

## **Abstract**

Excessive alcohol consumption increases the likelihood of accidental injury. This pilot study reports on the prevalence of hazardous drinkers presenting to a Minor Injuries Unit. The proportion of hazardous drinkers is broadly similar to that found in Emergency Departments, suggesting that such units could also host alcohol intervention and brief advice activities.

## **Introduction**

The latest report from the WHO suggests that in the UK population aged 15+, 6.42% of males and 1.52% of females experience alcohol related harms[1], mostly due to accidental injury. There is an exponential relationship between alcohol dose and likelihood of injury[2]. With up to 70% of patients presenting to the Emergency Department (ED) identified as hazardous drinkers[3] it is an ideal location for alcohol intervention and brief advice (IBA)[4].

Approximately 20% of ED presentations are classified as minor injuries[5], thus Minor Injuries Units (MIU) have been developed to reduce ED workload. These offer rapid treatment to patients with less serious injuries, are staffed by Emergency Nurse Practitioners (ENP) and have restricted opening hours. ENPs are more likely than doctors to offer health related advice and information to patients[6], and as such the MIU has potential as an alternative location for alcohol IBA. Therefore this pilot study set out to determine the prevalence of hazardous drinking among patients attending a MIU and to explore the attitudes of the ENPs towards alcohol IBA.

## **Methods**

An independent researcher collected data from patients presenting to a Minor Injuries Unit based at a major London hospital. Patients under 16 years old, those who were awaiting transport to the Main ED, any patient who was unable to read or understand English and those who had already participated in the study were excluded. Over a four week period patients in the waiting area were approached and given a Patient Information Sheet explaining the nature of the study. Consenting patients then completed the Paddington Alcohol Test (PAT)[7] and provided details about age, gender, previous ED attendance and the nature of their presentation to the MIU. Patients consuming at least double the DoH daily recommended units[8] (8+ for males, 6+ for females) on one or more occasion per week, or who admitted their attendance was related to alcohol consumption were identified as hazardous drinkers and offered written advice. After all data had been collected, ENPs completed a questionnaire examining their attitudes towards alcohol IBA and exploring issues surrounding its' implementation in the MIU.

Participation in the study was voluntary and no personal identifiable data were collected. The study protocol was approved by the Kings College London REC.

## **Results**

During the study period approximately 1000 patients attended the MIU, 315 were approached and 192 (61%) consented to participate (114 male, 78 female). Three quarters of all participants (76%) presented to the MIU following an accident. Most participants admitted to drinking alcohol (71.9%), with almost half (49.0%) consuming at least double the recommended daily unit allowance in a single session, and one third doing so on one or more occasion per week (34.9%), in addition 10 patients attributed their MIU visit to be related to their drinking (5.3%). Overall 69 participants were identified as hazardous drinkers (35.9%), however of these, just 3.3% accepted the offer of help or advice.

Hazardous drinkers tended to be younger (31.0 vs 36.5,  $t=-2.68$ ,  $df=186$ ,  $p=0.008$ ) and male (41.2% vs 28.2%,  $\chi^2=3.41$ ,  $df=1$ ,  $p=0.06$ ), with males drinking significantly more alcohol per occasion than females (8.9 units vs 5.3,  $t=3.35$ ,  $df=190$ ,  $p=0.001$ ). There were no significant associations between hazardous drinking status and presenting to the MIU as a result of an accident or having presented to the ED on more than one occasion in the preceding 12 months.

To determine what factors predict hazardous drinking status among participants, we conducted a regression analysis. The results in Table 1 show that age is the only significant predictor.

**Table 1 Interaction between age, gender, repeat ED attendance and hazardous drinking status adjusted for potential confounders**

Variable	Univariate model	Adjusted for potential confounders
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	<b>B</b>	<b>95% CI</b>	<b>B</b>	<b>95% CI</b>
<b>Age in years</b>	-0.19	-0.01 to -0.002*	-0.19	-0.01 to -0.001**
<b>Gender</b>	-0.13	-.03 to 0.008	-0.13	-0.26 to 0.02
<b>Repeat ED attendance</b>	-	-	-0.01	-0.17 to 0.15
<b>Accident</b>	-	-	-0.08	-0.25 to 0.08

\* $p=0.008$ , \*\* $p=0.01$

Four of the twenty five ENPs based in the unit completed the questionnaires (16%) commenting that that the MIU was not an appropriate location for alcohol IