disruption both for men and their bed partner (see Chapter One). For couples, the consequences of these disturbances may be considerable, with women at times assuming the added responsibility for ensuring their partner seeks medical advice for their condition:

> My husband is in and out of bed a few times a night and disturbs me as well because he is larger than me so the weight of him getting out of bed, that disturbs me, and I’m a very light sleeper anyway. (FG4.2: 60-69)

> My husband needs to pee so that sometimes does wake me up. He’s getting something done about it by my instigation. He gets up about three times a night so that sometimes disturbs me. (FG 4.2: 60-69, my emphasis)

**Restlessness**

While partner’s snoring and going to the toilet have a significant impact on women’s sleep, restlessness can also be problematic across the life course. Restlessness may arise from a range of factors, including pain and stress, or as in the following excerpt, may reflect underlying sleep disorders. In this case, a woman whose husband has been diagnosed as suffering from restless legs syndrome describes the impact on their sleeping relationship:

> I found his restlessness in bed terribly distressing because no matter how patient I tried to be ... He has restless legs. And also a whole series of drugs he was on would be slightly disinhibiting so he would be thrashing around or might shout out and talk about things and he would kick. He’d get up and walk around for hours. He’d go to bed and be asleep within 30 seconds, sleep for 20-40 minutes, be up for four hours and then sleep for a couple of hours ... The drugs he is on now are anti-Parkinson’s drugs which treat the restless legs quite well. (IV011: age 45)
The bedroom as a battleground

These problems may to a large extent be outside the partner’s control and thus difficult to resolve. Nevertheless, this study suggests that men sometimes act in a manner which shows a lack of sensitivity, and compromise their partner’s access to sleep. For some women in this study, the bedroom becomes a battleground in which partners engage in a power struggle for sleeping rights. The following excerpts show that partners may, either intentionally or unintentionally, act as sleep gatekeepers. Their sleep behaviour, needs, and demands during the night determine women’s access to sleep. Women may subjugate their own needs and place themselves at a distinct disadvantage in terms of access to sleep:

Dark, I like dark. It’s a hassle between us because my husband likes light to read by if he wakes up and it is light and I like the dark. Well we usually have [it] his way because otherwise I’m woken up by him biting his nails because he wants to turn the light on. (FG2.2: 48-52, my emphasis)

If my husband has got a problem and he is sort of waking up at 3 or 4 o’clock you know he will just say, ‘are you awake?’, as though he is trying to get through to me. And I say, ‘well, I am awake now’ and he says, ‘well, can we talk you know?’ And he will put the light on. (FG3.2: 50-59)

My husband smokes and has a bad chest which ‘squeaks’ and he coughs. He also grinds his teeth. All of which, once awake, drive me nuts! (S: age 51)

For some women, the bedroom may become a place of fear, where partner’s psychological problems interfere with their ability to get a good night’s sleep. One GP, whose surgery is close to a women’s refuge, reports the fear of domestic violence as underlying sleep problems in some of her patients:

I’ve got a couple of patients whose husbands are mentally ill and wander the place at night and the women are trying to keep the household together. They’re scared to go to sleep because of being bashed. (GP001)

Ironically, this delineation of sleeping rights across gender lines may be highlighted by the sense of freedom women feel and the degree of control they establish over the
sleeping domain when they sleep alone, either through choice, circumstance, partnership break-up, or their partner’s absence:

It’s nice to be able to please yourself....I love having the bed to myself and I sleep diagonally, and when he went (divorced) I bought lots of extra pillows. You can leave books lying around. (FG1.1: 40-47)

I had five months on my own. Tom went on a big sailing trip and that was extraordinary and I did sleep well. It was just the patterns of our sleeping and him snoring a lot. (FG2.2: 48-52)

Yet while partner behaviour can disrupt women’s sleep, it is the gendered commitment to care which may impact on quality sleep for women in later life. As the next section explains, the physical tasks associated with the failing health of a partner combined with the overlay of emotional labour or ‘worry’ work can play a significant role in structuring women’s sleep, and in reinforcing gender divisions within the couple relationship.

9.3.2: Caring for partners in later life

In describing their sleep in relation to caring experiences, women in this study allude not only to the physical and emotional labour associated with caring but also to the changing nature of the couple relationship. Caring for a partner with dementia, for example, can be a long-term commitment resulting in chronic sleep disruption and adverse consequences on the quality of the carer’s daily life. Florence, a widow, describes her experience of caring for her husband:

For ten years I looked after my husband with dementia and I mean I never stopped, I never slept really and that was my worse time for sleep. I kept a diary all the time he was ill and 25 times a night I got up once and in the morning I was just absolutely shattered. (FG5.1: 70 and over)

Rita, currently caring for her husband after a major heart attack, speaks not only of the impact on her sleep, but of the change in her identity within their relationship from ‘wife-husband’ to ‘mother-child’, characterising her husband’s behaviour in terms of that of a recalcitrant child over whom she needs to constantly watch:
When he had the actual heart attack I was so tired, but when he came home it was bad. That would be the only time I’d say my sleep has been bad .....It affected me from the point of view, it is like having a baby. I have always got one ear listening for him. But he is very naughty actually because he wakes up and has pains and he uses his spray and sits up in bed and I give him an aspirin and then after about half an hour he says, ‘oh I think I will try and sleep now’, and he goes to sleep. But of course I don’t. I lay awake listening to him breathe. (TV007: Rita aged 63, my emphases)

In the following extract, Bea describes the consequences on her sleep at present as she cares for her 89 year old husband suffering from Parkinson’s disease, the effects of multiple strokes, and arthritis:

I get into bed and then I can’t lie down and go straight to sleep. And for the past 3 years I haven’t been able to concentrate on reading a book. I lay down to go to sleep at 12.10, I woke at 2.30 and from 2.30 until 4.25 I couldn’t get back to sleep. I take Tamoxifen (for breast cancer), and that can give you hot flushes and this was continuous. I couldn’t go back to sleep. (My husband) was moaning, I didn’t know what was wrong. I went off into the other bed and took the radio. I had a little doze then up at 5.30 (to attend to husband), that took half an hour, no point going back to bed. So I got a couple of hours sleep ..... It is a battle and I haven’t got a husband. That is the awful part about it. So the man I love is not there...... I often wonder what is going to happen...... I know if he went into a home, then he would never come out again, and I couldn’t live with myself. (TV005: Bea aged 68, my emphasis)

Bea paints a vivid description of nights of continual sleep disruption and the sheer awfulness of her predicament. Yet her account reveals many insights into the evolving nature of the couple relationship in later life. In the final months of her husband’s life, Bea continues to fulfil the physical and emotional labour intrinsic to her role as wife in a situation where, through his illness, her husband’s identity has changed from active partner to passive dependent as his functional abilities decline. For her the partnership has changed beyond recognition. In the transition to widowhood, what remains is an expectation that she continue to care without the recompense of the loving relationship she once enjoyed. Moreover, Bea is burdened with guilt at the prospect of being unable to continue to fulfil her commitment to care for her husband ‘till death us do part’.
As the above excerpts show, caring responsibilities can be a major influence on sleep quality in later life. Moreover, they may reflect a gradual loosening of the couple relationship as gender roles become unbalanced and identities break down in the transition to widowhood.

9.3.3: Restructuring the couple relationship in later life

“All this fuss about sleeping together. For physical pleasure I'd sooner go to my dentist any day.”

(Evelyn Waugh, 1903-1966)
http://www.quotationspage.com

The decline in the quantity and quality of women’s sleep during later life, while on one level the result of partner sleep behaviour, may also be seen as symptomatic of underlying shifts in the gender balance of the couple relationship. As in Bea’s situation above, the increased responsibilities for caring for a partner in later life and the consequent intrusions into women’s sleep take place in the context of a corresponding change in their partner’s previous gendered role as provider and protector. To examine sleep disruption in later life, therefore, is to bear witness to changes in lifetime gendered roles and identities.

This restructuring of roles and identities is also evident in the significant number of couples who choose to sleep apart in later life. According to the 2003 Sleep in Ageing Women Survey, while only 7% of couples aged under 60 sleep apart, 28% of those aged 60 and over no longer sleep in the same bed. Moreover, almost twice as many couples aged 70 and over are sleeping apart compared to those in their 60s (see Chapter Six). The majority of those who sleep apart do so in separate rooms which may become available once children leave home. With partners increasingly affecting each other’s sleep with ageing, it would appear that to sleep apart while remaining together (Sleeping Apart Together), either in separate beds or in separate rooms, may be a pragmatic solution to the dilemma of disturbed sleep.
For twice-widowed Claire, single beds and earplugs proved an antidote to a first husband who ‘snored like crazy’, and a second husband who snored, suffered from cancer of the prostate, and had ‘a type of shake’ (IV023: age 71). For Vi, her decision to get single beds arose from the guilt she felt at disturbing her husband’s sleep by fidgeting at night:

It’s me that is the fidgety one and we’ve now got single beds and I tell you I wouldn’t want to go back to a double one ... because I fidget and then of course he says, ‘can’t you sleep?’ and all that and it makes me feel worse .... Even though I still fidget in my own bed, at least he is getting a good night’s sleep. (FG5.1: 70 and over)

The decision to Sleep Apart Together is not straightforward, however. According to the Sleep Council’s (2002) research into the sleep of younger couples (most aged under 55), although less than one couple in ten (7%) currently has separate beds, almost 20% would do so if their partner suggested it, while 5% would like to suggest it but know their partner would refuse. Fear of causing offence, putting a strain on the relationship, habit, and concern over the reaction of family and friends are cited as reasons for continuing to share a bed despite this being the cause of sleep disruption. These factors are equally applicable to couples over 60 who, despite a desire to get better sleep, may continue to share a double bed. The decision to move or to stay may be inextricably linked to the gendered expectations of the couple relationship and to the cultural values of the society in which the partnership exists.

In this society, part of the ‘doing of gender’ as ‘wife’ or ‘partner’ involves the sharing of a double bed. If, as West and Zimmerman (1987:147) maintain, doing gender ‘furnishes the interactional scaffolding of social structure’, then to sleep apart may represent a challenge to the gendered basis of the couple relationship, bringing into question women’s gendered identity as ‘wife’ or ‘partner’. Moreover, in a culture in which the ‘norms’ of couple behaviour are defined as sleeping with one’s partner, to sleep apart is to challenge the overriding ideology on which the couple relationship is based.
The following excerpts from the research highlight the feelings of this cohort of women, for whom the prospect of changing sleeping arrangements after long marriages, although in some cases desirable, is not acceptable within the terms of their relationship:

I’d prefer to sleep in a separate room. I know I’d sleep better but he doesn’t want me to go in another room..... I think we’re married and that is the end of it, isn’t it? (FG4.3: 60-69, my emphases)

He snores and I’m sure that he’s disturbing me. I was trying to get him to think perhaps it would be better in twin beds, but he won’t cave into that. (FG5.1: 70 and over, my emphasis)

Int: Have you ever thought of sleeping in separate beds? Jane: He says we may as well get a divorce then. (FG5.2: 70 and over, my emphasis)

Reactions from family and friends may also be indicative of a social stigma attached to couples sleeping in separate rooms:

Donna: We started to sleep in separate beds because he didn’t sleep well – except when we wanted, you know, a bit of hanky panky, but even then he would move out so that I could go to sleep. We now have two separate rooms because his sleep pattern is so irregular.

Int: What was the reaction to this?

Donna: The kids (when they came home from university) said, ‘oh, you two aren’t splitting up?’ I explained, and they knew anyway that dad used to wander around the house at night. (IV002: Donna aged 61)

For women whose sleep is compromised by their ageing partner’s sleep behaviour, moving from the double bed may become symbolic of a growing ambivalence in the couple relationship. Connidis (2003: 81) defines ambivalence as ‘structurally created contradictions that are experienced by individuals in their interactions with others’. Ambivalence, she argues ‘captures the co-existence of harmony and conflict in family relationships’, reflecting ‘the contradictions and paradoxes of their ties to one another’ (Connidis, 2003: 81-82). This ambivalence may be evident as women weigh up the pros and cons of moving from the double bed to a single bed or to another
room to reclaim their right to sleep. In some cases there may be a mismatch of attitudes towards sleeping apart, with a possible perception of this separation as preparation for widowhood:

I feel a separation but he doesn’t. It matters to me that we are together and he says, ‘I need my sleep’. I think there is this sort of, for me anyway personally, I don’t like to admit that maybe he spends more time across in the other bed. And there is something about getting older and the separation thing. I don’t know, perhaps I’m not grown up enough about it yet. (FG4.1: 60-69)

While couples may continue to relate as ‘man and wife’ despite sleeping separately, in some cases the night time separation after a lifetime of sharing a double bed can symbolise the effective ending of the marital partnership. Sarah, caring for a husband with dementia, describes the circumstances of her move to a separate room. In this case, sex, once a key reason for sharing a bed, seriously jeopardises the marriage, with changing rooms the only viable alternative:

I had to get out of the bed because (husband) had a problem. (His illness) affected his sexual drive and he just wouldn’t leave me alone so I had to say to him, ‘look I’m going to have to sleep in a different bed’... I just couldn’t cope with that ... I nearly left him. I was married 51 years and after about 41 years I was thinking of leaving because I thought he wasn’t the man I married. (FG5.1:70 and over, my emphases)

As these data show, making the decision to move or not from the marital bed in later life involves a complex process of negotiation with self and/or partner. Reflected in this process may be a growing sense of ambivalence as women weigh up the promise of improved sleep implicit in separation against the consequences on a relationship of rescinding the shared sleeping relationship. Implicit in the move is a loss of identity as ‘wife’, symbolised by the double bed; a loss which the majority of women are not prepared to countenance.

Forged over a long lifetime, the influence of the couple relationship can continue to influence women’s sleep long after it has ended. An examination of the impact of
divorce or widowhood on women’s sleep provides retrospective insights into the role of relationships in structuring women’s sleep.

9.3.4: Relationship loss and its impact on women’s sleep

“Night is the time to weep,
To wet with unseen tears
Those graves of memory where sleep
The joys of other years.”

(James Montgomery: The Issues of Life and Death)
http://www.online-literature.com/quotes/quotationsearch.php

For many women, divorce or the death of their partner represents a disengagement from the couple relationship and its concomitant roles and responsibilities. After a period of grieving and adjustment, women have the opportunity to restructure their sleeping patterns and arrangements as part of the building of a new identity. The sleeping experiences of these women thus provide insights into the role transition from partner within a couple to lone woman.

For over half the women in this study, the loss of a husband either through divorce or, more commonly, bereavement, has a significant impact on their sleep. In talking about their current experiences of sleep, widows and divorcees may shed light retrospectively on dimensions of the couple relationship not previously apparent.

Divorce in later life can bring a sense of freedom to some women and, after an initial period of mourning the relationship, often an improvement in sleep patterns. Lana, who divorced in her late 50s, describes how, in retrospect, her ex-husband’s behaviour in bed reflected the nature of their relationship:

When I was sleeping with my ex-husband in bed I felt I was being strangled. And he wouldn’t sleep without his arm around me. Sometimes it was round my neck. Possession....... Now I am by myself .... my sleep is much improved. I have just gone back to the pattern I had when I was young basically. (IV015: Lana aged 62)
Vanessa, whose husband left her for another woman when she was 57, describes the impact of separation and divorce on her sleep. Her description parallels that of the mourning period experienced following the death of a husband, and illustrates the strength of the marital bond on sleep, even after the relationship ends and significant time elapses:

*Vanessa:* My sleep went to pot. I found sleep very difficult, not initially. Initially I just slept but after a few weeks or so I began to be unable to sleep for very long. I took a long while to get to sleep and I woke up a lot in the night. Very poor sleep ... My sleep did improve gradually and I just can’t remember at what point, but within a couple of years it had improved....

*Int:* So since then, how has your sleep been?

*Vanessa:* At the moment it is mostly OK. There are always times I think with all of us particularly when memories come into this, when perhaps you have a wakeful spell, particularly after the break-up of the marriage. (TV009: age 71)

As discussed in section 9.3.2, the transition to widowhood for many women is characterised by a prior period of intensive caring responsibilities which can play havoc with their sleep. Patterns of sleep established during this period, coupled with grieving, can create a predisposition to poor sleep. One woman, whose husband died over ten years ago, links the deterioration in her sleep to the period of caring and subsequent mourning:

In 3.5 years my husband had 21 strokes. He could not walk or talk and could only eat soft food. I fed him. I had him home all the time, so I got little sleep in all that time. That was 11.5 years ago. My sleep has been up and down since then. (S: age 70)

After a lifetime of sharing a bed with a partner and the sense of companionship this implies, widows may experience a sense of loss symbolised by the empty double bed at night. For many widows, the empty bed is both a constant reminder of the couple relationship which was, and an expression of their new identity as widow. The long hours of night are often permeated by reminiscences about the past:

I go to bed and don’t go to sleep until 4 or 5 in the morning, but another night I could go in and drop off straight away you know. But I think, myself, it is
missing somebody in bed, because I have been a widow two and a half years, and I think you miss the company. (FG5.2: 70 and over)

You still remember things you did years ago. And I think that is one of the reasons I wake at night, or when you can't sleep you are thinking of all those times that you had. (FG5.2: 70 and over)

Alongside this sense of loss, the reality of sleeping alone without the security or companionship of a partner can create a sense of fear which impacts on women's sleep in widowhood and/or after divorce. In the following excerpts from focus group data, women speak of the consequences of living alone in the absence of the protective role of their partner, suggesting a link between companionship and better sleep:

Living on your own, you're just aware of sounds... I'm too much of a coward ... if I get up in the night it is because I think I heard something and this is living on your own. (FG4.2: 60-69)

It sounds funny because I wedge my bedroom door open because I want to know if there is something going on in the house. (FG4.2: 60-69)

I always sleep better if somebody else is staying with me. (FG5.1: 70 and over)

Women's accounts of sleep after divorce or widowhood can heighten understanding of the impact of loss of a partner on sleep patterns. For many widows, this period of adjustment is often accompanied by a continuation, at least in the short-term, of the disrupted sleep patterns which marked the intense period of caring during the final stages of their partner's life. This may be followed later on by greater freedom to create a sleeping environment free from the constraints imposed by their late partner. As women restructure their sleep in accordance with their new identity as widows or divorcees, talking about their past can provide valuable insights into the gendered roles and relationships which once characterised their lives.

For Connie, whose relationship had dictated her sleeping arrangements throughout her married life, the death of her husband provided an opportunity to move to what she considered a preferable sleeping environment. Her comments highlight the
dynamics of a relationship in which her sleeping comfort was compromised by her acquiescence to the wishes of her husband:

_Int:_ Was it strange sleeping alone after (your husband) died?

_Connie:_ Oh, yes.

_Int:_ But you stayed in the same bed?

_Connie:_ Yes, but then I got fed up with it, so I moved into one of the other rooms and moved a single bed in there.

_Int:_ You missed your husband?

_Connie:_ No, it wasn’t that. _I never did like the bed. He did. I didn’t like it._ (IV014: age 83, my emphases)

For May, widowhood has meant a restructuring of the patterning of her sleep. Away from the fear of her domineering husband who died four years ago, she describes the freedom she now enjoys:

_May:_ I wake up at 7am and just lay there thinking you know.

_Int:_ Is that a nice time for you?

_May:_ Yes.

_Int:_ So how has your sleep changed since your husband died?

_May:_ Well he didn’t like laying in bed and _if he got up he expected everybody else to get up_ so you were always up between seven and eight. And bed time was usually half ten. _He expected everybody to go to bed before him_..... Now I’m often still down here at 11.30. (IV016: age 74, my emphases)

The structuring of women’s sleep is thus inextricably linked to the changing roles and relationships which characterise their lives. Examining the impact of divorce and widowhood on women’s sleep, can paradoxically provide insights into the influence which partners have on women’s expectations and experiences of sleep.
9.4 Conclusion

This chapter has shown how family relationships and the gendered divisions of labour within the household contribute to the structuring of women's sleep. Rather than providing a sanctuary to recover from the day's work and prepare for the following day, sleep incorporates and extends the relational dimension of women's lives. In sleep, women are first and foremost partners and/or mothers and the performance of the physical and emotional labour required by these roles often curtails their right to a good night's sleep and reinforces their gendered identities in the home. Women's commitment to care for the family places them under the obligation of being available to deal with the needs of others during the night; be it the needs of children, or those of a partner suffering from increasing physical and/or mental disabilities in later life.

If we consider the rights of a person to sleep proposed by Williams and Bendelow (1998), it is clear that women are disadvantaged. In catering to the needs of others, women may lose their right to 'exemption from normal (domestic) role obligations', and 'freedom from noise and interference from others'. The role of partner and/or mother within a family structure can thus be synonymous with a loss of sleeping rights. If, as stated in the introduction to this chapter, the right to a good night's sleep is enshrined in law, then by inference, women's basic human rights may be compromised by factors which deny them access to uninterrupted sleep.

Women in this study see disturbed sleep as a 'woman's lot', an everyday reality over which they have little control. However, they absorb and manage the disruptions to sleep inherent in their roles with little fuss, conscious not to disturb the sleep of others. They appear to accept that their partners and children will act as unconscious gatekeepers, at times blocking their access to the sleep resource. To seek to change the status quo is to some extent to deny their gender role and risk the well-being and harmony of the family unit. Rather than seeing themselves as victims, women seek pragmatic solutions within the constraints of their social context which balance the demands of their responsibilities within the household with their need for sleep.
As Chapters Eight and Nine have shown, the study of sleep can provide insights into the role of both institutional and relational factors in determining the temporal pattern of women's everyday lives at mid-life and in later life. Yet, as life takes place across a continuum from birth to death, so too do the patterns of sleep change in response to life events and transitions, creating a sleep trajectory. As discussed in Chapter Ten, this trajectory captures each woman's sleep history in relation to the social constraints which characterise her life. In the absence of longitudinal studies, it is thus a unique representation of the changing nature of sleep across the life course.
Chapter Ten

THE TRAJECTORY OF WOMEN'S SLEEP ACROSS THE LIFE COURSE: CASE STUDIES

In order to understand people in later life 'it is necessary to see them in the context of their whole life history with the problems both successfully and unsuccessfully resolved from earlier periods in life.' (Bond et al., 1993: 30)

Bond et al's advocacy of a life course approach to the study of ageing is equally applicable to understanding women's sleep. In the absence of a longitudinal study, individual sleep trajectories in which women retrospectively map the changing patterns of their sleep over time in relation to paid work, family relationships, and life events and transitions provide insights into the interrelationship between sleep patterns and the socio-temporal factors which shape women's lives over time (see Figure 7.1).

By drawing on survey comments and excerpts from sleep-life grid interviews, this chapter demonstrates the complex social interactions which fashion women's sleep patterns across the life course. Using a case study approach, it discusses the sleep trajectories of five women: Donna, a 57 year old re-partnered woman with two children; Mary, a 65 year old married woman with three children; Agnes, a 65 year old divorced woman with three children; Julia, a 63 year old widow with two children; and Vanessa, a divorced woman in her early seventies with three children.

The chapter considers:

- how institutional and relational factors interact to compromise women's sleep across the life course;

- whether poor sleep in later life results from the cumulative effects of institutional and relational sleep disruption throughout the life course; and
• the extent to which good sleep in later life is possible despite compromised sleep patterns in earlier life.

A typed example of a sleep-life grid is included as Figure 10.1 to illustrate the approach used in constructing individual sleep trajectories.

10.1 Donna

Donna, a 57 year old respondent to the 2003 Women's Sleep in the UK Survey, has two adult children, works full-time and has repartnered since her divorce. In the free comments section at the end of the questionnaire, she wrote out her own sleep trajectory, describing how the interaction of socio-temporal factors over the past thirty years has contributed to a gradual deterioration in her sleep:

The quality of my sleep has deteriorated as follows: 1975: my second child had disturbed sleep for two years; 1975-85: I was a housewife and lost sleep due to my second husband being a bus driver, up at 3am occasionally; 1995: I cared for my sons twins and worked full time shift work as a nurse; 1998: my marriage ended in divorce, knees became painful; 2000: I'm happy with my (new) partner but my job is stressful and poorly staffed. (S: age 57)

Donna's sleep trajectory reveals three major factors which interact to affect the structuring of her sleep: institutional, relational, and life course. Institutional factors, such as the shift work demands of her husband's and her own jobs and the stress associated with her paid work, have formed a temporal thread throughout her life contributing to patterns of disruption. Alongside this, Donna has had to balance relational demands, including caring for her children and grandchildren. Divorce, repartnering and pain have also been pivotal factors in structuring her sleep. Although happily settled into a new relationship, Donna perceives her current poor sleep as arising from the accumulation of 'sleep defects' over time, as her sleep quality is eroded by her responsibility to care for others and by the demands of her job. The extent to which these 'defects' will continue into retirement once work is removed from the sleep equation is at this stage unknown.
Mary is a 65 year old married woman with three adult children. Her sleep trajectory reflects the interplay of a number of institutional, relational and life course factors which have impacted on the quality of her sleep. After having enjoyed ‘quite good’ sleep, Mary’s sleep deteriorated in response to a series of adverse events in her 40s, including increasing work pressures and travel, children leaving home, ill-health and hospitalisation, caring for elderly parents, and early retirement to coincide with her older husband’s decision to sell his business and retire. The following excerpts from her interview highlight the interplay of these events:

The children all moved out when they were 18. They went to university and never came home (to live) again...... I had a hysterectomy at 43 and the following year a breast papilloma which thankfully was benign and a few years later I was hospitalised with a leaking valve in my leg.... As soon as the children moved out I had my parents, I exchanged my young family for my old family. They increasingly required support. I had a very, very fraught five years looking after them until they died. ...... I had a lot of stress at work with the travel and a lot of deadlines...... I retired from (name of company) very early, in my mid-40s. My husband wanted me at home as opposed to travelling around the country... He’s hopeless in the house really, he does help a little bit but he is no cook – can’t cook or won’t cook sort of thing. He wanted me back home to cook the food and warm his slippers. I felt resentful. (IV001: age 65)

Mary describes her sleep during this period as poor, with early starts for work limiting her sleep duration. Feelings of claustrophobia in bed for about a year after her hysterectomy, combined with concerns over her husband’s failing business and caring for her parents also contributed to a deterioration in Mary’s sleep:

I would sort of get out of bed and go and read a bit and get back in again, and probably I was hot (as a result of menopause following hysterectomy)...... My sleep was really bad when my husband had the business problems. That was very bad. It was pretty bad with my mother and father and I had the problems with them. You don’t go to sleep easily (when your parents are ill). They had moved in with me, at one time I had them in two separate hospitals. I was going between the two of them. I’d wake up in the night and my mind would start buzzing. Eventually I’d get up and come down and make a cup of tea and try to switch onto something else and then go back to bed. ... If I was feeling a bit fraught, I’d take one of my father’s Temazepam. (IV001: age 65)
While Mary's sleep gradually improved after the death of her parents and her adjustment to retirement, the decision to move from Scotland to be closer to her family in recent years, and her husband's declining health with emphysema have contributed to on-going sleep disruption:

I didn’t sleep well before we moved down here (from Scotland) because this wasn’t the house that I wanted, I didn’t really want to leave Scotland. I mean I knew that I had to and it was the right decision but I absolutely adore Scotland. I think it is where I have left myself.... I would sort of think my sleep now is about middling. It's not really bad but I wouldn’t say it was very good. I think it is probably things on my mind.... If I wake up during the night I can hear him (husband) coughing and it is getting progressively worse. (IV001: age 65)

Mary’s sleep trajectory thus provides clear insights into the interrelationship between aspects of her life and her sleep patterns. In Mary’s case, the gendered nature of her roles and relationships as a wife, caring for a domestically challenged husband, and worrying about his health in later life; as a mother raising three children; and as a daughter, caring for her ageing parents in the years leading to their deaths have placed a heavy burden on her time and on her access to good sleep. Alongside these relational factors, institutional constraints such as the stress of a pressured job, extensive travel associated with her work, financial worries surrounding the collapse of her husband’s business, and the need to leave work prematurely to fit in with her husband’s early retirement have had a significant impact on her sleep across the life course from the age of 40. For Mary, sleep is a reflection of her life, with its complex roles, relationships, and transitions.

10.3 Agnes

Agnes, whose sleep-life grid is shown in Figure 10.1, is a 65 year old divorced woman with three children who lives alone in a small council flat.
Figure 10.1: Sleep-life grid: Agnes
Age: 65, divorced, three children, retired

- Born 1937
- 1977: divorce/family split
- 1982: stress from job/beginnings of insomnia
- 1987: single parent/homeless/financial worries/ quits degree
- 2002: retirement
- 205: retirement void/feelings of loss/living on own

Good sleep:
- Begins job as community race relations officer – career takes off
- Self-assertion/begins degree
- Sees doctor – Temazepam
- Resigns from job because of stress
- New job as Events organiser
- Antidepressants for stress

Poor sleep:
- Missing son
- Ex-husband dies intestate
- Retirement at 59/involuntary/anger
- Stress from job/fed up/stress leave
- Boredom/fed up/concerns with end of life goals & future

Age:
- 40
- 45
- 50
- 55
- 60
- 65
Agnes separated acrimoniously from her husband at the age of 40, at a time when she had begun a college course:

I think the breakdown (of my marriage) happened when I started asserting myself. It didn’t fit in with his concept of what a marriage was, bringing up children and so on. (IV004: age 65)

Left with three children to raise as a single parent, including a troubled son, Agnes began work as a race relations officer in inner London. She describes her life at this time as a mix of excitement at the work she was doing, yet highly stressful and ‘a bit of a guilt trip’ as she tried to balance the demands of work and the needs of her children. For Agnes, this period marks the beginning of on-going sleep problems:

I suffered a lot of stress really through that job. In terms of coming out from under my marriage it was very good for me. But I think that was when I started being an insomniac really. I’m sure that is when it happened. My sleep was awful really and the whole business of my son (running away from home) was pretty bad really. Just sheer stress and worrying. I was either worrying about the kids, or I was worrying about money. I was worrying about the job and I found it really hard to sleep. (IV004: age 65)

After moving from London to take up a new job, Agnes found herself homeless for some time before moving into council accommodation. She continued to work in community relations until she was made redundant at the age of 59. Agnes has found the work-retirement transition difficult. She feels anger and loss at losing her job and a sense of futility about the future. Alongside this, her health is poor and she feels increasingly isolated. It is not surprising that Agnes’ sleep is poor:

The insomnia got really bad when I was 59-60 because I felt bereft really of all the things and then my kids had grown up and I was living on my own..... You have a really quite responsible, important job, and suddenly there is a vacuum .... When I was doing the events stuff (organising major community events) I was so busy and I was working all the weekends and suddenly I wasn’t working at the weekends, I was living here on my own. I found I couldn’t sleep at all and I was very miserable. On bad nights I get about three to four hours which is probably better than some people I suppose. I never get more than five to six hours sleep. Never.... I’ve got problems with my back (caused by heavy lifting in her job)..... I think I get very bored. I think I get fed up. I think I am coming to the end of my life and I’m not sure what I’ve got to do. (IV004: age 65)
Thus rather than representing a release from the constraints of paid work, Agnes’ transition to retirement has been accompanied by deteriorating patterns of sleep as she copes with the realities of ill-health, the loneliness of living alone, and premature loss of work and status. Agnes’ sleep trajectory shows clearly the interaction of relational and institutional factors in creating patterns of sleep disruption across the life course. For her, sleep problems have accumulated across the life course to produce an almost untenable situation of compromised sleep patterns in her sixties. In Agnes’ case, her sleep is a reflection of the adverse circumstances of her life; inextricably linked to the realities of her everyday life over time. In this sense, sleep patterns in later life may, like chronic disease with ageing, be the outcome of ‘cumulative differential lifetime exposure to damaging physical and social environments’ (Kuh and Ben-Shlomo, 1997: 3).

10.4 Julia

Julia, a 63 year old widow, retired, with two adult children reveals how poor sleep patterns have accumulated over a period of twenty years in response to the circumstances of her life. During this time she has brought up two children, worked full-time in a responsible position, suffered the deaths of her parents and brother, been through a late menopause at 59, witnessed her children leaving home and her husband’s retirement. In the last three years, her own transition to retirement has been marked by caring responsibilities for her husband and her subsequent widowhood. The following compilation of excerpts from Julia’s sleep-life grid highlight the gradual deterioration of her sleep:

I used to sleep very well in my 40s, 11pm-7am, something like that. I needed an alarm clock.... We would worry about the children though and go and fetch them. You stay up waiting for them to come in.... Somewhere between 55 and 60 I stopped being able to sleep as well as I had. I started waking up a lot earlier, about 6am, and couldn’t get back to sleep ..... (When my husband was diagnosed with cancer) that was terrible. That was probably when the rot set in actually. I just didn’t sleep well or for very long. Obviously if someone beside you is not very well, you are very keen to see what is going on, even half asleep really. (After he died) I just carried on in the same waking up sort of pattern ... I’m obviously sleeping better than that now. I’m still not sleeping well, but I don’t let it bother me. I sleep from sort of midnight to
4am. Most people my age don’t sleep particularly well, do they? .... I know I could do with medication, if it (sleep disruption) really annoyed me, as it did when it first started happening, I would, but ..... I sleep better when the children visit. They were here at the weekend and I slept till 7.30am. I don’t know whether subconsciously one does sleep better if there is someone else in the house .... (IV008: age 63)

In Julia’s case, poor sleep is not inevitable in mid-life despite the socio-temporal constraints of family commitments and a full-time job, and the impact of family bereavement. However, despite enjoying good sleep during this period, the propensity for Julia’s sleep to be adversely affected by life circumstances is clearly illustrated by the deterioration in her sleep in later life. In the past few years, Julia’s equilibrium has been severely compromised by the interplay of the menopause, the work-retirement transition, increased caring responsibilities for her husband and bereavement. Her sleep has, not surprisingly, been correspondingly affected. As women adjust to retirement, widowhood and living alone, sleep disruption is to be expected. However, it may not be, as Julia suggests, an inevitable outcome of ageing, but rather, a reflection of the interaction of socio-temporal constraints at different stages of women’s lives.

Yet while Julia’s sleep at present is poor, sleep problems in later life are not inevitable.

10.5 Vanessa

In the final sleep trajectory, Vanessa, a divorced woman in her early seventies with three children, describes the impact of major life events and transitions on her sleep patterns in the past 30 years. In her 40s, Vanessa suffered severe health problems which forced her to give up her part-time work as a nurse. These problems culminated in major heart surgery and an extensive period of recuperation. She describes the impact of her illness on her sleep and on her relationship with her children:

I think my sleep was a bit on and off in my early 40s. I wasn’t sleeping very well, it was quite difficult for the children (my being ill and tired). (After the
operation) I was a couple of years getting better. My sleep was not good. I slipped into a period of clinical depression. I couldn’t get to sleep. I took medication to help me sleep. I remember when I got to age 50 or thereabouts, my sleep was good. I don’t remember any problems, so I must have been sleeping well. (IV009: age 71)

Yet, despite recovering from the effects of her operation and subsequent depression, Vanessa’s life and health were to be severely compromised during her fifties. Hospitalised three times with heart problems, Vanessa describes the major impact of her separation and subsequent divorce on her sleep:

My husband left me at 56. A big impact. I went back to paid part-time employment and moved house two years later. My children had all left home by this (time). My sleep went to pot. I remember that, but it’s not surprising. I found sleep very difficult, I woke up a lot in the night. My sleep did improve gradually, within a couple of years it had improved. (IV009: age 71)

Vanessa continued to work on a part-time basis, until a serious accident at the age of 63 forced her to retire. Since then she has established a full retirement lifestyle, her health has stabilised with the help of medication, and her sleep has improved to the extent that she describes the current period as ‘definitely the best sleep’ she has experienced in the past thirty years. In Vanessa’s case, despite adverse circumstances which have affected her sleep throughout her life, her sleep has improved in later life. Thus while the interaction of socio-temporal and health factors may impact on sleep at various stages of the life course, their effect is not necessarily cumulative. Poor sleep quality in later life may not be the inevitable outcome of compromised sleep at earlier stages of the life course.

10.6 Conclusion

A life course perspective provides a framework through which to explore the way in which changing roles and relationships over time may impact on the structuring of sleep. As the above trajectories show, women’s sleep is affected by the interplay between institutional and relational factors, and by the impact of life events and transitions which create the potential for change in sleep patterns as women move
through the life course. As a result, each woman’s sleep patterns will be a unique outcome of their life trajectory and their circumstances at different stages of the life course.

Although in later life the pressures of time associated with paid work and caring for children may subside, women’s sleep may continue to be characterised by disruption as they adjust to new socio-temporal patterns associated with the work-retirement transition, with divorce, and with caring and bereavement. For some women, there may be little difference in their sleep patterns pre- and post-retirement. For others, however, their expectations of a continuation of earlier sleep patterns in later life may be at odds with a reality in which the interaction of physiological ageing, life events, health factors and changing roles and relationships impact on sleep, creating the potential for disruption (Figure 10.2). Later life may thus involve a period of adaptation as women restructure their expectations of sleep in response to changed life circumstances.

Figure 10.2: The gap between expectation and reality in women's sleep in later life

<table>
<thead>
<tr>
<th>EXPECTATION</th>
<th>REALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuation of existing sleep patterns (good or bad)</td>
<td>Changes in sleep (either improvement or deterioration)</td>
</tr>
<tr>
<td>Improvement in sleep (children leave home, decreased work stress, increased time flexibility)</td>
<td>Deterioration in sleep (eg. loss of routine, status and identity; loneliness; increased caring responsibilities; loss of partner; health problems)</td>
</tr>
<tr>
<td>Deterioration of sleep with ageing (physiological)</td>
<td>Sleep may improve: physiological factors not the sole arbitrator of sleep quality in later life</td>
</tr>
</tbody>
</table>
It is this adjustment to new sleep realities which I contend is a key factor in understanding sleep disruption. For women, it is not necessarily a question of sleep deteriorating with ageing, but a question of adaptation to change. Whether women experience sleep problems in later life may be more a reflection of their ability to modify their sleep expectations according to new circumstances than simply the outcome of physiological change or the accumulation of sleep problems across the life course. For women like Agnes, however, her low income and difficult socio-economic situation may make this modification difficult and act as a further deterrent to better sleep outcomes.

While women may accept a degree of sleep disruption as a ‘normal’ part of their lives, they do not do this willingly. Rather than being victims of circumstance, they are actively engaged in finding solutions to sleep problems within the constraints of their everyday lives. Part V examines the strategies women use to manage their sleep, including everyday routines, activities and lifestyle behaviours; over-the-counter products and complementary therapies; and medical intervention.
PART V
MANAGING SLEEP DISRUPTION
In the 24-hour society in which we live, sleep has never been more important, or more elusive. For women in mid-life, the ideal of a good night’s sleep may be compromised by the pressures and constraints inherent in the multiplicity of roles they play in their daily lives, as partners, mothers, daughters, and full- or part-time employees. In later life, life course transitions such as retirement, increased caring responsibilities and bereavement may interact with declining health to challenge women’s ability to get a good night’s sleep.

As shown in the 2003 Women’s Sleep in the UK Survey data (see Chapter Six), getting to sleep and/or staying asleep are issues for many women in this study. While only one in five women aged 40 and over experience problems getting to sleep at least three times a week, this figure rises to over half of women aged 70 and over. Problems staying asleep (sleep maintenance) affect women consistently across all age groups, with 73% of respondents waking up several times during the night at least one or two nights a week, and half the respondents experiencing disrupted sleep on three or more nights a week. The implications of these problems for women’s ability to perform effectively during the day are reflected in the percentage of respondents who reported feeling sleepy during the day (64%) and/or woke up feeling unrefreshed (57%) at least once or twice a week.

Part IV examined how institutional, relational and life course factors contribute to the incidence of sleep disruption. As an introduction to Part V, this chapter proposes a model through which to understand how women respond to this disruption. It:
• locates sleep management within the context of research on illness behaviour;

• outlines a hierarchical three-tiered model of women’s sleep management which incorporates everyday routines, activities and lifestyle behaviours; over-the-counter products and complementary therapies; and medical intervention; and

• considers the constraints which may influence strategy choice and uptake.

11.1 Sleep management and illness behaviour

Although poor sleep cannot be considered an illness, women’s response to sleep problems appears to mirror the conclusions of earlier research in medical sociology on illness behaviour. These studies suggest that individual response to illness lies along a continuum ranging from accommodation to medicalisation. Zola (1973: 679), for example, hypothesised that ‘there is an accommodation both physical, personal, and social to symptoms and it is when this accommodation breaks down that the person seeks, or is forced to seek medical aid’. Mechanic (1978: 286), in discussing variables affecting response to illness, found that people evaluate symptoms according to their life situation. He states that ‘people who work long hours expect to be tired and are therefore less likely to see tiredness as indicative of an illness’. Popay (1992: 111) supports this finding in her study of women’s experiences of ill health. She states that women may accept poor sleep and daytime fatigue as a ‘normal’ feature of everyday life and ‘part of the price to be paid for combining paid work with domestic labour’. Similarly, in later life, women may see poor sleep as an expected consequence of the ageing process and life transitions such as retirement and bereavement, and thus ‘normal’.

Yet, while poor sleep might be considered ‘a fact of life’ for many women, it is not considered desirable. In a society in which women are expected to fulfil multiple roles, sleep disruption is an inconvenience which threatens women’s ability to
function effectively in their public and private roles. In this context, Phelan et al’s (2002: 287) assertion that ‘people experiencing problems with sleeping might consult their doctor, try self-treatment with non-prescription medicines or other remedies, or take no action’ (my emphasis) fails to encapsulate a complete picture of how women manage their sleep. As the above quotation from Dorothy Parker shows, albeit with some exaggeration, taking ‘no action’ is rarely a viable option. On the contrary. Rather than ‘doing nothing’ and ‘putting up’ with sleep disruption, women are highly motivated to take personal responsibility for finding solutions within the home, and within the constraints of their everyday lives, to try to overcome their sleep problems. The quest for effective sleep management strategies which may ensure a good night’s sleep, improve sleep quality, and facilitate daytime functioning is a priority for most women.

11.2 A model of women’s sleep management

In accordance with Fayol’s (1949, cited in Grey 1992: 563) conceptualisation of management as a series of activities, sleep management for women involves choosing between a range of strategies which they hope will ensure good sleep and, by association, a better quality of life. Sleep management is thus an active process, accommodated within the social fabric of women’s lives and subject to the socio-cultural constraints of a gendered society. As Figure 11.1 shows, women’s approaches to sleep management can perhaps best be contextualised in terms of a hierarchical three-tiered model comprising at its base everyday routines, activities and lifestyle behaviours; a second tier of over-the-counter products and complementary therapies; and a third tier of medical intervention when other measures fail to restore sleep. Each of these tiers is subject to constraints imposed by the socio-cultural realities of women’s lives.
11.2.1: Everyday routines, activities and lifestyle behaviours

As Figure 11.1 suggests, everyday routines, activities and lifestyle behaviours lie at the core of women’s sleep management. Through these personalised practices, women accommodate sleep management alongside the wider spectrum of tasks and routines which comprise their everyday life. These strategies include:

- pre-bed routines which have become synonymous with the wake-sleep transition, such as reading, having a bath, and drinking cocoa. While the original motivation for these routines and their impact on sleep may have been lost, women continue to engage in these activities which enable them, in theory, to wind down from their daytime roles and responsibilities and prepare for sleep. Whether these routines actually improve sleep, however, is unclear. What is important is their perceived association with sleep.

- activities which restore disrupted sleep during the night, including reading; listening to the radio or watching TV in bed; getting up and doing something; and relocating to another room. Central to the use of these
strategies is a sense of intentionality for alleviating sleep problems through direct action; and correspondingly an expectation or hope that the strategy will ensure a good night’s sleep.

- strategies which compensate for poor sleep, including taking naps and sleeping-in. These activities provide an opportunity for women to make up for sleep lost through disruption.

- healthy lifestyle behaviours which are incorporated into daily routines, such as attention to diet, exercise, stress reduction, and moderation of alcohol and caffeine intake. While behaviours such as these may have as their primary aim improved health and well-being, they may, as a consequence, also have a beneficial effect on sleep.

Yet while these everyday routines, activities, and lifestyle behaviours may form the mainstay of women’s sleep management practices, they are not always successful in rebalancing women’s sleep patterns.

11.2.2: Over-the-counter products and complementary therapies

Faced with the prospect of sleep disruption having adverse effects on their ability to carry out roles and responsibilities effectively, women may turn to over-the-counter products and complementary therapies as a supplement to everyday strategies. These may include over-the-counter remedies such as Nytol, Sleepeaze, painkillers, and antihistamine products; as well as a wide range of complementary therapies including massage, yoga, and acupuncture, which may not only reduce stress, but also create a sense of calm which induces better sleep. In choosing second-tier interventions such as these, women retain a sense of self-responsibility for their sleep which sees them actively involved in finding solutions to sleep problems without recourse to the medical profession.
11.2.3: Medical intervention

Medical intervention represent a third-tier response to sleep disruption. Yet, rather than representing a transfer of responsibility for sleep to the medical profession, medical intervention is the outcome of women acknowledging the need for professional help to try to restore a state of equilibrium and effective functioning when existing strategies prove inadequate. Morgan et al. (1985: 76-77) found that ‘people who seek medical care represent the tip of the iceberg of illness’ with ‘medical care being viewed as one possible response among a number of alternative courses of action’. In the case of sleep management, the decision to seek medical care may represent a marked response, taken in extreme cases in times of crisis or life transition when sleep problems fall outside the ‘acceptable normality’ of sleep which women construct around the contingencies of their social context.

While the prescription of benzodiazepine hypnotics on a short-term basis remains the primary response to severe sleep problems, for a minority of women, medical intervention involves referral to sleep clinics for diagnosis and treatment of sleep disorders such as sleep apnoea and narcolepsy. Taking prescription medication for the treatment of co-morbid conditions such as arthritis, depression or menopausal symptoms may also lead indirectly to improved sleep outcomes, through reducing symptoms which cause poor sleep.

11.3 Constraints on women’s sleep management

As Figure 11.1 indicates, everyday routines, practices and lifestyle behaviours; over-the-counter products and complementary therapies; and medical intervention are not isolated responses to poor sleep but part of an overall system of sleep management which may involve using strategies from one or more of these approaches at any one time. Women may, for example, carry out routines before bed such as reading and drinking cocoa, as well as taking prescription or non-prescription medication. Moreover, strategies are not fixed entities which remain constant throughout the life course. As a woman’s circumstances and sleep patterns change, so too will her
approach to sleep management. A woman who sets the alarm for 6am throughout her working life, for example, may adopt a more flexible routine on retirement; a couple who have slept together throughout their married life may sleep apart in later life once the children have left home.

Understanding women’s sleep management thus goes beyond a simple typology of strategies. While the range of sleep management strategies available to women is considerable, women’s response to sleep disruption is highly personalised, reflecting individual circumstances. Like sleep itself, sleep management strategies are socially embedded phenomena, responsive to the constraints inherent in the social practices, gendered roles, cultural beliefs, and experiences which influence and define women’s lives. Crow (1989) suggests that, in selecting a course of action, people weigh up the advantages and disadvantages of alternative strategies in terms of their particular circumstances. Drawing on the work of Yeandle (1987) in relation to strategies associated with women’s employment, Crow (1989: 10) states that women have ‘various strategies available to them, but their choice between them, and their consequent power to determine the shape of their own lives, are restricted’.

For women in this study, the choice of appropriate sleep management strategies involves finding a balance between individual needs and the socio-cultural constraints which frame strategy choice, including ageing, gendered roles and relationships, time pressures, financial constraints, and socio-cultural beliefs and attitudes. Choice of strategy may be mediated by individual perceptions of the severity of sleep disruption, family and work constraints, attitudes to commercial products and practices, and perceptions of the role of the medical profession and prescription drugs in the treatment of poor sleep. In mirroring their social context and its constraints, the strategies women choose in relation to their sleep may therefore represent an informed compromise between structure and agency. Within the limitations imposed by their social circumstances, women choose the strategies which they believe are most likely to improve their sleep outcomes. These may not, however, represent the most appropriate, or most effective, choice.
11.4 Conclusion

This chapter has outlined a model through which to examine women’s sleep management. Reflecting responses to illness behaviour, this model suggests that women’s choice of strategies to help overcome sleep disruption ranges along a continuum from a core of personalised self-help options encompassed within everyday routines, activities and lifestyle behaviours, supplemented as necessary by the use of commercial products and complementary therapies, with medical intervention as a final option when lay strategies fail and sleep disruption threatens to undermine women’s ability to carry out their day-to-day roles and responsibilities effectively.

Women’s choice of strategy reflects the embeddedness of sleep within the social context of their lives. Evaluating the effectiveness of strategies for improving sleep is therefore complex and involves more than the objective quantification of whether an activity, product, or treatment works or not. Any assessment of effectiveness must be contextualised within the socio-cultural framework of individual lives. Whether or not a particular strategy is suitable and whether or not it is perceived as effective is thus dependent upon the circumstances and constraints which frame each woman’s sleeping environment. While women may perceive a relationship between a particular strategy and good sleep, the constraints imposed by their social circumstances may often intrude on their ability to effectively implement these actions, thus compromising their sleep. Reading in bed during the night, for example, may be effective for a woman living alone, yet may not be possible for a partnered woman because of the effect of light on her partner’s sleep. Similarly, socio-cultural beliefs surrounding the use of sleeping pills may for some women inhibit the uptake of an otherwise proven treatment for short-term sleep disruption.

Drawing on findings from the study and relevant literature, Chapters Twelve to Fourteen each examine the three main approaches to sleep disruption: everyday routines, practices and lifestyle behaviours; over-the-counter products and complementary therapies; and medical intervention. For each approach, the writer contextualises strategies within a framework of women’s everyday lives, examining
the influence of socio-cultural constraints on strategy choice, and evaluating the effectiveness of strategies in relation to these constraints.
Chapter Twelve

EVERYDAY ROUTINES, ACTIVITIES AND LIFESTYLE BEHAVIOURS

“Put duties aside at least an hour before bed and perform soothing, quiet activities that will help you relax.”

(Dianne Hales)
http://www.quotationspage.com

As shown in Figure 11.1, everyday routines, activities, and lifestyle behaviours form a core of personalised activities which play a key role in women’s sleep management. An integral part of women’s everyday (night) lives, these actions serve a number of purposes, including:

- initiating sleep at night;
- restoring disturbed sleep during the night;
- compensating for poor sleep; and
- improving sleep quality through activities that enhance health and well-being.

This chapter examines the routines, activities and behaviours which women use in each of the above circumstances to improve their sleep outcomes. As well as outlining the types of strategies used, the chapter evaluates the effectiveness of these practices against the socio-cultural realities of women’s everyday lives.

12.1 Initiating sleep at night: pre-sleep routines

“There is a time for many words, and there is also a time for sleep.”

(Homer ~700BC, The Odyssey)
http://www.quotationspage.com

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Pre-sleep routines are practices which accompany women’s preparation for sleep on a nightly basis. In terms of sleep, routines can be seen as habituated patterns of behaviour which have developed during the life course, either as learned behaviour modelled on family practices or through shared experience over the course of relationships with significant others. These routines are strongly associated with the process of going to sleep and may be deeply embedded within the individual’s psyche as ‘must do’ activities:

I need to have the window open .... oh yes, ever since I was a child I have needed the window open to sleep. (FG1.1: 40-47)

Routines facilitate entry to the sleep role by initiating a switching off process which enables women, in theory, to withdraw from the physical and emotional activities associated with their daytime roles. Perceived as necessary precursors to sleep and an essential bridge between the wake-sleep states, these routines may include:

- reading
- watching TV/listening to music/radio
- relaxation activities
- having a bath or shower
- cleaning teeth
- putting on nightwear
- drinking cocoa or other drinks
- going to the toilet
- setting the alarm
- praying

The wake-sleep transition is thus accomplished through performing a sequence of these routines which women believe will ensure a smooth progression to sleep. To use Goffman’s (1959) concept of dramaturgy, taking off the clothes and makeup associated with the daytime role (both in a literal and figurative sense) and putting on
an appropriate costume for the sleeping role symbolises the transition from wakefulness to sleep; the progression from front to back stage roles:

I take my contact lenses out, brush my teeth, and have a bath. (FG2.2: 48-52)

I start thinking about it (going to bed) at 10pm and I go upstairs, make a hot water bottle, wash, clean my teeth, go to bed, read until 10.45, put the radio on, listen to Book at Bedtime, turn the radio off, and hopefully go to sleep. (FG5.1: 70 and over)

The pre-sleep routines which women perform reflect to some extent personal preference and lifetime practice. According to the 2003 Women’s Sleep in the UK Survey (see Chapter Six), more than half the respondents read (76%), watched TV or listened to music or the radio (71%), had a hot drink (67%) or a bath/shower (57%) before going to bed, with the majority of these women finding the activities effective in helping them sleep. Yet, as the following excerpts show, routines which are favoured by some women have little appeal for others and may hinder rather than help sleep onset:

A: I couldn’t go to sleep without having a read.

B: I’d never think of reading in bed because I think that’s what wakes your brain up. (FG4.3: 60-69)

A: The television’s helped me (to sleep) all the way through (since my husband died four years ago).

B: Well, it was the reverse with me. The TV doesn’t help at all. I find telly terribly boring now. I never put it on normally, not in the bedroom.

C: I couldn’t do without mine.

D: I put mine on a timer. I know that it’s going to go off after a certain time..... It does work a treat. (FG5.3: 70 and over)

Alongside personal preference, the socio-cultural realities of women’s lives may also influence the uptake and effectiveness of routines. Gendered roles and relationships,
as well as time constraints associated with the pressures of family-life and work may determine the nature and efficacy of pre-sleep routines.

12.1.1: Constraints on pre-sleep routines

Women’s role as homemaker, for example, may be reflected in the routines which characterise pre-sleep behaviour. These routines, closely related to women’s desire to create a sense of order in the home, may mark a point of demarcation from daytime roles, allowing them to set aside concerns about household tasks during the sleep period. Central to these activities is a sense of ‘putting away the day’ as an essential pathway into sleep:

I couldn’t go to bed if I had not sort of hung my clothes up or put them in the laundry basket. If it was untidy I wouldn’t sleep properly. (FG2.1: 48-52)

I like to do things for the morning (before going to bed), as much as possible .... so I try and get packed lunches. (FG1.1: 40-47)

For many women in this study, commitment to their partner and/or children may limit the range of routines available to them, thus compromising their ability to switch off from their daytime roles and prepare for sleep:

I can’t read myself to sleep because John has already turned the light out. (FG1.1: 40-47)

My 14 year old son doesn’t want to go to bed. I find it hard to settle myself if he is still thumping about, going up and down stairs. (FG1.1: 40-47)

Routines may also be influenced by the structuring of time around work both in the public and domestic spheres. For some women, time constraints may limit the time needed to wind down and relax in preparation for sleep:

I used to nearly always have a bath and I used to read. But I am stuck for time now. (FG1.2: 40-47)
I don’t feel as if I have enough time to wind down before sleep … if I have been doing something or other right up to the time I go to bed and then I go to bed it doesn’t seem enough, because you haven’t had a wind down. (FG1.2: 40-47)

Moreover, in a society dominated by schedules, working women may have the routine of setting an alarm clock imposed on their sleeping practices during the week. This routine places constraints on women’s sleep patterns, exerting pressure on women to sleep and wake at times which may be outside their innate sleep rhythms:

Ideally I would go to bed at about 10.30 and sleep through until I naturally woke up at 8.30, but in reality I end up going to sleep later ... and then the alarm goes off at 6.45 and I am dragged out of sleep by that…. I would happily go on sleeping. (FG1.1: 40-47)

Taking time out to ensure adequate preparation for sleep may be perceived in some cases as a ‘letting go’ of responsibility and thus engaged in reluctantly, if at all. As the following excerpt illustrates, women need to give themselves permission to focus on pre-sleep routines which promote the sense of calm and well-being necessary for good sleep:

Meditation is good as well. It’s about giving yourself permission… it’s OK to take that ten minutes of meditation …. it’s about not feeling guilty about having that time. And I think as females we actually feel guilty if we’re not on the go and multi-tasking all the time. (FG2.3: 48-52)

Pre-sleep routines thus emerge from the interplay of individual life experience, personal preferences, and the socio-cultural realities of women’s lives. Yet, while women may articulate a causal relationship between these routines and sleep, this link may be more perceived than real. Over time, it is the habit which dictates behaviour in relation to sleep onset rather than the actual sleep outcome. The need to carry out pre-sleep routines is thus intrinsic to women’s sleep-related behaviour regardless of its effectiveness in improving sleep outcomes. To this extent, while the importance of these routines in women’s sleep management cannot be underestimated, the actual effectiveness of these activities in improving women’s sleep remains unclear and difficult to measure. Whether women would still get to
sleep without reading, or without a cup of cocoa, or the window open is hard to say. What is important is that they strongly believe that routines such as these are indispensable to good sleep.

While pre-sleep routines may help women get to sleep within a reasonable timeframe, they do not, however, ensure that they stay asleep. Sleep disruption during the night, with its potential impact on daily activities and performance, is a major concern for many women in this study. Strategies which help overcome this disruption and restore sleep are thus an important part of women's sleep management practices.

12.2 Strategies for restoring disturbed sleep during the night

"If you can't sleep, then get up and do something instead of lying there worrying."

(Dale Carnegie)
http://www.quotationspage.com

According to the 2003 Women's Sleep in the UK Survey, waking during the night and being unable to get back to sleep at least once a week affects almost three quarters of women (see Chapter Six). For some women, waking during the night and lying in bed can be a positive experience which requires no active response:

I was awake for, it seemed like half an hour ..... I was just thinking about lots of things really, it was just a very pleasant time of thinking. I wasn't worried about falling asleep again or not, because I knew I would. (SD001: age 46)

When I was teaching those 'waking hours' were very productive thinking/planning times. Now being awake is a waste of sleeping time!! (S: age 62)

Yet, while these women may just accept the status quo and hope that in time sleep will be restored, for the majority of women in this study waking during the night is not only frustrating but perceived to be detrimental to their performance the
following day. Rather than tolerating sleeplessness, they choose strategies which offer them not only the promise of overcoming poor sleep, but a sense of active engagement with the problem. According to the 2003 Women's Sleep in the UK Survey (see Chapter Six), women practise a range of in-bed strategies to try to restore their sleep, including reading (36%), practising relaxation techniques (32%), and watching TV/listening to music or the radio (22%). Over 80% of women who use each of these strategies find them effective in helping to restore sleep:

My strategy if I wake in the night is to press a button which switches on the radio (Radio 4/World Service). My thinking is that either I will hear something interesting, so not wasting time or fretting about my inability to sleep; or I will fall asleep fairly quickly. It's usually the latter. The radio, which is set to a very low volume, switches itself off after a while. (SD008: age 62)

I listen to relaxation tapes sometimes .... the one I have the woman has certainly a very plummy but a very restful voice and I think it is a bit like being read to sleep. (FG1.2: 40-47)

Other women find prayer, deep breathing, visualisation, and meditation activities helpful:

I visualise a table and then put a black cloth on the table and then put a vase on the table and then put some flowers in the vase .... (FG5.3: 70 and over)

I'm a Christian and I pray and if I'm awake for two hours in the night then it is very useful. (FG3.3: 53-59)

Lying in bed and adopting strategies such as these is not a preferred option for all women, however:

I can't stand the thought of lying in bed. I haven't got time to waste. There's not enough hours in the day. (FG1.3: 40-47)

One in three survey respondents reported getting up and doing something when sleep is disrupted during the night. Women who wake during the night and are unable to get back to sleep after what they consider a reasonable time may get out of bed and
relocate in the house, either temporarily or for the remainder of the night. As well as distancing women from the source of disturbance, if any, this strategy may also help fill the time void created by broken sleep with useful activities. For some women, being awake at night, although undesirable, offers an opportunity to buy extra time to accomplish tasks related to their daytime roles. In this sense there is a strong projection of daytime roles and responsibilities into the sleep period. Moreover, the strategies women choose may be related to how they perceive the sleep disruption and its potential impact on their performance the following day:

I’ll read or go downstairs and make a cup of tea, you know I catch up on last week’s papers or whatever. I try and do something useful because I know that generally speaking I’ve got a full day at work to come and you know if you go in feeling tense it’s not going to help. (FG2.1: 48-52)

For partnered women, relocation from the double bed on an intermittent basis may represent a pragmatic solution to snoring and general restlessness when they interfere with sleep. According to the 2003 Women’s Sleep in the UK Survey, one in four women reported moving to another room when their partner was disturbing their sleep, while one third of respondents said they moved to another room when they thought they were disturbing their partner’s sleep:

I think it is pragmatism. One snores occasionally and if it is a bad night I just think ‘oh stuff this’ and put off somewhere. It doesn’t bother me. I would much rather do that (move to another room) than listen to him. (FG1.2: 40-47)

My husband sometimes moves beds because of my snoring. I’m seeing a consultant at the hospital at the moment. (S: age 54)

For a significant number of couples in this study, sleeping apart has become an habituated behaviour rather than an occasional response to disturbance (see Chapter Nine). As the following excerpt shows, what may begin as an intermittent response to sleep disruption, can over time become a permanent practice:

My husband read into the early hours, fidgeted, snored, woke me up to talk, have sex. When we left the RAF married quarters and our children left home
I would go into another room if I felt poorly and gradually stayed there longer and longer. It is now permanent. (S: age 65)

The habit of sleeping apart can dramatically improve sleep outcomes for some women and their partners:

After my husband’s retirement three years ago he moved more or less permanently to the spare room. It’s an amicable arrangement which has resulted in excellent quality of sleep for both of us. (S: age 50)

It’s me that’s the fidgety one and we’ve now got single beds and I tell you I wouldn’t want to go back to a double one. (FG5.1: 70 and over)

For some women, however, the ability to get up and do something or to relocate in response to poor sleep during the night may be constrained by their commitment to other members of the household and by prevailing socio-cultural attitudes.

12.2.1: Constraints on strategies during the night

While lone women may feel free to turn on the light to read, listen to the radio, or clatter around the house at night making cups of tea, women with partners and/or children may feel restricted in adopting these strategies because of concern not to disturb their family’s sleep. Thus a strategy which women use effectively before going to sleep, such as reading, may be inappropriate during the night because it is considered to impinge on the sleeping rights of a partner. According to the 2003 Women’s Sleep in the UK Survey, 76% of respondents read before going to bed with the vast majority (85%) finding this an effective strategy in helping them sleep (see Chapter Six). Yet, despite the effectiveness of this strategy, only 36% of women read when their sleep is disrupted during the night. The risk of disturbing their partner by turning on the light might explain this discrepancy:

My partner has real sleep problems so I feel bad if I wake him up because I know how hard he finds it to sleep. (FG1.2: 40-47)
The restrictions which partnerships impose on women’s sleep management during the night may only become obvious after divorce or bereavement, when women are able to reassert a degree of control over their sleeping environment and strategy choice:

Since I have been on my own I do occasionally get up and make a drink. (FG4.3: 60-69)

Work demands and considerations may also lead women to reject particular strategies if they have the potential to interfere with daytime functioning:

I don’t get up and make cups of tea and mess about (if I can’t sleep), because I would just be wide awake and I have to work. (FG3.2: 53-59)

While sleeping apart can improve sleep and minimise disturbance for some women, for others it does not necessarily improve their sleep. As the following excerpts show, women can feel a sense of dislocation when either they or their partner moves to another room. In this sense, sleeping apart can represent a compromise rather than an ideal solution to sleep disruption:

I don’t really like it (sleeping apart). It’s cold in that bed on my own. I want to be somewhere warm. I’d rather sleep with him but I need my sleep. (FG3.3: 53-59)

I still didn’t sleep even when he moved out (to another room). I just didn’t have to listen to the snoring. (FG5.3: 70 and over)

Moreover, in accordance with the duty of care which underlines a woman’s role in the household, wives may experience a sense of guilt if their husbands ‘desert’ them to move to another room. In the following excerpt, it is the husband who moves to another room to escape his wife’s snoring. Yet rather than being pleased with her husband’s initiative and consideration for her sleep, his wife is left feeling guilty at disturbing his sleep:
My husband leaves me if I am snoring... I wake up in the night and look and he is just not there. And he has gone and that is really heartbreaking because I can't stop my snoring and he never complains, he just goes, and it is horrid. (FG3.2: 53-59)

As discussed in Chapter Nine, the decision to sleep apart on a temporary or permanent basis may be further constrained by cultural norms and expectations associated with couple behaviour. In a society which favours the dominant sociocultural model of partners sleeping together as a symbol of their relationship and commitment, sleeping apart, while desirable, may not be feasible. As a result, by remaining in the double bed out of a sense of spousal commitment or social probity, women may tolerate or condone their partner’s behaviour while subverting their own sleep needs:

I wouldn’t complain about his snoring because he can’t help it. He’d probably think it was a bit disloyal (to relocate). I think it is something, when you’re married, it’s just something you learn to live with. (FG3.3: 53-59)

The sense of stigma associated with behaviour perceived to be ‘outside the norm’, may be reflected in the way women speak of their experiences of sleeping apart. There is a need to reassure the researcher that the couple are ‘together’ despite sleeping apart:

We had separate rooms from very early on and people made assumptions about us not having a sexual relationship, which we did. (FG3.1: 53-59)

My husband and I sleep in separate beds .... We’re quite amicable. We both love each other and all that. (FG5.3: 70 and over)

While some women would not contemplate sleeping in a separate bed from their partner at any stage of their relationship, for others, as the marriage matures, there may not be the same pressures to remain in the double bed and women may feel freer to move to a separate room in certain circumstances. This freedom may be associated with society’s expectation of the declining importance of sex in marriage over time, and thus a removal of existing stigma:
When we had coughs and colds in the early days of my marriage we would never sleep somewhere else, whereas now if one of us has got a really bad cold – it is not very often - but when I was younger it (sleeping apart) was something I would not have ever considered. (FG2.2: 48-52)

We’ve been married a long time, thirty odd years, so it doesn’t seem to bother him (that we sleep apart). (FG2.3: 48-52)

The decision to move to another room even as a temporary measure may also be related to shifts in family roles and responsibilities. For some couples, the option of a separate bedroom only becomes viable in later life once the children have left home:

I can only do that (move to another room to escape her snoring partner) if the children aren’t at home. There isn’t another bed to go to. (FG1.3: 40-47)

The issue of relocation may be seen in two ways. From one perspective, a woman’s actions in moving to a room which is not her own in search of sleep may contribute to the construction of a gendered world of sleep in which her right to an equitable distribution of the sleep resource is subsumed by her perceived responsibilities to others. It may be that it is women’s ‘resigned acceptance of men’s intransigence’ (Pilcher, 2000: 70), as shown here in their sleep behaviour, which constrains women’s access to sleep and perpetuates gender inequality in the sleeping environment:

I always felt it was (husband’s name) who should have got up and gone (to another room when he snored). But it was easier for me just to get out of the room. (FG4.3: 60-69)

From another perspective, however, in relocating, a woman may in effect be manipulating a difficult situation to gain better sleep while avoiding tensions with her partner and preserving the harmony of the family. Her actions thus maintain the guise of commitment to care while allowing her to get some sleep. Rather than losing control of her sleeping environment she may be exercising some autonomy within the constraints imposed by her roles and responsibilities. In terms of power relationships, however, her rights to sleep in her own sleeping space are inevitably compromised by moving to another room.
12.3 Compensating for poor sleep

'Think what a better world it would be if we all, the whole world, had cookies and milk about three o'clock every afternoon and then lay down on our blankets for a nap.'

(Barbara Jordan, US attorney, b. 1936)

www.thinkexist.com

As shown above, strategies for restoring disrupted sleep during the night can be effective. Yet their success depends on women achieving a balance between their sleep needs and the constraints imposed both by their roles and responsibilities in the home and by prevailing socio-cultural attitudes. In this environment, poor sleep may remain a reality in women's lives despite their efforts to counteract it. Strategies, such as napping and sleeping-in, which compensate for lost sleep may offer an alternative when the above measures fail to ensure adequate sleep.

12.3.1: Napping

While napping can be considered an involuntary behaviour initiated by boredom or inclement weather, taking naps and sleeping-in are strategies used by many women in the study to compensate for shortfalls in sleep. For a significant number of women in this study, napping provides a period of respite to restore energy and offset the effects of sleep disruption. According to the 2003 Women's Sleep in the UK Survey, one in five women took naps three or more times a week (see Chapter Six). Just over half of the women who took naps did so for between 20 minutes and an hour, while 44% preferred a shorter nap of less than 20 minutes:

Sometimes if I have had a really bad night, when I have had my lunch at work I will just try to find somewhere quiet and shut my eyes just to recharge for the afternoon. Five minutes can make a lot of difference. (FG4.1: 60-69)

When I haven't had enough sleep and I've had a challenging day or something, when I come back from work I sometimes go to sleep. I only intend to sleep for 10 minutes and sometimes I wake up an hour and a half later. (FG3.1: 53-59)
As an interventionist strategy designed to compensate for poor sleep, napping appears to have a therapeutic effect for the majority of women, with 58% of women who take naps reporting that they felt better afterwards, compared to 12% who felt worse (see Chapter Six). As the following excerpts show, however, despite the potential benefits of an afternoon nap, women may avoid them because of adverse after-effects or fear of poor sleep at night:

I can’t nap. If I fall asleep, when I wake up I feel sick, I feel really, really sick, and so I stop myself having naps. My mother can just sit down, have five minutes of sleep, get up fresh as a daisy. (FG5.1: 70 and over)

I daren’t do it (nap). If I feel like I am going to go I do actually physically get up and move around. It makes it hard to get a proper sleep at night. (FG3.3: 53-59)

As shown in Chapter Eight opportunities to nap during the day may also be bound by work status. The increase in napping in post-retirement age women suggests that work and life schedules may play a key role in restricting napping behaviour. The institutionalisation of time around work may inhibit opportunities to nap for working women, thus excluding them from a strategy which may compensate for poor sleep at night:

When I was a student I used to (nap), and I would now if I could. (FG1.1: 40-47)

12.3.2: Sleeping-in

Sleeping-in on the weekend is a popular strategy for working women. According to the 2003 Women’s Sleep in the UK Survey, working age women spend a longer time asleep at weekends than during the working week when compared to women aged 60 and over (see Chapter Six). This suggests that they may use the weekend to make up for sleep lost as a result of work schedules during the week. Yet, even at weekends, the ability to sleep-in may remain elusive. The intrusion of the alarm clock during the week may set up a pattern of sleep which is difficult to break even when time is available to sleep-in:
I turn it (the alarm) off at the weekends and I still wake up, and then I resent
the fact that I can have an extra hour and I can't sleep. (FG3.1: 48-52)

The flexibility of sleep-time enjoyed by women in retirement (see Chapter Eight) is
shared by women in the study who work part-time, or are self-employed. In the
absence of fixed schedules, these women may have more control over the structuring
and duration of their sleep:

I work from home, so that may make a difference why I don’t spring out of
bed when my alarm goes because it is actually my own choice when I start
work. (FG2.2: 48-52)

Compensating for sleep loss by sleeping-in and napping can thus be an effective
strategy, especially for women whose daily lives are compromised by sleep
disruption. In addition, women are also becoming aware of the benefits to be gained
from adopting healthy lifestyle practices.

12.4 Improving sleep quality through activities that enhance health and well-
being

"Sleep is the golden chain that ties health and our bodies together."

(Thomas Dekker)
http://www.quotationspage.com

Healthy lifestyle behaviours also have a role to play in women’s sleep management.
While other strategies may have a direct association with sleep, these behaviours
often have as their main objective the improvement of health rather than sleep per se.
Improved sleep may be a secondary consideration or merely a welcome though
unexpected consequence of other activities which promote enhanced well-being.
Thus while women in this study may not embark on healthy lifestyle behaviours with
the explicit intention of improving their sleep, there is nevertheless an awareness of
the link between health behaviours and better quality sleep.
In adopting healthy lifestyle behaviours, women have the moral support of a prevailing healthist culture in which the interrelationship between sleep and good health is well established. According to the *Omnibus Sleep in America Poll* (NSF, 2000), American adults rank sleep as the third ‘most important component of good health’, alongside good nutrition and regular exercise. These findings support studies from the 1980s and 1990s in the UK which highlight the relationship between good sleep and well-being. Calnan (1987: 25) found that, regardless of socio-economic background, women regarded adequate sleep, rest and relaxation as valuable for the maintenance of health. Its value lay ‘mainly in terms of enabling them [women] to fulfil their family responsibilities or helping the family economy’. Blaxter (1990), in her analysis of data from the 1984/5 *Health and Lifestyle Survey*, refers to the strong association between health and sleeping habits, placing it alongside smoking, consumption of alcohol, exercise, and diet as central to a healthy lifestyle. In citing the individual’s health status as ‘the overwhelmingly dominant predictor of sleeping habits’, Blaxter (1990: 127) suggests a reciprocal relationship between health and sleep. Not only is good sleep important to health, but health determines the quality of our sleep. Thus lifestyle changes which promote health, such as diet and exercise, may also have a beneficial effect on sleep.

The *National Sleep Foundation* (NSF, 2001a) suggests adopting healthy lifestyle behaviours such as decreasing coffee consumption, avoiding alcohol and nicotine, exercising regularly, avoiding heavy meals before bedtime, relaxing in a hot bath, and establishing a regular bedtime and wake time schedule as a means of improving sleep. Women in this study suggest a link between improved sleep and doing regular exercise, paying attention to diet, and decreasing caffeine and alcohol intake:

I notice I sleep better when I have had more exercise during the day, ie. walking, gardening, yoga, and pilates. (S: age 67)

Previously when I drank alcohol eg. half a bottle of wine, I found my sleep was restless, interrupted and I felt tired during the day. Now, without alcohol I sleep well and feel more energetic most of the time. (S: age 44)
Healthy lifestyle practices also help women wind down from their daytime roles. By distancing themselves through these strategies from the physical and emotional activities and stresses associated with their daytime roles, women hope to restore equilibrium and to create a context conducive to good sleep:

I've taken up swimming again and that makes a lot of difference especially if I've had a bad day. I can go and trawl up and down in the pool and that washes things away. (FG2.1: 48-52)

Yet while women may perceive a relationship between healthy lifestyle practices and good sleep, not all adhere to behaviour which promotes good health.

12.4.1: Constraints on the adoption of healthy lifestyle behaviours

Lack of motivation can be a problem which prevents women adopting healthy lifestyle behaviours, even when they recognise the link between these behaviours and better sleep:

I appreciate that if I went to bed earlier and drank less alcohol then my sleep would improve. (S: age 59)

I think exercise helps reduce aches but it's a vicious circle. I can't be bothered going to the gym, consequently the achy hip or hips disturb one's sleep. (S: age 50)

Lack of time may also impinge on the uptake of healthy lifestyle behaviours, thus limiting the flow-on effect of well-being to improved sleep. Balancing the demands of work and family life may leave little spare time to attend the gym or even to go for a walk on a regular basis:

I would like to do more exercise but when I get home from work I am too tired. But I know that's what I should be doing. (FG3.1: 53-59)
In later life, lack of mobility and poor health can seriously impact on the extent to which women are able to undertake exercise; a factor which can impact on sleep quality:

Being disabled with arthritic legs means I do not get sufficient exercise which affects my ability to sleep through the night. (S: age 79)

In some cases, however, confidence in the relationship between health behaviour and sleep is diminished by personal experience in which anticipated improvements to sleep are not realised despite the adoption of healthy lifestyle behaviours:

I'm sure giving up smoking has made my sleep pattern different (ie. worse), as I can take one or two hours in bed reading or listening to the radio, longing to sleep. I often beg for a cigarette once a week when my daughter-in-law visits. (S: age 74)

I can go out for the day and run around the field and come home and I’m tired. Go to bed and I’m wide awake. (FG3.3: 53-59)

Thus in achieving better health and well-being through the practice of healthy lifestyle behaviours, women may also either consciously or subconsciously be improving their sleep.

12.5 Conclusion

Everyday routines, activities and lifestyle behaviours form the core of women’s sleep management. Developed over time, these practices are personalised according to women’s individual circumstances. They take place as an integral part of women’s everyday lives and reflect their socio-temporal realities.

Pre-bed routines such as reading, having a bath/shower, or having a hot drink help initiate sleep at night. As indispensable, ‘must do’ activities or habits they mark the transition from wake to sleep. However, these routines do not necessarily ensure a positive sleep outcome and their association with sleep may be more perceived than
real. Unlike pre-bed routines, strategies for overcoming disrupted sleep during the night, such as listening to the radio, reading, or relocating to another room, are chosen consciously with the expectation that the activity will help restore sleep. Napping and sleeping-in are strategies which reflect a belief that sleep loss can be rectified by compensatory action. In choosing healthy lifestyle behaviours such as diet and exercise, women are taking responsibility for their well-being, and as a consequence recognising the link between health and sleep. Improvements in health may contribute to better quality sleep.

Women accept these routines, activities and behaviours as a means of improving their sleep and optimising daytime performance. They choose strategies which are acceptable to them in relation to their personal circumstances and to their experience over the life course. They believe that these strategies will help them fall asleep, get back to sleep during the night, compensate for lost sleep, or improve the overall quality of their sleep. In this case, perception is reality. It is the belief that these routines, activities and behaviours work, rather than the actual sleep outcome, which is important.

What works for one woman may not work for another, however, because of different personal circumstances. Gender roles and responsibilities, time pressures, financial constraints and socio-cultural attitudes may act as barriers which limit the uptake and effectiveness of sleep management strategies. It may, for example, be difficult to wind-down at night because of family responsibilities and reading in bed at night may disturb a partner. Moving to another room may only be possible if rooms are available and couples agree to subvert the cultural stereotype of couples sharing a bed. Sleeping-in during the week may not be possible for working women or those with children, while there may be lack of time for exercise because of work and domestic responsibilities.

Thus despite implementing everyday routines, practices and behaviours, women’s sleep may still fall short of that perceived as necessary to optimise their daytime performance. In these circumstances, women may turn to a range of over-the-counter products and complementary therapies in an effort to enhance their sleep. Chapter
Thirteen analyses and evaluates the use of these products and therapies in relation to women’s sleep management.
"A cup of tea, a Bex and a good lie down."

(Prescription for well-being: advertisement for headache powders remembered from childhood)

The use of over-the-counter products (OTC) and complementary therapies forms an important adjunct to everyday routines, activities and lifestyle behaviours in managing sleep disruption. In recent years, the growth of the health care industry has ensured a wide range of products and services are available which promise to improve sleep.

This chapter examines the use of OTC products and complementary therapies in the management of women’s sleep. It:

• discusses the commercialisation of women’s sleep;

• examines women’s attitudes towards the use of OTC products;

• considers the use of complementary therapies in helping to overcome poor sleep; and

• examines the constraints inherent in using OTC products and complementary therapies in the management of women’s sleep.
13.1 The commercialisation of women’s sleep

Commercial enterprises, fuelled and financed by people’s desire to eradicate fatigue and sleepless nights, have grown rapidly in recent years into a thriving sleep industry. Again, women are being targeted, with research showing a strong association between female gender and the purchase of over-the-counter sleep aids (Phelan et al 2002). Supported by extensive marketing and generous advertising budgets, sleep medications, herbal teas, and CDs and books which promise the elusive dream of a good night’s sleep, have found their way onto the shelves of supermarkets and pharmacies as well as internet shopping sites. Despite the questionable benefits, safety, and side effects of some of these products there is apparently a ready market in today’s 24-hour society with its emphasis on ‘quick-fix’ solutions to problems. For women, the use of over-the-counter (OTC) sleep remedies may ensure the maintenance of a sense of self-responsibility for trying to improve their sleep while offering a viable alternative to medical intervention. Alongside the use of OTC products, complementary therapies such as massage, relaxation techniques, and aromatherapy have also emerged as possible solutions to sleep problems.

According to a community pharmacy-based survey, advertising was reported to be the main influence on the decision to purchase OTC sleep aids (Phelan et al., 2002). An examination of sleep advertisements in magazines and on the internet highlights the extent to which sleep products are being promoted in the media. An advertisement in Good Housekeeping (2001: 155), for example, encourages women to take Nytol before going to bed as ‘a bridge back to a normal sleeping pattern’, while an article in the same magazine (2001: 39) invites insomniacs to rest their ‘wearied head on the Norso Magnetic Pillow Insert and wallow in its relaxing magnetic field for a sound night’s sleep’ for £28. Meanwhile, the website of a leading pharmaceutical company (www.wellbeing.com) currently displays around 100 items under the category sleep, ranging from Sleepeaze Herbal; a ‘traditional herbal remedy for the relief of tenseness and irritability, so promoting natural sleep’, to Sleep Cones: ‘small rubber cones on an adhesive strip [which] stimulate the H7 acupuncture points located on the wrists’, believed to help relieve sleep disturbances.
*Nytol* is perhaps the most well known over-the-counter sleep medication in the UK, and is the only product of its type promoted to the public through radio and television advertising (Phelan et al., 2002). Described as ‘a night time herbal sleep aid which promotes calmness & natural sleep’ (http://www.boots.com/shop/product-details.jsp?productid=1010502), *Nytol* accounted for 95% of requests for sleep aids in Phelan et al’s study (2002).

13.2 Women’s attitudes towards the use of OTC products

13.2.1: *OTC products designed to improve sleep*

In general, women who buy over-the-counter products find them a useful adjunct to sleep management. Around one quarter of respondents in the 2003 Women’s Sleep in the UK Survey have used OTC products such as *Nytol, Sleepeaze* and *Kalms* to help improve their sleep. Of these women, 63% have found them effective, suggesting that in many cases these products provide relief from potential or actual sleep disruption:

For several years I have woken at 3.30-4.30 for 1-2 hours unless I take *Nytol* (which I do every night before bed). (S: age 43)

I don’t take it (*Nytol*) regularly but I do (take it). If I’ve been idle all day. If I haven’t been anywhere or done anything and I think I’m never going to sleep tonight, I’ll have one then. (FG5.3: 70 and over).

However, there can be differences of opinion as to the effectiveness of these products. In the following excerpt, women discuss their varied experiences of taking *Nytol*:

A: I took *Nytol* for a while.

Int: Was it from the chemist?

A: Yes.

B: Is that herbal?
A: No, chemical.
B: I took the herbal ones for sleep, but they were a complete waste of time.
C: Oh, I took them last year and I thought they were really helpful.
D: I have always got a herbal sort of remedy in my cabinet. Just in case.
Int: And do they work when you take them?
D: Well, yes they do, but I’m not sure whether it’s psychological. (FG1.2: 40-47)

Women also note a number of side-effects associated with the use of common over-the-counter sleep medications. In the following excerpt, women taking Nytol report side-effects such as a hangover or dopey feeling the following day, a dry mouth, and agitation:

A: It (Nytol) makes you feel funny the next day, you’re not with it. For me it’s a wee bit too strong.
B: It made my mouth go dry.
A: You take a while to come to in the morning, you know a few hours.
C: My daughter, it made her all jumpy and that.
D: I used to take Nytol. I got used to it and it’s expensive as well. (FG4.3: 60-69)

The ready availability of non-prescription sleeping remedies suggests that women would feel comfortable about their use. However, the negative attitude of some women towards sleeping pills (see Chapter Fourteen) can also extend to the use of over-the-counter sleep treatments, with women expressing a degree of scepticism in relation to the safety and efficacy of products which are not subject to the same regulations as prescription drugs. These attitudes may impede uptake of potentially effective treatments for sleep disruption:

I always assumed if it was any good they wouldn’t flog it to you over the counter. You would have to get it on prescription. (FG1.1:40-47)
A: They must be a sort of drug, mustn’t they?

B: Well, yes, it is natural I suppose.

A: I would have thought they had something in them. I’d be very wary taking anything like that too regularly. I suspect it’s one of the ones that you could get hooked on. (FG4.3: 60-69)

For other women, concerns about addiction, interaction with other medication, and possible effects on daytime performance can also inhibit usage:

I know they’re meant to calm you down (Kalms) but how calm are you going to be. Am I going to have a brain in the morning to concentrate on things? That’s why I haven’t touched them. (FG2.3: 48-52)

A: I looked at them (Kalms) in the health food store and thought, no, because even if they are health products you’re still going to have to rely on them. This is my fear. I feel if you get used to them you’re going back to square one again. So what’s the point.

B: When you’re on Warfarin there’s so many things you can’t have anyway. I’m on about 14 tablets a day, so I mean I daren’t try anything. (FG5.3: 70 and over)

The restricted availability of products such as melatonin, used to counteract the effects of jetlag, may also affect usage. While widely available in the US, melatonin is at present unauthorised for use in the UK. According to the 2003 Women’s Sleep in the UK Survey, although 2% of respondents had tried melatonin, only half of these women reported positive results:

I got some melatonin from the States, which I think really works ... you take one when you want to go to sleep and you wake up feeling completely normal ... you can’t buy it here at all, in America you can just walk into a chemist and buy suitcases of it. (FG1.1: 40-47)

I took melatonin and actually a lot of people say it is marvellous substance and people take it against jet lag. I got it over the counter. But it honestly worked too strongly on me, but I lent some to a friend of mine before I left and she sent me an e-mail to say it hadn’t worked at all. (FG2.2: 48-52)
13.2.2: Herbal products and supplements

As part of an overall trend to healthy lifestyle behaviours, women may also choose from a range of other herbal products and supplements as an aid to overcoming sleep problems. These include the use of herbal preparations such as Red Clover, Cava, Valerian, Skullcap, and Hops either in pill form or as teas, and the use of lavender pillows to induce sound sleep. Almost one in five women responding to the 2003 Women's Sleep in the UK Survey have tried herbal teas, and/or lavender pillows to relieve stress and tension and to help them sleep (see Chapter Six). In each case the majority of users have found them effective (62% and 65% respectively). For some women, it is the ‘feel good’ factor which encourages use of these products rather than their effectiveness in improving sleep:

I used to drink [a herbal tea] called Sleepy Time which was supposed to make you sleep. Whether it was because I expected it to be or it was psychosomatic I don’t know, but it did seem to be quite good. (FG3.2: 53-59)

You can get a combination of things that smell really good and relaxing, Lavender and so on. It's lovely and calming. It won't make you sleep, but it relaxes you and makes you feel better. It's very comforting. (FG3.1: 53-59)

Negative factors which may discourage the use of herbal teas and lavender products include the ‘horrible’ taste of the tea, and the short-lived smell of the lavender mentioned by some women.

Women often discuss the use of herbal remedies with peers as a means of evaluating their possible effectiveness and acceptability. The following interchanges, taken from focus group data, give an indication of how women might work through the process of evaluation, and highlight the way in which women's experience of particular strategies may differ. In the first excerpt, a woman discusses what, for her, has been an ideal strategy to counteract the disruptions to her sleep caused by menopausal symptoms:

I had this doctor who said try Red Clover [for menopausal symptoms] and that worked … before I took it I felt as though I was in a fog sometimes and I
think that’s because of lack of sleep – you know, feeling very anxious and irritable and snappy. (FG2.1:48-52)

In this case, the herbal remedy improved the quality of her sleep, did not interfere with others in the house, was suggested by her doctor (thus indirectly validating its safety), had no side effects, was acceptable socially, and helped her improve her concentration and interpersonal relationships in her social roles.

Yet for another woman, Red Clover failed to live up to expectations:

A: I started taking Red Clover but I gave up.

I: Did it work?

A: No it didn’t work at all. I felt awful. I didn’t want to go on with it. (FG2.1: 48-52)

13.2.3: Other OTC products used to help sleep

Alongside these specially formulated non-prescription sleep medications, women report using a range of other over-the-counter products to help their sleep. These include painkillers such as paracetamol and aspirin, and cough and cold remedies containing antihistamines such as Actifed, Lemsip, and Night Nurse. While designed for other health conditions, these products have proven effective in overcoming sleep problems. According to our survey, 23% of respondents have tried paracetamol to improve their sleep, with 81% of these women finding it effective. Paracetamol increases in popularity as a sleep aid as women age, with the percentage of use increasing from 22% for women in their 40s to 39% for those aged 70 and over. The study does not show, however, whether improvements in sleep from paracetamol are directly the result of the medication or a by-product of pain relief. While only 7% of respondents reported using antihistamine products as a sleep aid, 84% of these women considered them effective:

I have to admit that I sometimes take a couple of teaspoonfuls of Benylin, which is drowsy cough mixture, and that sends me to sleep like a baby and I
have a wonderful night and I wake up feeling fantastic with no bitter taste in my mouth. (FG2.2: 48-52)

I will take paracetamol if I can’t find anything else, but I’d rather take aspirin. I find it helps my joints as well. (FG3.3: 53-59)

Yet while the intermittent use of these products has proven effective for the majority of those who take them, side effects and fear of addiction have left other women reluctant to use them as a sleeping aid:

The pharmacist stopped me a few years ago. He said I was getting hooked on Actifed (a cough medicine) because I started to take it every night (to help her sleep). (FG4.3: 60-69).

As a second-tier response to sleep disruption, OTC remedies provide women with a range of products which may improve their sleep. Alongside these products, complementary therapies may also offer a solution to poor sleep for some women.

13.3 The use of complementary therapies

The promotion of a healthy lifestyle message in society has also seen the emergence of a range of complementary practices, therapies, and treatments such as yoga, massage, reflexology, acupuncture, aromatherapy, and Bach Flower Remedies. According to the 2003 Women’s Sleep in the UK Survey, 29% of respondents practise some form of relaxation technique, (such as deep breathing, meditation, thinking pleasant thoughts, yoga or massage), before going to bed, while 32% use these techniques during the night to restore broken sleep. In each case over 80% of women find these strategies effective in improving their sleep. Women who have tried these practices believe that they promote a sense of calm, which enhances feelings of well-being, and, in some cases, improves sleep:

I had acupuncture on and off for different things and I would say nothing knocks me out like acupuncture. I always sleep like a baby. (FG3.2: 53-59)
(Rescue Remedy, a Bach Flower Remedy) doesn’t necessarily make you sleep, but it stops your mind going round and round and round and round on things. (FG4.3: 60-69)

An increased focus in the media on complementary therapies has helped create a greater willingness in society to accept and embrace these treatments as a viable alternative to conventional medicine. As one woman observes, when financial resources are available, women are prepared to try alternative remedies for sleep:

I think it is becoming now if you have got resources, and working women here have got more resources to spend on themselves, they can go for alternative stuff. Where I am they are trying out things that they read in magazines. (FG3.1: 53-59)

However, for other women, time constraints as well as the cost of these therapies can counteract any potential benefits:

It’s so relaxing (aromatherapy massage). But it’s expensive, £30 for a massage, and I haven’t got the time to go and get it done. It’s not the same if you sort of massage yourself. (FG2.3: 48-52)

Moreover, some women remain unconvinced about the effect of these therapies on improving sleep quality:

I think you tend to look at the alternative stuff a bit sceptically really. I wasn’t expecting it (aromatherapy) to work, so I suppose that didn’t help. (FG1.3: 40-47)

I’ve tried massage and reflexology but they didn’t do anything for me at all. (FG5.3: 70 and over)

13.4 Conclusion

Over-the-counter products and complementary therapies form a second-tier range of strategies which mediate between everyday routines, activities and lifestyle
behaviours; and medical intervention. Products such as Nytol, Sleepeaze and Kalms, designed to optimise sleep are evidence of the increasing commercialisation of women’s sleep. Herbal remedies, and complementary therapies such as acupuncture, reflexology, massage, yoga and meditation claim to promote better sleep by creating a feeling of calm and well-being. Alongside these products and therapies, women may also use products designed for health conditions such as pain, headaches and hayfever. In accepting responsibility for their well-being through the use of these remedies, women may indirectly improve their sleep.

Women’s choice of strategies is mediated by their personal circumstances and socio-cultural attitudes towards the use of OTC products and complementary therapies. They choose strategies which are acceptable to them and reject those which are not, despite the potential of these treatments to improve their sleep. Effectiveness varies, therefore, with some women finding OTC products and complementary therapies helpful in improving their sleep, while others remain unconvinced and concerned at the non-regulation of these treatments. Factors which influence acceptability and effectiveness include: financial considerations such as the cost of products and therapies; socio-cultural attitudes and scepticism about the safety and effectiveness of OTC products; and time pressures which may limit the uptake and practice of complementary therapies. These constraints may impact on the use of otherwise effective strategies which may ameliorate sleep disruption. In managing their sleep women need to balance their personal circumstances and need for a good night’s sleep against these constraints.

While the use of OTC products and complementary therapies play an important role in women’s sleep management practices, they are not always successful in restoring women’s sleep to optimum levels, however. Faced with the consequences of sleep disruption impacting significantly on their ability to carry out their roles and responsibilities effectively, women may consult their GP for advice and treatment. The issues surrounding medical intervention for sleep problems are discussed in Chapter Fourteen.
Chapter Fourteen

MEDICAL INTERVENTION

"The best cure for insomnia is to get a lot of sleep."

(W.C. Fields)
http://www.digiserve.co.uk/quotations/search.cgi

As Chapters Twelve and Thirteen show, the majority of women in this study manage their sleep as part of their everyday routines and behaviours, supplementing these practices as needed with the use of over-the-counter products and/or complementary therapies. However, for some women sleep problems become so distressing as to seriously undermine their quality of life. In this case, consultation with their GP for diagnosis of specific sleep disorders, medication for co-morbid conditions affecting their sleep, or for prescription sleeping medication may become unavoidable.

This chapter considers the role of medical intervention in the management of women’s sleep problems. It:

- overviews the management of women’s sleep in the context of medicalisation;
- examines women’s experiences of consulting their GP about their sleep; and
- evaluates the use of benzodiazepine hypnotics as a treatment for severe sleep disruption.

14.1: The medicalisation of women’s sleep

Since the pioneering work of Zola (1972), the concept of medicalisation has become a central theme in sociological studies of the relationship between health and illness. Conrad (1992) describes medicalisation as a process of social control whereby both
deviant behaviour and natural life events are reconstructed as illnesses or disorders and placed under the jurisdiction of the medical profession. The term has been used widely in association with conditions as diverse as infertility (Becker and Nachtigall, 1992), chronic fatigue syndrome (Broom and Woodward, 1995), and ‘natural’ death (Seymour, 1999).

As a physiological process, sleep has always had the potential to become absorbed into the medicalisation paradigm. Indeed, it is the focus of extensive scientific study and, for example, the subject of a weighty volume entitled *The Principles and Practice of Sleep Medicine* (Kryger et al., 2000). In the UK alone there are numerous sleep clinics and laboratories which conduct research into the mechanisms of sleep and/or treat sleep disorders such as sleep apnoea, restless legs syndrome, and narcolepsy, each characterised by specific medical aetiologies, diagnostic measures, and treatment regimes.

Women’s sleep is particularly vulnerable to medicalisation. According to Riessman (1983: 5), women are perceived as more likely than men to have ‘problematic experiences defined and treated medically’, as evidenced by the medicalisation of such ‘natural’ female processes as menstruation (Oinas, 1998), childbirth (Werz and Werz, 1989), pre-menstrual syndrome (Bell, 1987; Riessman, 1983), and the menopause (Bond and Bywaters, 1998; Griffiths, 1999; Ballard, 2002). In relation to sleep disruption both women and older age groups report increased rates of sleep difficulty, with women 1.3 times more likely than men to report insomnia-like sleep problems (Walsh and Ustun, 1999). Research conducted in the US (National Sleep Foundation, 1998: 2) found that the ‘average woman aged 30-60 sleeps only six hours and forty-one minutes during the workweek’, considerably less than the recommended eight hours per night. Moreover the incidence of poor sleep in US women is increasing, with 47% of women aged 40-49, and 50% of women aged 50-60 experiencing difficulty sleeping ‘often or always during the past month’. According to the study, almost one-third of women aged between 30 and 60 reported that their sleep problems frequently interfered with their daily activities, including job performance and caring for family, as well as interpersonal relationships. As Walsleben and Baron-Faust (2000: xiii) observe, women are ‘probably the most
sleep-deprived creatures on earth', with hormonal factors and the competing
demands of careers and children contributing to poor sleep outcomes.

In this environment, it is not surprising that women’s sleep has become associated
with the process of medicalisation. The high incidence of tranquilliser use among
women (Gabe and Bury, 1996) since the development of effective hypnotics in the
1960s is evidence of this trend. The medicalisation of sleep disruption has been
achieved by a consensus between the medical profession, assuming the status of
‘experts’ on sleep problems, patients (mainly women) seeking a solution to their
sleep problems through medication, and the pharmaceutical industry with vested
interests in the promotion of products to meet the needs of the lay population and the
medical profession.

Yet despite media attempts to portray women as victims of medicalisation through
widespread addiction to hypnotics (for example, BBC Panorama, May 2001),
Williams and Calnan (1996: 1613) suggest that, rather than being passive consumers
in a culture of medicalisation, individuals have become ‘critical reflexive agents’ in
managing their health. While the potential for medicalisation may exist, the extent to
which it actually occurs is related to women’s experiences and perceptions of health
and illness (Ballard, 2002), with many women resisting taking prescription
medication except as a last resort (Griffiths, 1999). The emergence of a widespread
ambivalence towards the use of benzodiazepines accompanied by ‘a measure of
acceptance of tranquillisers and their role in everyday life’ (Gabe and Bury, 1996:
90) is evidence of a more recent restructuring of the medicalisation model of the
1960s and 1970s. The fall in the number of prescriptions for benzodiazepines from
16.5 million in 1991 to 13.2 million in 2000 (Phelan et al., 2002: 290) suggests that
women are either seeking alternative ways of dealing with sleep problems, or taking
a more active role in the medicalisation of their sleep.

14.1.1: Why women consult their GP about their sleep

For many women consulting their GP about a sleep problem is considered a last
resort after all other avenues of help have been exhausted. For some, there may be a
reticence in consulting their GP about what they consider a minor problem despite its major impact on their well-being and ability to function effectively. As a result, GPs sometimes have to dig beneath the surface to uncover the problem:

It’s a build up to a crisis and they just feel they can’t go on. They often use that phrase, ‘I just can’t go on any longer’. (GP002)

Sometimes they don’t say anything, they just look terrible and you just sort of say, ‘how is your sleep going?’ and then they’re often quite pleased and they’ll elaborate. (GP001)

The trigger which sends them to the GP may be as simple as making a silly mistake, losing their keys, or bumping into another car in the car park because of tiredness. Or it may be the complex interplay of psychological factors arising from divorce or bereavement. Or it may arise from breakdowns in interpersonal relationships either at work or at home:

They may feel their work is suffering and the manager’s said ‘sort yourself out’, or husbands [have said] ‘you’re so restless I can’t carry on, it’s divorce or go and do something about it’. (GP002)

I just collapsed. I don’t normally (go to the GP). Usually I keep away from them and it’s not like me at all. Everybody was amazed. I just ground to a halt, and you know you like to be in control. (FG3.1: 53-59)

For the small minority of women who experience specific sleep disorders (see Chapter Six), medical intervention legitimises the condition and offers treatment options. In the following excerpt, one woman describes her diagnosis of obstructive sleep apnoea and her treatment with a CPAP mask to help her breathing:

I’d been on holiday and shared a room with my daughter. She used to say ‘I’m frightened at night because you stop breathing.’ And I was then working at the (name of hospital) and I saw this sleep clinic and I made enquiries. You had to be referred by your doctor. So I think I went to my doctor and just asked to be referred to the sleep clinic. So that was just a straightforward referral .... I’ve got sleep apnoea and they give you this awful ghastly mask thing. (FG4.1: 60-69)
In this case, while the mask did improve her condition, she decided to discontinue its use because of discomfort and side effects. As a lone woman she was able to do this without disturbing a partner:

I didn’t think it (the mask) was worth the discomfort because you can’t turn and you can’t toss about and you have got to lie still and all this and that. If you’ve got a partner then that is fair enough, but if I snore and I stop breathing, I’m not disturbing anybody. I also had a side effect – it was as though I had a heavy cold all the time. (FG4.1: 60-69)

Sleep may also be drawn into the orbit of medicalisation through its association with other medicalised conditions, such as the menopause, arthritis, and depression. Prescription medications such as Hormone Replacement Therapy (HRT), sedating anti-depressants such as Amitriptyline, strong painkillers, and muscle relaxants such as Diazepam, while designed to alleviate the symptoms of the primary medical condition may indirectly improve sleep:

I saw my GP recently (about a sleep problem). We found my sleeping problem was a symptom of other things and I took sleeping pills and anti-depressants. (FG2.1: 48-52)

I’ve got arthritis of the spine and I have terrible trouble turning at night. And so if I have a couple of painkillers (prescription) it does help (my sleep). (FG2.3: 48-52)

The use of HRT to overcome menopausal symptoms provides a good example of the use of prescription medication with the aim of improving sleep outcomes. In the case of menopausal symptoms, compromised sleep with its consequences on women’s ability to function during the day, is a key factor in their decision to consult a GP. In this case, HRT, designed to ameliorate menopausal symptoms, may act as a de facto sleeping pill by removing the cause of sleep disruption and restoring pre-menopausal sleep patterns:

Int: Do many of your women patients complain of sleep problems?

GP: Yes, the principal lot are peri-menopausal women who want HRT, who say ‘if you don’t give me HRT I will hang myself because I can’t sleep, I can’t
concentrate, I'm so tired' .... HRT for the peri-menopausal group is startlingly effective – usually their sleep patterns are restored within two weeks. (GP002)

The evidence of a link between HRT and improved sleep, however, on the basis of research data, is inconclusive. According to the 2003 Women's Sleep in the UK Survey, one third of respondents had used HRT at some stage, with 16% reporting current usage. Of the women who had ever taken HRT, 27% believed it improved their sleep, 65% experienced no effect, and 7% reported a detrimental effect on their sleep:

I've been taking HRT since January 2002 and my sleep has improved. Prior to taking HRT (for about 2 years) I suffered from night sweats and stress. (S: age 51)

However, side effects, adverse research findings, and media scares about potential risk factors associated with the use of HRT have led to discontinuation by some women, with a resultant effect on their sleep:

My main disturbance in my sleep is hot flushes which I experience every night. I have tried HRT but the side effects were worse than the flushes. (S: age 57)

14.1.2 Women's attitudes to the medicalisation of sleep

Women's experiences of consulting their GPs about sleep problems can be very positive, helping to overcome the sleep problem and restore well-being:

My GP gave them (sleeping pills) to me because she could see I was desperate. But she also went through a program with me for coming off them. She told me how to come off them by halving the tablet and then quartering the tablet and then giving it up. So she did it (prescribed sleeping pills) but she did it with caution. (FG4.1: 60-69)

However, for other women the experience has been negative. They cite insufficient GP training in treating sleep problems and lack of time as reasons for their dissatisfaction:
They’re not experts on sleep. They can write you out a prescription, but..... (FG2.1: 48-52)

I’m not sure your GP is the right person to deal with something like that (sleeping problem). It’s such a complex situation that you can’t solve it in such a short period of time. (FG2.1: 48-52)

Other women report a lack of empathy among GPs and a tendency to prescribe pills rather than fully understand the complex nature of their sleep problems:

(GP reaction) It was almost like, ‘pull yourself together. It (treating sleep problems) isn’t what we’re here for really’. I haven’t found him terribly sympathetic towards anything other than sort of like physical illnesses. (FG1.2: 40-47)

Sometimes I resent very much the medical profession’s tendency to not explain the reasons, not allow you to be justifiably awake and worried, and to put you onto sleeping pills or anti-depressants without looking at further causes. (FG3.1: 53-59)

They dole out the pills, that’s what they do, give you pills and say, ‘Yes, go away’. When you are older, that’s what they do. (FG4.2: 60-69)

In this environment, women may choose to take responsibility for their sleep management rather than consult their GP. While the option of medical intervention for sleep problems exists, women feel that the medical profession is not well equipped to deal with ‘normal’ everyday sleep disruption which, while not life-threatening, can have a significant impact on their lives. They feel that, ultimately, responsibility for managing their sleep lies with them:

I think women have woken up to the fact that they get palmed off far too often (by their GP). They’re beginning to take responsibility for things. (FG3.1: 53-59)

It’s (sleeping problem) something I have to deal with and take responsibility for really. You know, in seven minutes they’re not going to go into great detail, are they? So I probably know more about it than he (GP) does. (FG2.1: 48-52)
Seen from another perspective, however, their comments suggest that a forum which addresses the problems associated with everyday sleep disruption is missing from the health-care agenda. While self-responsibility for sleep management may be admirable and demonstrate a sense of agency, it also highlights a gap in the health-care system where the treatment of sleep disruption, rather than specific sleep disorders, is little understood.

14.2 The use of benzodiazepines (sleeping pills)

Perhaps the best known treatment for sleep disruption, however, is benzodiazepine hypnotics (or sleeping pills) which are designed as a short-term interventionist treatment for insomnia when it is ‘severe, disabling, or subjecting the individual to extreme distress’ (British National Formulary No 41, p166, quoted in Macgregor, 2001)). According to the 2003 Women’s Sleep in the UK Survey, only one in five women has taken sleeping pills at some stage during their lives, while 5% are current users (see Chapter Six). Sleeping pills were considered at least ‘somewhat effective’ by 94% of women who had ever taken them. Sleeping pill use is closely associated with age. Although he does not specify age, Woods (2003: 12) reports that ‘older people receive 80% of all the prescriptions in the UK for benzodiazepines used as sleeping pills’. In the 2003 Women’s Sleep in the UK Survey, 22% of women aged 70 and over have taken sleeping pills at some stage of their lives compared to 13% of women in their 40s.

Women using benzodiazepine hypnotics such as Temazepam fall into three main groups: short-term users, intermittent users, and longer-term (or habituated) users:

14.2.1: Short-term use

Clinthorne et al. (1986), maintains that people are more willing to take tranquillisers ‘in situations in which individuals (are) seriously incapacitated by emotional distress’ (cited in Gabe and Bury, 1996: 80). Short-term use of benzodiazepines is generally precipitated by a build up of stress related to a life crisis or transition. Going to the
GP for sleeping pills is seen as a last resort when sleep disruption falls outside the parameters of what is acceptable and normal for the woman concerned and thus is seen as outside her control:

I just got so desperate because I wasn’t sleeping..... I got to the point where I was trying to cope with it on my own and I couldn’t and I went to the doctors. I was very reluctant to go on them but when you literally go days like that you’ve got to do something (FG1.3: 40-47)

Yet while life crises and transitions may provide the trigger for consultation with the GP, the medicalisation process is prefaced not by personal discomfort alone but by the social implications of severe sleep disruption on performance of daily roles and responsibilities. Rather than representing a transfer of responsibility for sleep to the medical profession, medicalisation in this case is the outcome of women evaluating the need for professional intervention to help restore a state of equilibrium and effective functioning. As the following excerpts show, the use of sleeping pills for a short period may enable women to cope with their daily activities and relationships until the crisis has passed and normal sleep patterns can be re-established. In the first excerpt, one woman, whose father’s death coincided with the birth of her second child, was given a six-week course of Temazepam to help re-establish her sleep patterns to enable her to deal with the crisis of bereavement and the need to look after her children. In the second excerpt, sleeping pills acted as a bridge between the shock of a marriage break-up and the need to carry out work duties as the principal of a nursery unit:

It was one of those things whereby you are exhausted, but you can’t sleep ... at night everything is jangling and that’s when you start to get into trouble, and you can obviously go downhill fast at that point .... I had this baby to look after and her older sister, so it was pretty crucial really (to go to the GP). (FG1.1: 40-47)

I first got to know about it during the Christmas holidays (husband’s affair) and I knew I had to go back to work round about 6 January and you don’t face 39 small children and two or three staff when you haven’t slept – at least I don’t – and I went to the doctor and she advised Temazepam. (FG4.1: 60-69)
As a short-term intervention, the use of sleeping pills can be highly effective in improving sleep outcomes:

I had brief problems at the beginning of the year. Got sleeping tablets from the doctor. Only had to take 2 or 3. (S: age 45)

I did have some sleeping pills a few years back when I had a breakdown. I just couldn’t cope and the tablets made me sleep for 12 hours and the doctor said that was what I needed. I was fine after that (two weeks). (FG2.3: 48-52)

14.2.2: Intermittent use

The perceived effectiveness of prescription sleeping pills has meant that some women choose to continue to use medicalised strategies to manage their sleep on an ‘as needs’ basis to help counteract the stresses and worries which impact on their ability to sleep and perform optimally the following day. By exercising control over their use of medication in this way, women achieve a balance between potential risk factors associated with long-term use of sleeping medication and their need for a good night’s sleep:

I have taken odd sleeping pills to get me over whatever the latest teaching problem is. (FG2.2: 48-52)

I quite often have sleeping tablets in the house actually. To some extent it depends what is happening the day after. If I am supposed to be working then yes, I will resort to sleeping tablets. (FG3.2: 53-59)

However, for some women, the psychological panacea of having medications available may be at least as important as the actual therapeutic effects, with sleeping pills becoming part of the broader spectrum of everyday strategies which underlie the day-to-day management of women’s sleep:

I take them occasionally – Temazepam – if I have to, but some nights if I can’t sleep I think I am going to pretend to have taken them .... I say ‘let’s pretend’ and I am lying here because I am expecting that lovely sleep and it does (come). (FG4.2: 60-69)
The sense of agency reflected in women's use of prescription medication on an 'as needs' basis, however, is often not acknowledged by clinicians. The focus on short-term medication and the concerns associated with long-term use may deny women access to a strategy which could prove helpful in overcoming intermittent sleep problems.

14.2.3: Long-term use

For a number of older women in this study, the use of sleeping pills has extended well beyond the initial crisis which prompted consultation and treatment. Rather than being a short-term interventionist treatment for acute sleep problems, sleeping pills have become a source of addiction for these women. According to an NOP poll carried out for the television program Panorama in 2001, 28% of women taking sleeping pills in the UK have been on them for more than ten years (2001a). The level of addiction and fear of withdrawal is shown candidly in the following excerpts, the first from a woman who began taking Temazepam 38 years ago as a result of a stressful factory job, and the second from a woman who has been on the drug for six years:

I am so crafty with them (sleeping pills) – I put in the prescription for 30 and he (GP) never queries it and I try to make them last so that he never looks back and says, 'God, she's been on them a long time'.... I'm terrified of running out – and yet I don't take them very often .... I'm frightened he's going to say I should come off the Temazepam and I honestly don't want to ... what makes me so fed up really, at my age now, is that I'm still no better than I was when I was 40. In fact, if anything my sleep is worse. (IV008: age 78)

I've been on Temazepam for about six years I suppose on and off. The thing is they (GPs) won't take me off them. It doesn't have the effect now. You get used to it but taking it off you is a very traumatic thing so they won't take me off it. (FG5.3: 70 and over)

As these excerpts show, the long-term use of sleeping pills appears to be ineffective in managing sleep problems. These findings support those of a recent study of benzodiazepine use in the UK which found that about two-thirds of patients aged 65 and over participating in the study (N=192) experienced sleep problems despite
taking benzodiazepines at night (Curran et al., 2003). Women may continue to take medication as a result of habit or addiction despite the failure of the product to improve sleep:

I’m afraid I do rely on (sleeping) tablets, but even those don’t give me a full night’s sleep. I’ve got used to them. (S: age 78)

14.3 Women’s attitudes to the use of prescription sleeping pills

Women’s decision to take sleeping medication (or not) is often justified or explained in terms of wider social roles and responsibilities, rather than as a purely personal choice. Perceptions of sleep problems in relation to work demands and considerations may influence use:

I feel very worried about taking them and I don’t want to feel dependent. I find I am always saying do I need one tonight, because I have really got to do this, this and this tomorrow and should I have one tonight because I really need a good night’s sleep. (FG2.2: 48-52)

I would (take sleeping pills) if I was having a sleepless two or three hours a night, because I don’t think you can function on that – you would have to do something. (FG1.3: 40-47)

Moreover, the need for alertness and concentration during the day may also be reflected in the way women approach their medication. One woman, taking a prescription sleeping pill, warns of the importance of timing in taking the pill to avoid a hangover feeling in the morning which would interfere with her ability to function:

It (taking sleeping pills) works, it’s great but you have to leave 8 hours. It needs eight hours to work, so if you find you can’t go to sleep at 2 in the morning I would never take it, I would just choose to have a sleepless night because if you take it at 2 and get up at 7 you feel like absolute death for those remaining hours. (FG2.2: 48-52)
As a safe and effective treatment for short-term sleep problems, benzodiazepines continue to play an important role in women’s sleep management. Yet, according to the 2003 Women’s Sleep in the UK Survey, while one third of respondents reported chronic sleep problems (ie. problems sleeping ‘often’ or ‘always’), only one in five women in the sample had ever taken sleeping pills. Moreover, there has been a continuing decline in the number of prescriptions issued from 30 million in 1979 (BBC News, 2001b) to 13.2 million in 2002 (Phelan et al., 2002). While this decline may be explained in part by guidelines for GPs issued in 1988 which limited the prescription of benzodiazepines to four weeks at a time (BBC News, 1996), it may also highlight a growing disenchantment with the use of prescription medication to treat sleep problems.

Today the willingness of women and their GPs to support the medicalisation of sleep as they did in the 1970s and 1980s, is tempered by media scares about the safety of long-term tranquilliser use as well as concerns about the increased risk of falls and fractures among older people taking medication. As Gabe and Bury (1996: 79) suggest, the decision to use these drugs is in general an active process shaped by ‘personal beliefs, social circumstances and experience’ as well as a response to media hype with its focus on the dangers of addiction with long-term use. The impact of the media is shown in the words of a GP:

A recent TV program about how one shouldn’t have it (tranquillisers) did an awful lot to help us not have to prescribe it. They (patients) don’t believe us but they’ll often believe the tele. (GP005)

The resulting stigmatised perception of tranquilliser use in the community has contributed to an atmosphere of suspicion in which women are often reluctant to embrace the idea of medication despite its potential benefits, focusing perhaps irrationally on the fear of addiction. Negative attitudes arising from adverse media coverage are ‘often reinforced by knowledge of friends’ or relatives’ experiences of taking tranquillisers’ (Gabe and Bury, 1996: 81)

No, (I wouldn’t take sleeping pills). I just think I’d be worried about becoming dependent on them. That’s what would bother me. (FG3.3: 53-59)
The thing is I've known a couple of people once they've started them, because they get that satisfaction of sleep, they won't come off them. I wouldn't like to rely on a drug. (FG2.3: 48-52)

This perceived stigma is also reflected in the language used by women when describing their use of prescription sleeping medication. To admit to taking sleeping pills implies a sense of guilt and shame associated with acknowledgement of deviation from the norm and perceived loss of control over sleep management. The use of qualifying statements in the following excerpts may represent an attempt by women to ‘save face’ by distancing themselves from the stigma and guilt which they feel surrounds the use of sleeping pills:

I just have to have some [Temazepam] there psychologically and the doctor is really nice and it is OK. I am not addicted or anything like that. (FG2.2: 48-52; my emphasis)

My doctor gave me some (Temazepam) I think at Christmas because I wasn’t sleeping but I don’t like taking them. I just keep them by. (FG4.2: 60-69; my emphasis)

Prevailing attitudes to medication can result in conflict between the need to find a safe, effective remedy to overcome sleep problems and the desire to avoid prescription sleeping drugs. Patient reluctance to acknowledge poor sleep as problematic, failure to consult their GP, and indecision about whether or not to take prescription sleeping medication reflect feelings of discomfort with the medicalisation process and a disinclination to step outside perceived boundaries of socially acceptable behaviour. For some women, there is an underlying belief that the management of sleep, as a natural process, should remain within their control.

14.4 Conclusion

Medical intervention represents a third-tier approach to sleep management, adopted by women when first- and second-tier approaches fail to alleviate sleep problems.
Women evaluate their sleep problems in terms of their roles and responsibilities. The decision to seek medical help is an acknowledgement that the situation is beyond their immediate control and threatens their ability to function effectively in everyday life. Women may consult their GP to overcome sleep problems arising from life crises or transitions; to assess sleep disorders such as obstructive sleep apnoea (OSA), narcolepsy or restless legs syndrome; or for treatment of other health conditions such as menopausal symptoms, depression or arthritis which impact on sleep.

Treatment may include the prescription of benzodiazepine hypnotics (sleeping pills) such as Temazepam, or medication to alleviate the primary health condition. Patients may also be referred to a sleep consultant for diagnosis and treatment of specific sleep disorders. Treatment for co-morbid health conditions can be effective in overcoming symptomatic sleep problems, while the use of sleeping pills on a short-term basis is very effective in alleviating sleep problems in the majority of cases. However, used long-term, these drugs can be addictive, leading to a deterioration in sleep, and withdrawal symptoms if treatment ceases. Moreover, in later life, the sedative effect of these drugs can lead to falls and fractures during the night when women get up to go to the toilet.

Yet while these treatments can be effective in alleviating sleep problems, there remains a reticence among some women to medicalise their sleep despite experiencing significant sleep disruption which impacts on their quality of life. The medicalisation of sleep is only one of a number of choices which women have in coping with sleep disruption. Used on a short-term basis, benzodiazepines remain perhaps the most effective way of restoring sleep patterns and ensuring a good night’s sleep. However, media alerts and public opinion continue to moderate use and, in some circumstances, may even block access to a potentially effective short-term sleep management strategy. In this environment, the decision to medicalise sleep may thus represent a balancing of personal circumstances and socio-cultural constraints against the severity of the sleep problem and its impact on everyday life.
PART VI
DISCUSSION AND CONCLUSIONS
Chapter Fifteen

CONCLUSION: THE SOCIAL CONTEXT OF WOMEN'S SLEEP

"And flights of angels sing thee to thy rest!"  
(Shakespeare, Hamlet, Act V, Sc II)

As the first empirical study of women's sleep conducted in the UK, this research breaks new ground, contributing to an understanding of the interrelationship between sleep and its social context. Part of the EU-funded Sleep in Ageing Women project, the study used a mixed methodology, including focus groups (N=15), in-depth interviews (N=35), audio sleep diaries (N=36), and a national self-completion postal questionnaire (the 2003 Women's Sleep in the UK Survey (N=1445)), to record, analyse and interpret the ideas, beliefs and experiences of sleep of women aged 40 and over in the UK (see Chapters Three to Five). These data not only provide insights into the characteristics of women's sleep in the context of everyday life but also act as a mirror to illuminate fundamental issues associated with gender, ageing, and life course transitions which underpin, structure and constrain women's everyday lives.

By adding an empirical dimension to the study of sleep, the thesis extends the theoretical focus of previous sociological studies, increasing understanding of the lived experience of sleep and providing a foundation for future studies. Moreover, in highlighting the contribution which sociology can make to sleep research, the study complements the work of bio-medical and other sleep researchers, emphasising the importance of a multi-disciplinary approach to a comprehensive understanding of sleep.

This final chapter draws together and discusses research findings, focusing on:
the role of social context in structuring women’s sleep across the life course;

the interrelationship between gendered roles and relationships and women’s sleep; and

the contribution of the study to (a) the development of a sociology of sleep and (b) sleep research in general.

15.1 The role of social context in structuring women’s sleep across the life course

"O heavenly Father, you give your children sleep for the refreshing of soul and body; grant me this gift, I pray."

(Book of Common Prayer, Prayers for a Lifetime, Kings Chapel, Boston, p.162)

Women’s sleep is inextricably linked to their social world. For the majority of women in this study, regardless of age, sleep disruption is a fact of life which impacts on their ability to function effectively in their day-to-day activities. As shown in the 2003 Women’s Sleep in the UK Survey (see Part III Chapter Six), three quarters of survey respondents experience sleep problems at least ‘sometimes’, while one third report chronic sleep disruption. In today’s pressured society, women speak of a gap between sleep needs and the reality of their lives which limits their sleep to an average of 6.5 hours per night during the week. This loss of sleep can have a major impact on the quality of women’s lives, affecting daytime concentration, appearance, mood, energy and stress levels. In short, poor sleep is incompatible with the competing demands of everyday life.

Survey results concur with those of bio-medical sleep researchers, highlighting the effect of physiological factors on women’s sleep. Although not a key part of this thesis, disrupted sleep from going to the toilet, menopausal symptoms, pain from arthritis and other co-morbid health conditions are significant factors in influencing
sleep outcomes. Moreover, from a psychological perspective, worries and concerns about the family, finances and the future, as well as stress associated with work can also impact on sleep. Yet while acknowledging the relationship between physiological and psychological factors and sleep problems, this thesis asserts that it is the social context of women’s lives with its competing socio-temporal dynamics which creates the potential for sleep disruption. Rather than being, as Ekirch (2001: 385) contends, ‘the natural pattern of human sleep breaking through into today’s artificial world’ (see Chapter Eight), this thesis has shown that it is the interaction between institutional and relational factors as well as life course events and transitions which may impact adversely on women’s sleep (see Figure 7.1). It is only by examining sleep within its social context, therefore, that a more comprehensive understanding of the factors underlying sleep disruption can be gained.

As illustrated in Part IV (Chapters 7-10), women’s sleep is structured by the interaction of multiple public and private roles which constitute everyday reality. Across the life course, these roles create a sleep trajectory which maps the changing patterns of sleep in response to work, family relationships, life events and transitions. The historical pattern of a woman’s life is thus reflected in the changing nature of her sleep. At mid-life, for example, women’s sleep may mirror the dual temporal burden of balancing the demands of paid work alongside roles and responsibilities as partners and/or mothers. Paid work, with its institutionalised schedules organised around the linear segmentation of each day into eight hour periods of work, leisure and sleep, may conflict with women’s commitment to the family and the unpaid domestic labour and sentient activities inherent in these responsibilities. Alongside these factors, increased caring responsibilities for ageing parents and the impact of divorce or serious illness may also contribute to an erosion of sleep patterns. Following retirement, women’s sleep may be affected by the loss of the routines imposed by paid work, increased caring responsibilities for ageing partners, and changes in the couple relationship in the transition to widowhood. In these circumstances, individual sleep needs may be deprioritised in favour of the needs of others in the household, reflecting an on-going cycle of domestic activities which intrude into the sleep period. For women whose sleep is influenced by relationships...
with significant others, the time available for sleep may be determined not by perceived needs but by the constraints imposed by roles and responsibilities.

The impact of these competing demands is reflected in the diversity of sleep patterns experienced by women in this study. Conceptualisations of normality in relation to sleep may bear little correlation with the eight hour ideal believed to be essential to good health and well-being. Rather, sleep quality is assessed on a night-by-night basis in relation to the changing demands on women's time. Thus while disruption during the night may be problematic for a woman living alone who usually enjoys eight hours of uninterrupted sleep, it may be considered as falling within the bounds of 'acceptable normality' for a woman with three young children, a demanding job and a snoring husband. It is the individual circumstances of their lives, therefore, which determine both women's expectations of sleep and the quality of their sleep.

Yet while women may accept poor sleep as an inescapable outcome of the complex nature of their lives, they do not consider it desirable. As shown in Part V (Chapters Eleven to Fourteen), in an effort to improve their sleep, women respond to these disruptions by adopting a range of strategies, including everyday routines, activities and lifestyle behaviours; over-the-counter products and complementary therapies; and medical intervention. Central to these strategies is a core of personalised activities, including pre-bed routines, activities to restore sleep during the night, sleeping-in and napping to help compensate for lost sleep, and the adoption of healthy lifestyle practices. To supplement these strategies they may try over-the-counter products, including herbal sleep aids, and complementary therapies such as aromatherapy, yoga, massage and meditation. In cases where sleep problems are severe and impacting significantly on their ability to function, women may consult their GP for prescription medication or referral to a sleep clinic for diagnosis of specific sleep disorders. The medicalisation of sleep, however, is seen as a last resort, with women in general taking responsibility for improving their sleep within the limits of their social context.

The application and effectiveness of these strategies, however, is mediated by social constraints which limit the degree of control women are able to exercise over their
sleep. Given the complexity of women’s lives, the possibility of finding a generic solution to sleep disruption which is applicable to all women, at all times, and in all circumstances is indeed remote. In the everyday world of women’s sleep, sleep management must be considered in terms of the realities of women’s lives. To expect undisturbed sleep while raising children or while caring for an ageing partner may be unrealistic. Likewise, the ability to read in bed with the light on, get up and make a cup of tea, or relocate to another room may not be practicable, or considerate, when sharing the bed with a partner.

Women’s sleep is thus a reflection of the interplay of socio-temporal factors across the life course. It is also a lens through which to study the gendered roles and relationships which structure and constrain women’s lives.

15.2 The interrelationship between gendered roles and relationships and women’s sleep

For the sociologist, the study of sleep provides a rich and relatively untapped resource through which to examine the gendered roles and relationships which underpin women’s lives. This section summarises the interrelationship between sleep and family relationships; highlights how sleep reveals changing patterns of roles and relationships across the life course; and examines the interaction of agency and constraint in the adoption of sleep management strategies. It asserts that as a social act, sleep is structured by the constraints and inequalities inherent in the gendered division of labour in the home. Moreover, it suggests that, in ‘doing’ and managing sleep in this context women may contribute to the reinforcement and perpetuation of gendered roles and relationships in society.

15.2.1: Family relationships and sleep

Through its location within the home, sleep is structured by the gendered divisions of labour which characterise the household. Rather than providing a sanctuary to reflect on the day’s work and prepare for the following day, sleep incorporates and extends
the family dimension of women’s lives. In sleep, women are first and foremost partners and/or mothers and the performance of physical and emotional labour required by these roles often curtails their right to a good night’s sleep and reinforces their gender role in the home. As Part IV (Chapter Nine) shows, sleeping for the majority of women is, or has been, a shared experience, and it is the constraints and inequalities inherent in their relationships with significant others which frame the patterning of their sleep.

If we consider the rights of a person to sleep proposed by Williams and Bendelow (1998), it is clear that women are disadvantaged. For the majority of mid-life women, their ‘waking role status’ involves paid employment. As working women during the day, they may fulfil high profile, responsible and well-paid roles in the public sphere. Yet in the home, these roles are subverted by their role as partner and/or mother which is the dominant factor controlling the sleep period. Women’s commitment to the family places them under the obligation of being available to deal with the needs of others during the night through carrying out a range of sentient activities. While interruptions to sleep arising from caring for children or a partner during the night may be anticipated, it is the invisible sentient activities of planning, organising, managing and worrying which may go unremarked while nevertheless undermining women’s sleep quality. In catering to the needs of others, women thus lose an important part of their waking role status and identity as paid workers, as well as the right to ‘exemption from normal role obligations’, and ‘freedom from noise and interference from others’.

Being female within a family structure can thus be synonymous with a loss of sleeping rights. Furthermore, if, as a recent verdict of the European Court of Human Rights (Hatton and Others vs the United Kingdom, 2 October 2001) suggests, a good night’s sleep is a basic human right, then, by inference, women’s basic human rights may be compromised by factors which deny them access to uninterrupted sleep. The study of sleep, therefore, may highlight underlying gender inequalities in society.
15.2.2: *Sleep as a barometer of changing roles and relationships across the life course*

As shown in Part IV (Chapter Nine), the study of sleep can provide insights into the changing nature of the couple relationship across the life course. With ageing, women's sleep may be affected by disturbances from partners who snore, experience prostate problems or suffer from increasing physical and/or mental disabilities. Intrusions into women's sleep from partners are often compounded by women's own health problems and by the emotional labour expended in relation to their partner's health and well-being. Following divorce or widowhood, the emptiness of the double bed may serve as a constant reminder of the loss of a partnership and the identity attached to the role of wife. Retrospective accounts of the couple relationship during this period of adjustment can contribute to our understanding of the way in which couples interact to structure the sleep experience, in so doing reinforcing the gendered nature of the couple relationship.

Sleep disruption during later life is not simply a response to the restlessness of partners, but may be symbolic of a restructuring of the couple relationship. For couples, sleep is, in essence, a barometer, sensitive to shifts in the nature of the relationship arising from fluctuations and changes in the health of partners and the impact of life events and transitions. In the transition to widowhood, for example, women's sleep may be affected by an intensification of their gendered roles as service provider and carer, at a time when men's roles as provider and protector are in decline. In some cases, the couple relationship as it has existed throughout the marriage is lost through dementia or serious illness or disability. This gradual undermining of the basis of the couple relationship forged over long years in the togetherness and companionship culture of the double bed is highlighted in the ambivalence which often accompanies women's response to sleep disruption.

In choosing whether or not to vacate the double bed and remove themselves from the source of sleep disruption, women are caught in a bind. To prioritise their own sleeping needs and move from the double bed, they risk not only losing access to their own sleeping space but also challenge the foundations on which the couple
relationship has been built over time. Similarly, when women are forced to move to another room because of their partner’s illness, they may also lose the companionship of the relationship and the benefits of sleeping in the room symbolic of their couple relationship. In these circumstances, the study of sleep not only reflects the complexity of meanings associated with the restructuring of the couple relationship in later life, but may also shed light on gender inequalities within this relationship as couples negotiate their sleeping environment.

15.2.3: Sleep management strategies: a reflection of agency vs constraint

As shown in Part V (Chapters Eleven to Fourteen), sleep management strategies are firmly embedded within the social context of women’s lives; played out against a background of the individual’s gender roles and responsibilities, time pressures, financial constraints, and socio-cultural attitudes and beliefs. For the women in this study, an ideal strategy is one which:

• improves the quality of their sleep;
• respects the sleeping rights of others in the house;
• is considered safe and has few side effects;
• is socially acceptable; and, most importantly,
• helps women function in front stage roles.

Given the constraints inherent in their social circumstances, however, the choice of strategies available to women may be restricted and fall short of fulfilling the ideal criteria. Women may not, for example, be able to relocate to another room to sleep as a result of the stigma associated with partners sleeping apart, or because there are no spare rooms available. They may not be able to turn the light on to read, or clatter around the house at night making cups of tea or listening to music because of their concern not to disturb their family’s sleep. Women’s choice of strategy is thus mediated by the constraints associated with gendered roles and relationships, as well as by socio-cultural attitudes and beliefs about health and well-being and about the use of prescription and non-prescription medication.
Yet while the ideal strategy may not be available to many women, the aim is to find a strategy which overcomes to some extent the effects of poor sleep so that women can carry out their daily tasks and activities as effectively as possible. For each woman the choice of sleep management strategies is personalised; a strategy which is highly effective for one woman may be ineffective or simply not feasible for another. Evaluating the effectiveness and acceptability of sleep management strategies thus involves not only women’s subjective assessment of practices and treatments but also an appreciation of the constraints which frame strategy choice and which may limit the uptake of otherwise effective strategies.

Thus while it would be desirable to provide a menu of effective strategies which are guaranteed to improve women’s sleep, the reality of women’s lives renders this impossible. In choosing strategies, women act as active agents, balancing their sleep needs and expectations against the constraints of their social context. It may be that for some women the key to improving sleep outcomes lies in accepting the reality of disruption and adjusting sleep expectations in accordance with specific circumstances at different stages of the life course rather than in looking for solutions. Acceptance of unchangeable aspects of life which impact on sleep may in itself be a positive strategy of sleep management, leaving women free to choose from a range of options which promise to help overcome disruption caused by lifestyle behaviours and environmental factors over which women have some control.

15.3 Contribution of the research

15.3.1: Contribution to the development of a sociology of sleep

Adding an empirical dimension to sleep research

As shown in Part I (Chapter Two), Williams (2002; Williams and Bendelow, 1998) has played a key role in the development of a sociology of sleep. Through integrating, reworking and extending earlier writings (Aubert and White, 1959a; Aubert and White, 1959b; Taylor, 1993; Schwartz, 1970), he has been successful in establishing a theoretical foundation for the study of sleep from a sociological perspective. Yet Williams has not positioned his work within an empirical
framework; a framework which explores and captures the everyday world of sleep as it is experienced on a night-to-night basis within the social context of the home.

This thesis addresses this gap by interpreting the first-hand accounts given in focus groups, in-depth interviews and sleep diaries by more than 170 women in the UK; as well as by analysing the contribution of over 1400 women who responded to the 2003 Women's Sleep in the UK Survey. By providing insights into the lived experience of sleep in its social context as seen through the experiences of these women, the thesis brings a 'real world' dimension to the study of sleep, laying the foundation for subsequent studies.

Sleep as a site for 'doing gender'

Far from the sleep period being a temps perdu which separates two consecutive days as suggested by Aubert and White (1959a), this study shows that, for many women, sleep is a time of active engagement; a time for 'doing gender' as they fulfil their commitment to their family. Rather than a periodic remission from daytime roles, sleep represents a continuation of roles and responsibilities.

Contrary to Taylor's (1993) belief that sleep becomes more private and less 'interactive' with age, the study suggests that women in general eschew this privacy by deprivitising their own sleep needs to those of their family. They remain on call throughout the night to respond to the well-being of their children and/or partner. Their right to a good night's sleep as asserted by Schwartz (1970) and Williams (Williams and Bendelow, 1998), is thus effectively compromised by their gendered roles and responsibilities. This thesis validates Taylor's (1993) hypothesis that sleep provides fascinating insights into sociological constructs such as gender. Indeed, as Aubert and White (1959a; 1959b) observed in the 1950s, sleep is a key factor in social organisation.
Developing a methodology for the study of sleep

As shown in Part II (Chapters 3-5), this thesis has used both qualitative and quantitative methodologies, including focus groups, interviews, audio sleep diaries, sleep-life grids and a self-completion questionnaire, to record women’s sleep realities in the context of their everyday lives. Central to the research philosophy underlying these methodologies is the belief that women themselves are the sleep experts who hold the key to understanding the nature of sleep in its social context and ultimately to finding solutions to their sleep problems. Thus my role as a researcher is to tap into this resource through collecting women’s perceptions and experiences of sleep and to interpret these findings from a sociological perspective. By incorporating novel methods of data collection such as audio sleep diaries, where women recorded an assessment of their sleep each morning for seven consecutive days, and sleep-life grids reflecting women’s sleep trajectories across the life course, the thesis has contributed to the development of a model for future empirical research into sleep.

The design and development of the 2003 Women’s Sleep in the UK Survey as part of this study is unique in being the first survey in the UK which elicits information about women’s sleep in its social context. While for the purposes of this thesis, survey data were used primarily to describe the nature of women’s sleep and to identify correlations between sleep problems and age, they provide a resource for more comprehensive analysis of the relative importance of a range of social and health factors on women’s sleep. Moreover, if translated, the questionnaire would provide a basis for comparative cross-national sleep studies.

Establishing a foundation for future studies and collaboration

As a discipline, the sociology of sleep is in its infancy. This study has focused on women’s perceptions and experiences of sleep in mid-to-later life, gaining insights into men’s sleep only incidentally from the perspective of women. The study could rightly be accused, therefore, of having a female bias as well as an age bias. While the study has moved the sleep research agenda forward from its theoretical base by incorporating an empirical dimension which examines and interprets sociologically
women's own ideas, beliefs and experiences of sleep and the management of sleep disruption, at present it forms just one chapter in the story of sleep. As a foundation for future research, the thesis findings need to be complemented by other studies which consider the social context of sleep for men, women, and children, across all age groups.

Indeed this study has been the forerunner of other projects which address this imbalance by focusing on other key areas of sleep research. A current ESRC-funded project, for example, is investigating the interrelationships between the sleep patterns of couples aged between 20 and 59. The study provides insights into how sleep needs and rights are negotiated and how this changes across the life course as the relationship matures. One of the features of the project is the use of actiwatches to examine the physiological impact each partner is having on the other during sleep; thus integrating for the first time objective sleep measures with qualitative sociological data from interviews and audio sleep diaries. Other proposed sociological studies of sleep include a longitudinal study of sleep in children aged 8-11, and a study which examines the impact of young adult children on parental sleep, focussing on the intergenerational differences in the normative expectations of parental and teenage sleeping patterns. Other ideas for projects include the study of sleep in total institutions such as prisons, hospitals and nursing homes; and the study of sleep in pregnancy.

With the establishment of a special interest group (Social Science and Sleep) of the British Sleep Society (BSS) and the organisation of an inaugural sleep seminar at the University of Surrey for human scientists working in sleep research (held in June 2004), foundations have been laid for increasing the broad dissemination of research and encouraging collaborative projects. ESRC funding has recently been granted for a series of six joint seminars over the next two years which aim to critically explore the social world of sleep, and to stimulate new alliances and research agendas within

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3 ESRC funded (RES-000-23-0268): Negotiating Sleep: Gender, Age and Social Relationships amongst Couples (Arber, Hislop, Meadows, Venn)
4 Watch-like devices which measure movement
5 J. Moran-Ellis, J. Boyle, M. Barrett, M. Cropley – currently being piloted
6 PhD proposal to ESRC, S. Venn
and beyond the social sciences. These will examine diverse aspects of sleep research, including sleep, wakefulness and everyday/night life; sleep, intimacy and family life; sleep, work and time; sleep, ageing and the life course; the medicalisation and commercialisation of sleep; and art, law and the politics of sleep.

Sociological research and initiatives such as these will complement existing sleep research agendas, contributing to a broader understanding of the social structuring of sleep for both men and women across the life course, as well as highlighting the importance of a multi-disciplinary approach to understanding sleep.

15.3.2: Contribution to sleep research in general

Understanding sleep in everyday life

As shown in Part I (Chapter One), the contribution of the bio-medical sciences to an understanding of sleep physiology over the past fifty years has been extensive and provides an important reference point for the study of sleep in its social context. Yet while bio-medical science has focused on researching the micro-level processes of sleep at the level of the body, sociology extends this understanding into the social world in which sleep takes place. As this thesis has shown, it is the wider context of people’s everyday lives which plays a significant role in structuring women’s sleep patterns across the life course.

The findings of this thesis illustrate the difference between the prescriptive findings of sleep scientists working in laboratory conditions, and the descriptive realities reflected in the experiences of women in the context of their everyday lives. Thus, the focus of sleep scientists on the diagnosis and treatment of specific sleep disorders such as obstructive sleep apnoea, narcolepsy and restless legs syndrome, ignores the reality of everyday sleep disruption which affects the majority of women in this study. While from a physiological viewpoint the function of sleep may be ‘to enable us to be awake’, this thesis contends that it is the interplay of institutional and

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7 Hosted by the Institute of Health, University of Warwick and the School of Human Sciences, University of Surrey

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relational factors as women carry out their multiple social roles which may create disruption, problematise sleep and impact on quality of life.

In disregarding these social factors, the findings of sleep scientists may create a gap between ideal and reality. The recommendation of eight hours sleep as ‘normal’, for example, fails to take into account the complexities of women’s lives, where the average sleep duration, according to the 2003 Women's Sleep in the UK Survey, is 6.5 hours per night during the working week. Women’s dissatisfaction with their sleep may in part reflect a feeling of failure to achieve an unrealistic eight hour ideal of sound sleep. The recent findings of Kripke (2004, see Chapter One) which recommend a sleep duration for adults of 6.5-7.5 hours on weekdays, is perhaps a truer reflection of the reality of women's sleep and, if sustained, may create greater satisfaction with overall sleep-times of less than eight hours.

Bio-medical scientists have focused on the impact of ageing on sleep. Yet while natural scientists are concerned with the physiological ageing of sleep, this thesis explores the social ageing of sleep; the way in which life course transitions such as motherhood, divorce, the menopause, retirement and widowhood, create changes in roles and relationships which, in turn, affect patterns of sleep. Thus while the research findings of natural scientists show a fragmentation of sleep as people age, with a decline in slow wave (or deep) sleep which leads to increased problems with sleep maintenance in later life, the results of the 2003 Women’s Sleep in the UK Survey, showed that women in their fifties were more likely to experience sleep disruption than those aged 60 and over. This suggests that it may be the influence of social factors, including the competing demands of work, raising children, caring for ageing parents or partners in conjunction with physiological changes associated with the menopause and declining health in later life which may create the propensity for sleep disruption at different stages across the life course. Thus rather than being the direct result of declining slow wave sleep, disruption in later life may reflect an increased susceptibility to environmental intrusions onto sleep. Lighter sleep patterns may act as ‘windows’ onto the outside world, increasing the potential for sleep to be disrupted by factors such as noise, worries and concerns, partners, and pain. This potential may increase as women find themselves living alone in later life and
experiencing concerns for their safety. As the sleep trajectories in Part IV (Chapter Ten) show, a deterioration in sleep patterns in later life is not an inevitable outcome of physiological ageing. Rather, this deterioration must be seen in relation to the impact of the changing patterns of social roles and relationships across the life course and the extent to which women are able to respond positively to these incursions on their sleep.

The role of sociology in inter-disciplinary sleep research

The quality of women’s sleep results from the complex interplay of social, cultural, economic, psychological and physiological factors. Understanding women’s sleep thus involves putting multiple pieces of a jigsaw together. By examining women’s sleep in the context of their everyday lives, the sociological input from this research provides a key part of this puzzle. By capturing the diversity of women’s sleep experiences against a backdrop of roles, relationships, responsibilities, life events and transitions, the research provides insights into the lived experience of sleep which to date have been missing from the sleep research agenda. The study of sleep from a sociological perspective may thus provide the missing link in sleep research, acting as a complement to the work of other researchers by contributing new insights into the lived world of sleep in relation to the socio-temporal constraints of everyday life.

In the development of multi-disciplinary approaches to sleep research, such as that adopted in the EU *Sleep in Ageing Women* project on which this thesis is based, the incorporation of sociology alongside the physiological and psychological sciences will ensure that a more comprehensive picture of sleep emerges in the future. It is the realisation that each discipline has a key role to play in the future development of sleep research which is reflected in the establishment of the *Surrey Sleep Research Centre* (SSRC) at the University of Surrey in 2003. Incorporating sleep researchers from the Schools of Biomedical and Molecular Sciences (SBMS) and Human Sciences (SHS) as well as the Human Psychopharmacology Research Unit (HPRU), the SSRC aims to be a centre of excellence in the development of cross-disciplinary sleep research initiatives.
15.4 Final thoughts

Sleep is a complex and fascinating topic which gives insights into the social context of women’s lives, as well as being a resource through which to examine the gendered roles and relationships and inequalities which underpin women’s everyday realities. In examining women’s sleep, this thesis acts as a foundation for future research which may lead not only to a greater understanding of the phenomenon of sleep but to the development of practical solutions for treating everyday sleep disruption.

It is my hope that, despite the many demands on women’s lives and the inevitable disruptions, sleep can become ‘a blessed barrier between day and day’.

(Wordsworth, 1770-1850, To Sleep, http://www.netpoets.com)
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APPENDICES

Appendix A: Recruitment poster for focus groups (Stage 1)

INTERESTED IN SLEEP?

WANTED
WOMEN AGED BETWEEN 40 AND 80

What for? to take part in focus groups on the subject of sleep

Why? The Centre for Research on Ageing and Gender (CRAG) at the University of Surrey is currently conducting research on ‘Women and Sleep’. Through talking to a range of women about their sleep we hope to find out more about the quality of sleep experienced by women, how the nature of sleep affects their lives, how sleep changes with ageing, and what strategies women use to improve their sleep.

What do I have to do? take part in one informal discussion session on sleep with 6-8 women in the same age group. The sessions will take place in Oxford at dates to be fixed in May-June and will last a maximum of 1½ hours.

What’s in it for me? Two things:
* the satisfaction of contributing to sleep research
* £20 for your participation

Who should I contact? If you would like to participate, or want more information about the project, please call Jenny Hislop on (01865) 244 645, or email her on j.hislop@soc.surrey.ac.uk
Appendix B: Letter of confirmation for focus groups (Stage 1)

10 May 2001

Dear

Thank you for agreeing to participate in a focus group as part of the ‘Women and Sleep’ project being conducted by the Centre for Research on Ageing and Gender (CRAG) at the University of Surrey. The focus group sessions will help us find out more about the quality of sleep experienced by women, how the nature of sleep affects their lives, how sleep changes with ageing, and what strategies women use to improve their sleep.

The focus group session to which you are invited will be held as follows:

**Date:** Monday 4 June 2001

**Time:** 7.15pm-9.15pm

The discussion will start at 7.30pm and end at 9.00pm. However, to allow time for administration and tea/coffee, participants are asked to allow an extra 15 minutes before and after the session.

**Place:** (address)

(for directions, see attached map)

The focus group sessions will involve approximately 8 women of a similar age discussing different aspects of sleep. The discussion, led by Jenny Hislop, will be tape-recorded and later transcribed for analysis. Sharing your experiences will provide valuable insights into sleep for the project. Following the focus group your individual identity will not be revealed at any stage. At the end of the session you will be paid £20 for your participation.

The success of focus group sessions depends on participants’ attendance. If for any reason you are unable to attend the session, please call me on (01865) 244645 (day or evening) as soon as possible.

I look forward to meeting you and feel sure that you will find the focus group both informative and enjoyable.

With best wishes (signed)
Appendix C: Bio-data questionnaire for focus groups (Stage 1)

Focus group information

About you

<table>
<thead>
<tr>
<th>Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Phone (day/evening)</td>
<td></td>
</tr>
<tr>
<td>Date of birth</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married (or living as married) □</td>
</tr>
<tr>
<td></td>
<td>Separated or divorced □</td>
</tr>
<tr>
<td></td>
<td>Widowed □</td>
</tr>
<tr>
<td></td>
<td>Never married □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest educational attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current employment status</td>
</tr>
<tr>
<td>Working full time □</td>
</tr>
<tr>
<td>Working part-time □</td>
</tr>
<tr>
<td>Retired □</td>
</tr>
<tr>
<td>Not working □</td>
</tr>
<tr>
<td>If so:</td>
</tr>
<tr>
<td>Full time housewife □</td>
</tr>
<tr>
<td>Unemployed □</td>
</tr>
<tr>
<td>Disabled □</td>
</tr>
</tbody>
</table>

| If working, your occupation |
| If not working, your most recent occupation? (if applicable) |

About your family

<table>
<thead>
<tr>
<th>Who else lives in your household?</th>
<th>Husband/Partner □</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children □</td>
<td></td>
</tr>
<tr>
<td>If so, how many?</td>
<td></td>
</tr>
<tr>
<td>Ages:</td>
<td></td>
</tr>
<tr>
<td>Elderly parent/s □</td>
<td></td>
</tr>
<tr>
<td>Other relatives □</td>
<td></td>
</tr>
<tr>
<td>Tenant/s □</td>
<td></td>
</tr>
<tr>
<td>If so, how many?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ages of children not living at home (if applicable)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Husband/Partner’s current employment</th>
<th>Working full time □</th>
</tr>
</thead>
</table>
status (if applicable)  
- Working part-time □
- Retired □
- Not working □
  - If so:
    - Unemployed □
    - Disabled □

Husband/Partner’s current or most recent occupation

Your health

As women’s sleep patterns may be affected by hormonal changes at different stages of their lives, could you please tick the boxes if you:
- are still having regular periods □
- suffer from pre-menstrual tension □
- are going through the menopause □
- are post-menopausal (ie. have not had a period for at least one year) □
- are currently taking HRT □
  - if so, how long have you been taking it?
  - main reasons for taking it?
- have used HRT in the past □
  - if so, how long did you take it?
  - what were your main reasons for taking it?
  - what were your main reasons for discontinuing?
- if you are going through the menopause or are post-menopausal but are not taking HRT, what are your main reasons for this?

Future involvement in project

The Women and Sleep project is a three year project. The focus groups are the first stage of the project. At a later date, there may be opportunities for involvement in other aspects of the project eg. keeping audio sleep diaries, one-to-one interviews etc. Unlike the focus groups, however, we would be unable to pay participants. Please indicate below your possible interest in being involved in these activities. There is no commitment involved at this stage.

I would be interested in keeping an audio sleep diary □
Yes □ No □
I would be interested in a one-to-one interview □
Yes □ No □

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Appendix D: Focus group and interview guide (Stage 1)
[Note that the focus group guide was used as a basis for one-to-one interviews (Stage 1)]

Introduction: Welcome/thanks for coming. I’m Jenny Hislop from the Centre for Research on Ageing and Gender (CRAG) at the University of Surrey. We’re currently working on a project on ‘Women and Sleep’. We want to find out more about how women’s sleep patterns change as they grow older and about the effects of different sleep patterns on daily life. We also want to look at ways of preventing and treating sleep problems in women. By sharing your experiences of sleep with us, you can help us get a better picture of what actually happens when we sleep, and of how sleep, or the lack of it, affects our lives. All information you supply is strictly confidential. The results from this study may be used for publication but your comments will remain anonymous.

I’d like to start by asking you to say a few words about yourself. Things like your name, how old you are, whether you live with a partner or alone, whether you have any children at home, your job if you have one (now or before you retired).

1. Attitudes to sleep
   introduce topic with statistics:
   ‘Did you know that if you live until you’re 75 you’ll spend 25 years asleep?’
   * how does that make you feel?
   * is sleep ‘a waste of time’?
   * how important is sleep?
   * do you think we have enough time for sleep in modern society? why? why not?
   * how can our lifestyle influence how we sleep?

2. Definitions of sleep
   people often talk about their sleep by saying things like:
   ‘I slept really well last night’ or ‘I had a terrible night’s sleep’
   * what do we mean when we say we slept well? what are the features of a ‘good’ sleep?
   * what do we mean when we say we slept badly? what problems do you associate with sleeping badly?
   * what is a normal night’s sleep?
   * (show of hands) how many people sleep approximately 8 hours a night (on week-nights/weekends)? Less than 8 hours? More than 8 hours?

3. Patterns of sleep
   we’re going to look now at how you sleep at night
getting to sleep
* do you usually go to bed at the same time every night?
* what influences the time you go to bed?
* what sort of things do you do before you go to bed?
* what do you do before you go to sleep?
* how long does it usually take you to fall asleep?
* what do you think might prevent you from falling asleep quickly?
* what do you do if you can’t fall asleep in a reasonable time?

staying asleep
* do you ever wake up during the night?
* what are some of the things that make you wake up? (eg. stress, worry, husband’s snoring, own snoring, noise, pain, breathing difficulties, temperature, children etc)
* how long do you usually stay awake?
* do you get out of bed?
* what do you do to try and get back to sleep?

getting up
* what time do you usually wake up in the morning? (weekdays and weekends)
* what normally wakes you?
* how do you feel when you wake up?
* how long does it take you to get up?

special circumstances
other factors can also influence our sleep patterns

* has anyone ever worked shift work? what influence did this have on your sleep? how did you come to terms with it?
* what about jet lag? what effect does this have on your sleep? is there anything you’ve tried to minimise jet lag?

4. Sleeping as a shared experience
living with a partner or children, or caring for an elderly person can often have an impact on how we sleep (and on how they sleep, too).

* does your partner go to bed at the same time as you? if you or your partner’s out late, do you/your partner wait up and not go to sleep until they come in? what effect does this have on your sleep?
* do you have a particular side of the bed you sleep on? what happens if you change sides (eg. on holidays, because of illness etc)?
* do you or your partner read, watch TV, have the light on while the other partner is asleep/ trying to sleep? what effect does this have?
* does your partner have any annoying habits which influence your sleep? how?
* has your partner ever commented on the way you sleep? (eg. snoring, breathing, leg movements, talking in your sleep etc) how did you respond to this?
* if one of you wakes up earlier, does it wake the other? what effect does this have? what about if one of you sleeps in?
* are there any circumstances in which you would sleep in separate beds, either temporarily or permanently? why?
* whose sleep is more important in your house? how do you feel about this?
* what about your children? how do they affect your sleep? do you think our sleeping patterns are influenced by the experience of raising children? how?
* is anyone caring for an elderly relative at home? what impact does this have on your sleep?
* life experiences such as separation, divorce and bereavement can also have a significant impact on our sleeping patterns – would anyone like to comment on how their sleeping patterns and quality of sleep has been affected by any of these circumstances?

5. Sleep, women and ageing
we want to look now at women’s sleep as they age

* do you think sleep changes as we get older?
* how does it change?
* why do you think this happens?
* what are some of the things that might stop you getting a good night’s sleep as you get older?
* do you think our sleep is influenced by the hormonal changes we go through as women?
* do/did you experience any changes in your sleep during your menstrual cycle? what happens/ed?
* does/did anyone suffer from pre-menstrual tension? how does/did this affect your sleep?
* do/did the changes with the menopause cause any sleep problems (eg. hot flushes, sweating etc)?
* does/did anyone take HRT? how long have you taken it for? what is/was the main reason for taking it? how does/did this affect your sleep?
* for those who have been through the menopause, have you noticed any changes in your sleep since then?
* has anyone suffered any illness or injury that has affected their sleep? how?
* what about taking medications for complaints other than sleep? has anyone noticed any change in their sleeping patterns as a result of this?

6. Effects of poor sleep
when we don’t sleep well it may be hard to function during the day

* what effect does it have on you when you don’t sleep well? (eg. job, household activities, relationships with family, colleagues etc)
* what do you do to help you stay awake?
* do you think poor sleep can influence your overall health?
* have you ever felt drowsy while driving? what did you do?
* do you ever have a nap in the afternoon? how long do you nap for? do you find these naps helpful?
7. Sleep remedies
we’ve talked a lot so far about things that might cause us to have poor sleep but
let’s look now at what we can do about it?

* has anyone ever taken medication to help them sleep? what was it? was it
prescription or over-the-counter? how long did you take it for? did it solve the
problem? were there any side-effects?
* how do you feel about taking sleeping pills if you’re having sleeping problems?
* has anyone ever taken any herbal or alternative remedies for sleeping
problems? what were they? how long for? how successful were they in solving
the problem? any side-effects?
* what about exercise? does this help sleep? does the time of day or evening you
do exercise affect how well you sleep? what else can help you get to sleep?
* what changes can we make to our lifestyle or behaviour to help us sleep better?
* where would you look to get advice on sleep problems and possible remedies?
(eg. internet, magazines, friends, TV programs, GP etc)

8. Sleep disorders and GPs
sometimes we may need to consult our GP about a sleep problem

* what would make you go to your GP about a sleep problem?
* has anyone ever been to their GP for this? what was the problem? why did you
go to the GP? what happened? were you satisfied with the response/treatment
you got?
* has anyone ever been referred to a specialist sleep clinic about a sleep problem?
tell us about your experience
Appendix E: Email and flyer to Quality Fieldwork 12/09/03 for focus group recruitment (Stage 2)

Email:

Dear Trudy

Further to our conversation/emails in early June, I'd like to confirm arrangements for Quality Fieldwork to recruit participants for five focus groups as follows:

1. five focus groups, one each for ages 40-47, 48-52, 53-59, 60-69, 70 and over (NB age groups differ from earlier email) (cost as quoted £290 per group, total £1450 including hosting)

2. each focus group to comprise 8 participants and to reflect a cross-section of the population 3. each session to be 1.5 hours in length, including admin time to fill in questionnaires etc

3. all sessions will be tape-recorded and later transcribed by the researcher for analysis (is recording equipment available?)

4. sessions to be held on-site at Quality Fieldwork (cost for room hire as quoted by phone £30 per hour, total £225)

5. refreshments (coffee, tea, water, biscuits etc) to be provided by OF (cost quoted by phone £15 per group; total £75)

6. participants will receive an incentive of £20 cash for their participation (to be provided by researcher at end of focus group)

7. transport expenses where required by elderly participants to be passed on at cost (receipts required)

Assuming that focus groups for the younger age groups (under 60) will be held in the evening, and those for the older age groups (60 and over) during the day, I'd like to hold sessions as follows. Could you please let me know if these dates/times are appropriate given room availability etc?

FG1 Wednesday 5 November (evening) -7-8.30pm
FG2 Thursday 6 November (morning) -10-11.30am
FG3 Thursday 6 November (evening) -7-8.30pm
FG4 Monday 10 November (evening) -7-8.30pm
FGS Tuesday 11 November (morning) -10-11.30am

Attached is a flyer giving information about the project which your staff can use in recruiting participants.

I will need to stay overnight in Birmingham on 5, 6, 10 November. Can you suggest a reasonably priced hotel with easy access to the venue where focus groups will be held?

Should you need any further information, please email or call me on (01865) 244645. I look forward to hearing from you to confirm these arrangements.

Best wishes (signed)
INTERESTED IN SLEEP?

WANTED

WOMEN AGED 40 and over

What for? to take part in focus groups on the subject of sleep

Why?
The Centre for Research on Ageing and Gender (CRAG) at the University of Surrey is currently conducting research on ‘Women and Sleep’. Through talking to a range of women about their sleep we hope to find out more about the quality of sleep experienced by women, how their daily lives affect their sleep, how sleep changes with ageing, and what strategies women use to improve their sleep. We want to talk to all types of women, regardless of whether they have good sleep or bad.

What do I have to do? take part in one informal discussion session on sleep with 8 women in the same age group. The sessions will take place in Birmingham at dates to be fixed in November and will last a maximum of 1½ hours.

What’s in it for me? Two things:
* the satisfaction of contributing to sleep research
* £20 for your participation
Appendix F: Focus group guide (Stage 2)

Aims:

- to evaluate the different treatment strategies for sleep disruptions among ageing women
- to make recommendations for the use of different strategies for sleep problems in ageing women

Arrival of participants:
Each group is due to arrive 10-15 minutes before the start of the session and will be looked after in a separate room by a hostess. They will be offered refreshments before and during the session. Check list of attendees with hostess. Ask participants to write their first name on a name tag to help identification during the session.

Introduction:
Welcome/thanks for coming. I’m Jenny Hislop from the Centre for Research on Ageing and Gender (CRAG) at the University of Surrey. This is my colleague Rob Meadows/Sue Venn. We’re currently working on a project on women’s sleep and talking to a range of women aged 40 and over like you throughout the UK. We’re hoping to build up a better picture of how your lives affect your sleep (and vice versa), what sort of problems you face, and what you do when you can’t sleep. This will help sleep researchers develop better treatments for sleep problems.

In the next hour we’re going to discuss sleep. I’ll guide the discussion by asking you some questions. Please feel free to comment, or not. As we’re taping the session, please speak clearly. After the session, the tapes will be transcribed so that we can analyse more carefully what you are telling us about your sleep. All information you supply is strictly confidential. The results from this study may be used for publication but your comments will remain anonymous.

Before we start, are there any questions?

[Start tape; this is important as a source of voice identification for the transcriber and as background information on participants] I’d like to start by asking you to say a few words about yourself. Things like your name, how old you are, whether you live with a partner or alone, whether you have any children, and your job if you have one. I’d also like you to complete the sentence ‘My sleep is ...............’ [Have these points on flip chart as prompt]

Possible themes and probes:

[These are suggestions for the main areas to be covered during the session. How they are approached and elaborated on is dependent on the group]
The importance of good sleep

- What is ‘a good night’s sleep’? (scribe responses)
- How important is good sleep to you? Why?
- What stops you having a good night’s sleep? (scribe responses)
- How do you feel when you haven’t slept well?
- How does this affect your daily activities?

The sleeping environment

- In a perfect world, how would you organise your bedroom to ensure you have a good night’s sleep? – probe: mattress, lighting, position of bed, windows open/shut, side of bed, sleeping with/without partner
- Now, in your real world, how does your sleeping environment differ from this?
- How does this affect you?
- Why don’t you change things?

Self-help strategies: pre-bed rituals

- You’re all experts on sleep. You’ve been practising for a long time. What are some of things you’ve found useful before going to bed to help you sleep? (scribe in one column)
- Why do you think they work?
- What about the things you do before bed that don’t help you sleep? (scribe beside first list)
- Why do you think they don’t work?

Self-help strategies during the night

- When you can’t sleep at night, what are some of the things you do to try and get to sleep? (scribe responses)
- Do these things work?
- What else could you try?
- Why don’t you? (constraints)

Sleeping apart [if not already raised]

- (if partnered): Have you ever slept apart from your partner to help your sleep?
- Under what circumstances?
- How did you feel about this?
- (those who don’t move) Why wouldn’t you consider sleeping apart?
OTC products

- Have you ever bought any products from Boots or other chemists to help you sleep? (scribe responses)
- How did you hear about these products?
- Did they work?
- Would you recommend it to others? Why/Why not?
- If you've never tried any of them, why not?
- Would you try........? Why/why not?

Alternative therapies

- Has anyone ever tried alternative therapies (eg. massage, relaxation tapes, acupuncture, reflexology, aromatherapy, yoga etc) to help them sleep?
- How did you find out about this therapy?
- Did it help you sleep?
- Would you recommend it to others? Why/Why not?
- How does everyone else feel about these therapies?

Medical intervention

- Have you ever been to the GP about a sleep problem? Give details.
- Do you think GPs can help with your sleep problems? Why/why not?
- Have you ever taken sleeping pills? How long for?
- Did they work?
- How did you feel about taking sleeping pills?
- How does everyone else feel about sleeping pills?
- Has anyone ever been diagnosed with a sleeping disorder (eg. OSA, narcolepsy)? Give details.
- How were you treated?
- Was the treatment successful?

Advisory panel

[this provides an opportunity for participants to summarise the session]

- What recommendations can you make to women to help improve their sleep? (scribe responses)
- What products/therapies should women try if self-help strategies fail?
- What warnings would you give them?

Closing session:

- Thank participants for their attendance.
- Ask them to complete 2003 Women’s Sleep in the UK Survey.
• When finished, ask them to complete details and sign receipt form.
• Hand out envelopes with £20.
• Collect receipts for those who’ve used taxis and refund costs.
• Tidy up room etc
• Debrief over dinner/ lunch and a glass of wine (ie. facilitators).
Appendix G: Letter to GPs requesting interview

Dear Dr .......

Dr ....... has suggested I contact you in relation to an EU-funded research project I am conducting for the Centre for Research on Ageing and Gender (CRAG) at the University of Surrey. The project, ‘Women and Sleep’, aims to increase our understanding of women’s experiences of sleep as they grow older and to identify ways of preventing and treating sleep problems in women. It will examine how patterns of sleep change with age, the kind of sleep problems common among women, how these problems affect their lives, and what strategies and treatments they use to overcome them.

As part of this research I propose to interview a number of GPs in the Oxford area (where I am resident) to gain insights from their experience into the extent and nature of sleep problems in women between the ages of 40 and 80, how these problems are managed, and sources of referral available. Interviews will be short (maximum 30 minutes in length) and designed to fit in with your schedule. Dr ......, whom I have already interviewed, felt that you may be able to give another perspective on the subject.

If you are willing to participate in this research, could you please contact me on (01865) 244645 as soon as possible to arrange a suitable interview time.

With best wishes

Jenny Hislop
Research Fellow
Centre for Research on Ageing and Gender
University of Surrey
Appendix H: GP interview guide

1. Sleep and health
   * in terms of overall health, how important do you think sleep is?
   * what do we mean by ‘good’ sleep?
   * what problems do we associate with ‘bad’ sleep?
   * what is ‘normal’ sleep?
   * how widespread do you think sleep problems are in modern society?
   * what are the main causes of sleep loss?

2. Sleep and consultation
   * do many of your women patients complain of sleep problems? what problems do they present with?
   * what factors might contribute to these problems?
   * how do they initiate discussion on their sleep problems?
   * under what circumstances would you initiate discussion of sleep problems with a woman patient?
   * what questions would you ask to find out the nature of the problem?
   * to what extent do sleep problems mimic the symptoms of other illnesses eg. depression? how do you differentiate? does this make diagnosis of sleep problems difficult?
   * what treatments would you prescribe for sleep problems (prescription, over-the-counter, alternative remedies, behavioural changes)? how successful are these in overcoming the problem? what are the side effects?
   * what other treatments are commonly used by women with sleep problems? what is your opinion of these?
   * under what circumstances would you refer a patient to a sleep specialist? what is the procedure for this? which clinics do you send them to?
   * what sort of treatment is available? how effective is it?

3. Women and sleep
   * to what extent do you think women’s sleep problems are regulated by hormonal changes eg. menstrual cycle, menopause, postmenopause?
   * what percentage of your patients over 40 take HRT? at what stage do they begin treatment? how long do they take it for? how effective is it in relieving sleep problems associated with the menopause?

4. Sleep and ageing
   * is there any increase in the incidence of sleep problems in women over 60?
   * what factors could explain this?
   * what sleep problems are common with this age group?
   * what treatments are available?
   * what factors do you have to take into account when prescribing medication for this age group?

5. Training in sleep
   * how do you keep up-to-date with the latest developments in sleep medicine? * what training do medical students receive in sleep problems?
   * what about continuing education programs for GPs?
Appendix I: Audio sleep diary guide

Dear Participant

Thanks for agreeing to record an audio sleep diary as part of the Women and Sleep project. This will involve recording a brief summary of your sleep as soon as possible after you get up each morning for a period of 7 days. The following notes provide a guide to the sort of information you may include, but feel free to record any points about your experiences of sleep or other factors, now or in the past, which may influence your current sleep patterns.

Please complete the attached information sheet (*bio-data as per Appendix C*) and return with your completed sleep diary.

Notes:

At the beginning of the tape please record your name and age.

For each diary entry:

- day/date
- how you slept last night rated on a scale of 1-5 (1 = very poor sleep, 3 = average sleep, 5 = very good sleep)
- time you went to bed last night, woke up, and got up this morning
- quality of your sleep last night eg. whether you went to bed/woke up/got up earlier or later than usual, how long it took you to fall asleep, whether you slept soundly or lightly, how often you woke up and at what time, what woke you, how long you stayed awake, what you did while awake, degree of restlessness during the night (eg. snoring, kicking, tossing and turning etc), dreams etc
- strategies/medications (if any) you used to help you get to sleep and stay asleep
- factors that may have influenced the way you slept last night eg. difficulties or stress during the day; exercising, eating, or drinking alcohol or caffeine close to bedtime; medications; disturbances during the night (eg. noise, physical discomfort, aches and pains, temperature etc); napping during the previous day
- (if applicable) the influence of hormonal factors on your sleep (eg. periods, premenstrual tension, menopausal symptoms such as hot flushes etc)
- (if applicable) the influence of your partner on your sleep (eg. different bed times, reading/ watching TV in bed, snoring, sleep disturbances etc)
- (if applicable) any comments your partner made about your sleep
- how you woke up this morning (eg. naturally, alarm clock, etc), effects of this
- how you felt when you woke/ got up
- any other information you feel might be relevant or interesting about your sleep

When you have completed your audio sleep diary, please phone Jenny Hislop on (01865) 244645. Thank you for your participation. (signed)
Appendix J: 2003 Women's Sleep in the UK Survey questionnaire

(original attached)
Women’s Sleep in the UK

What’s this about?
The University of Surrey is currently conducting a major research project on women’s sleep in the UK. We want to find out:

1. the quality of women’s sleep
2. how different aspects of women’s lives affect their sleep
3. what women do to improve their sleep

Why have I been chosen?
We are asking a representative sample of women throughout the UK to tell us about their sleep. You have been selected as one of these women. Your views and experiences are extremely important to us.

What do I have to do?
Just fill in the questionnaire by following the instructions given for each question. It will take you no more than 15 minutes. If you’re unsure about how to answer a question, please give the answer that best reflects the way you feel. The information you give will remain anonymous and will be strictly confidential. If you have any queries about the research or the questionnaire, please contact Sue Venn by phone on (01483) 683966, or by email at s.venn@soc.surrey.ac.uk

What do I do when I’ve filled out the questionnaire?
Please return the questionnaire as soon as possible in the pre-paid envelope provided (no stamp required).

IF YOUR COMPLETED SURVEY IS AMONG THE FIRST TEN RECEIVED, YOU WILL BE SENT A £10 MARKS & SPENCER VOUCHER.

Thank you very much for taking the time to participate in the survey of Women’s Sleep in the UK.
1. **How would you **describe** the overall quality of your sleep?**
   - very good 1
   - good 2
   - fair 3
   - poor 4
   - very poor 5

2. **How satisfied are you with the overall quality of your sleep?**
   - very satisfied 1
   - satisfied 2
   - dissatisfied 3
   - very dissatisfied 4

3. **When do you usually go to bed?**
   - (a) on weekdays? __•__ am/pm
   - (b) on weekends? __•__ am/pm

4. **When do you usually get up?**
   - (a) on weekdays? __•__ am/pm
   - (b) on weekends? __•__ am/pm

5. **How long overall do you usually spend asleep at night?**
   - (a) on weekdays? __hrs __mins
   - (b) on weekends? __hrs __mins

6. **Do you consider yourself to be a ‘morning’ person or an ‘evening’ person?**
   - definitely a ‘morning’ type 1
   - more a ‘morning’ than an ‘evening’ type 2
   - more an ‘evening’ than a ‘morning’ type 3
   - definitely an ‘evening’ type 4
   - neither a ‘morning’ nor an ‘evening’ type 5
   - don’t know 6

7. **Do you ever have problems sleeping?**
   - never 1
   - seldom 2
   - sometimes 3
   - often 4
   - all the time 5

8. **Have you experienced a problem sleeping in the past week?**
   - yes 1
   - no 2
9. During the past 12 months, have you experienced any overall changes in the quality of your sleep?  
*<Please circle one number only>*

10. How often do you ......  
*<Please circle one number on each line>*

<table>
<thead>
<tr>
<th>a</th>
<th>have difficulty falling asleep at night?</th>
<th>never</th>
<th>less than once a week</th>
<th>1-2 times a week</th>
<th>3-5 times a week</th>
<th>6-7 times a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>wake up several times during the night?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>have disturbed, restless sleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d</td>
<td>wake up too early, unable to get back to sleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e</td>
<td>have difficulty waking up?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f</td>
<td>wake up feeling tired and unrefreshed?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g</td>
<td>feel sleepy during the daytime?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. When you have had poor or disturbed sleep, how has this affected your daytime ......  
*<Please circle one number on each line>*

<table>
<thead>
<tr>
<th>a</th>
<th>ability to concentrate?</th>
<th>no effect</th>
<th>mild effect</th>
<th>moderate effect</th>
<th>severe effect</th>
<th>don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>ability to keep awake?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>mood?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d</td>
<td>energy levels?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e</td>
<td>stress and anxiety levels?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f</td>
<td>relationships with people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g</td>
<td>appearance?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>h</td>
<td>appetite?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### Influences on your sleep

**12** How often do the following factors disturb your sleep?  
*<Please circle one number on each line>*

<table>
<thead>
<tr>
<th>Factor</th>
<th>never</th>
<th>less than once a week</th>
<th>1-2 nights a week</th>
<th>3-5 nights a week</th>
<th>6-7 nights a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>a pets</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b light <em>(inside or outside)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c street noise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d lodgers or neighbours</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>e work-related stress</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f concerns about your family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g concerns about your relationships with others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h concerns about your safety</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i concerns about money</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j concerns about your future</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>k feelings of loneliness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**13** How often is your sleep disturbed during the night by .....  
*<Please circle one number on each line>*

<table>
<thead>
<tr>
<th>Disturbance</th>
<th>never</th>
<th>less than once a week</th>
<th>1-2 nights a week</th>
<th>3-5 nights a week</th>
<th>6-7 nights a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>a getting up to go to the toilet?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b feeling too hot?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c having cold feet?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>d bad dreams?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>e leg cramps?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f creeping sensations in your legs that make you want to move around?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
14  How often do the following conditions disturb your sleep?  
<Please circle one number on each line>

<table>
<thead>
<tr>
<th>Condition</th>
<th>never</th>
<th>less than once a week</th>
<th>1-2 nights a week</th>
<th>3-5 nights a week</th>
<th>6-7 nights a week</th>
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<tbody>
<tr>
<td>a stress</td>
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<td>5</td>
</tr>
<tr>
<td>b depression</td>
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<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>c headaches</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d coughing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>e breathing difficulties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f heart problems/palpitations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g pain from arthritis, backache, etc</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

15  Sleep may be influenced by other people in your household. Who else usually lives in your household?  
(Please circle one number only)

<table>
<thead>
<tr>
<th>No one</th>
<th>1</th>
<th>Go to Q21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husband/partner only</td>
<td>2</td>
<td>Go to Q18</td>
</tr>
<tr>
<td>Husband/partner and children</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Children only</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Other &lt;Please specify&gt;</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<Please answer Q16 and Q17 if CHILDREN UNDER 25 usually live in your household.

16  How old are the CHILDREN in your household?  
<Please write their ages in these boxes>

17  How often is your sleep disturbed by CHILDREN ......
<Please circle one number on each line>

<table>
<thead>
<tr>
<th>Condition</th>
<th>never</th>
<th>less than once a week</th>
<th>1-2 nights a week</th>
<th>3-5 nights a week</th>
<th>6-7 nights a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>a sleeping in your bed?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b crying or calling for you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c coming into your room?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d playing loud music/using the internet/watching TV?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e coming home late?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f playing/moving around the house?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
How would you describe your usual sleeping arrangements? 

1. Sleep with husband/partner (in same bed) 
2. Sleep with husband/partner in the same room (not in same bed) 
3. Sleep alone (husband/partner sleeps in another room) 

How often is your sleep disturbed by your husband/partner? 

Please answer Q19 even if your husband/partner sleeps in a different bed or a different room.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Less than once a week</th>
<th>1-2 nights a week</th>
<th>3-5 nights a week</th>
<th>6-7 nights a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading with the light on?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Watching TV/listening to music/radio?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Coming to bed late?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sleeping restlessly?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Snoring?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Going to the toilet?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Wandering around the house?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Getting up early?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Waking you up to have sex?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Waking you up to talk?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Waking you up to stop you snoring, tossing, or turning?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Do YOU ever move to another room when your husband/partner is disturbing your sleep? 

Do YOU ever move to another room when you think YOU are disturbing your husband/partner’s sleep? 

Please answer Q20 if you and your husband/partner share the same room, either in the same bed or separate beds.
### Managing your sleep

#### 21 Do you do any of the following activities immediately BEFORE going to bed? If YES, is it effective in helping you sleep?

*<Please circle one number on each line>*

<table>
<thead>
<tr>
<th>Activity</th>
<th>No don't do this activity</th>
<th>Yes effective</th>
<th>Yes partly effective</th>
<th>Yes not effective</th>
<th>Yes don’t know if effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>a read</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b watch TV/listen to music/radio</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d exercise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e have a bath/shower</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f have something to eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g have a hot drink</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h drink alcohol</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i have sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j practise relaxation techniques (eg. deep breathing, meditation, thinking pleasant thoughts, yoga, massage)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

#### 22 Do you do any of the following activities to help you get back to sleep when you wake up DURING THE NIGHT? If YES, is it effective?

*<Please circle one number on each line>*

<table>
<thead>
<tr>
<th>Activity</th>
<th>No don't do this activity</th>
<th>Yes effective</th>
<th>Yes partly effective</th>
<th>Yes not effective</th>
<th>Yes don’t know if effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>a read in bed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b watch TV/listen to music/radio in bed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c have sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d get up and do something (eg. read, watch TV)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e get up and have something to eat or drink</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f practise relaxation techniques (eg. deep breathing, meditation, thinking pleasant thoughts, yoga, massage)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
23. Have you tried any of the following products to improve your sleep? If YES, was it effective?

*Please circle one number on each line*

<table>
<thead>
<tr>
<th>Product</th>
<th>No not tried</th>
<th>Yes effective</th>
<th>Yes partly effective</th>
<th>Yes not effective</th>
<th>Yes don't know if effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) over-the-counter products</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(eg. Sleepeaze, Kalms, Nytol, Valerian etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) paracetamol</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c) antihistamines</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d) melatonin</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e) homeopathic remedies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f) herbal teas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g) lavender pillows</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h) relaxation tapes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

24. (a) Have you ever taken prescription sleeping pills?

*Please circle one number only*

| Yes | 1 | Go to Q25 |
| No  | 2 |          |

(b) When was the last time you took them?

*Please circle one number only*

| in the past month | 1 |
| 1-12 months ago   | 2 |
| 1-5 years ago     | 3 |
| more than 5 years ago | 4 |

(c) Were they effective in improving the quality of your sleep?

*Please circle one number only*

| very effective | 1 |
| effective      | 2 |
| somewhat effective | 3 |
| not at all effective | 4 |
| don't know/can't remember | 5 |

25. (a) How often do you take a nap during the day?

*Please circle one number only*

| almost every day | 1 |
| 3-5 times a week | 2 |
| once or twice a week | 3 |
| rarely or never  | 4 | Go to Q26 |

(b) How long do you usually nap for?

*Please circle one number only*

| less than 20 minutes | 1 |
| between 20 minutes and one hour | 2 |
| more than one hour | 3 |

(c) When you wake up from your nap, how do you usually feel?

*Please circle one number only*

| about the same as before | 1 |
| better than before       | 2 |
| worse than before        | 3 |
26 During the past 12 months, how would you rate your HEALTH overall?  
*Please circle one number only*  
very good 1  
good 2  
satisfactory 3  
poor 4  
very poor 5

27 During the past 12 months, have you experienced any overall changes in the following aspects of your LIFE?  
*Please circle one number on each line*  

<table>
<thead>
<tr>
<th></th>
<th>no change</th>
<th>it has improved</th>
<th>it has got worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>your physical health</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b</td>
<td>your emotional health</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c</td>
<td>your family life</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d</td>
<td>your work life</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

28 (a) What is your menopausal status?  
*Please circle one number only*  
pre-menopausal (regular periods) 1  
pre-menopausal (irregular periods) 2  
going through the menopause (periods becoming irregular or recently ceased) 3  
post-menopausal (have not had a period for more than a year) 4

Please answer (b) if you are currently going through the menopause or if you are post-menopausal:

(b) Do/did menopausal symptoms affect your sleep?  
*Please circle one number only*  
no effect 1  
mild effect 2  
moderate effect 3  
severe effect 4  
don’t know/can’t remember 5

29 (a) Have you ever taken Hormone Replacement Therapy (HRT)?  
*Please circle one number only*  
yes, currently taking HRT 1  
yes, have taken HRT in the past but not taking it now 2  
no, have never taken HRT 3

(b) If YES, does/did HRT affect your sleep?  
*Please circle one number only*  
no effect on sleep 1  
improved sleep 2  
sleep got worse 3  
don’t know/can’t remember 4

30 During the past 12 months, have you consulted a GP about any problems with your sleep?  
*Please circle one number only*  
yes 1  
no 2
31 Have you ever been diagnosed by a doctor as suffering from ......

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a sleep apnoea?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b narcolepsy?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c restless legs syndrome?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d insomnia?</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

32 (a) Do you currently smoke cigarettes? yes 1

<Please circle one number only>

no 2

(b) If YES, how many cigarettes do you smoke a day?

<Please circle one number only>

less than 10 a day 1

10-19 a day 2

20 or more a day 3

33 How many cups of coffee do you usually drink each day?

<Please circle one number only>

none 1

1-3 cups 2

4 or more cups 3

34 How many standard units of alcohol do you usually drink each week?

<1 unit of alcohol = half pint of beer, or glass of sherry, or glass of wine, or single measure of spirits>

<Please circle one number only>

none 1

1-4 units a week 2

5-14 units a week 3

15 or more units a week 4

The questions in this section are important for understanding how sleep varies for different women.

35 How old were you last birthday?

<Please write your age in the box>

36 What is your marital status?

<Please circle one number only>

married 1

living with a partner (not married) 2

separated or divorced 3

widowed 4

never married 5

37 How many children have you ever had?

<Please circle one number only>

none 0

one 1

two 2

three 3

four or more 4
38 What is your HIGHEST educational qualification?  
(Please circle one number only)  
- degree or higher degree 1  
- professional qualifications (e.g. nursing/teaching etc) 2  
- A-levels (or equivalent) 3  
- O-levels (or equivalent) 4  
- clerical or commercial qualifications (e.g. secretarial, hairdressing) 5  
- no qualifications 6  
- other <Please specify> 7

39 Which of the following types of HOUSING applies to you?  
(Please circle one number only)  
- own house/flat outright 1  
- own house/flat with mortgage 2  
- rent on private market 3  
- rent from local authority or housing association 4  
- other <Please specify> 5

40 Which of the following best describes your annual HOUSEHOLD income BEFORE tax?  
(Please circle one number only)  
- Under £5000 1  
- £5000-£9,999 2  
- £10,000-£14,999 3  
- £15,000-£19,999 4  
- £20,000-£24,999 5  
- £25,000-£29,999 6  
- £30,000-£39,999 7  
- £40,000-£59,999 8  
- £60,000 and above 9

41 Are you CURRENTLY in paid employment?  
(Please circle one number only)  
- yes, full time 1  
- yes, part-time 2  
- no 3

42 If you are currently NOT IN PAID EMPLOYMENT, what is the main reason for this?  
(Please circle one number only)  
- looking after the family/home 1  
- retired 2  
- unemployed 3  
- long-term sick/disabled 4  
- other <Please specify> 5

<Please answer Q43 and Q44 in relation to your CURRENT paid employment. If not currently in paid employment, answer according to your MAIN paid job during your working life>

43 (a) Are/were you working as an employee or are/were you self-employed?  
(Please circle one number only)  
- employee 1  
- self-employed 2

(b) What is/was your job title?  
(If you have/have had more than one job, please give the title of your MAIN job)  
(Please write your answer in the space provided)

(c) Briefly describe what you do/did in your job.  
(Please write your answer in the space provided)
Have you ever done shift work?

- Yes, I’m currently doing shift work
- Yes, I did shift work in the past but not at present
- No, I’ve never done shift work

If you are currently MARRIED or LIVING WITH A PARTNER, please answer Q45 to Q47. If not, go to Q48.

Is your husband/partner CURRENTLY in paid employment?

- Yes, full time
- Yes, part-time
- No

If they are currently NOT IN PAID EMPLOYMENT, what is the main reason for this?

- Looking after the family/home
- Retired
- Unemployed
- Long-term sick/disabled
- Other

Please answer Q47 in relation to your husband/partner’s CURRENT paid employment. If not currently in paid employment, answer according to their MAIN paid job during their working life.

(a) Is/was your husband/partner working as an employee or are/were they self-employed?

- Employee
- Self-employed

(b) What is/was their job title?

(If your husband/partner has/had more than one job, please give the title of their MAIN job)

(c) Briefly describe what they do/did in their job.

Please write in the box anything else you would like to tell us about your sleep.

PLEASE CHECK THAT YOU HAVE ANSWERED ALL RELEVANT QUESTIONS.

RETURN YOUR QUESTIONNAIRE IN THE PRE-PAID ENVELOPE PROVIDED (NO STAMP REQUIRED).

THANK YOU FOR YOUR PARTICIPATION IN THE ‘WOMEN’S SLEEP IN THE UK’ SURVEY.
Appendix K: Survey: First follow-up letter

(Personally addressed to each non-respondent)

Women’s Sleep in the UK Survey

15 minutes is all it will take

A couple of weeks ago we sent you a questionnaire asking about your sleep. Your views are very important to us to ensure our research accurately reflects the experiences of British women.

If you have returned the questionnaire already, thank you.

If not, please fill it in now and return it in the reply paid envelope we provided (no stamp required).

If you need another questionnaire or reply paid envelope, or more details about the survey, please call Sue Venn on

We look forward to receiving your completed questionnaire.
Appendix L: Survey: Second follow-up letter

(Letterhead)

(Personally addressed to each non-respondent)

Women’s Sleep in the UK Survey

In the Autumn we sent you a questionnaire as part of our pioneering national study of women’s sleep in the UK. Your views are very important. For our research to reflect accurately the experiences of British women we need you to fill in the enclosed questionnaire, even if you have no problems with your sleep.

By completing the questionnaire you can help build a better picture of what affects the quality of women’s sleep, how sleep impacts on women’s lives, and how women respond to sleep disturbances.

Perhaps you have already returned the questionnaire. If so, thank you. If not, we would greatly appreciate it if you could complete the enclosed questionnaire and return it in the REPLY PAID envelope provided (no stamp required) as soon as possible. The first ten completed questionnaires received in response to this letter will be sent a £10 Marks & Spencer voucher.

If you need help completing the questionnaire or require further information, please call Jenny Hislop on (01483) 689292, or email j.hislop@soc.surrey.ac.uk. If for some reason you do not wish to complete the questionnaire, please return it in the envelope provided.

We look forward to receiving your completed questionnaire and thank you for taking the time to contribute your views to the survey of Women’s Sleep in the UK.

Yours sincerely

Professor Sara Arber
Head of School of Human Sciences
University of Surrey

Jenny Hislop
Research Fellow
School of Human Sciences
University of Surrey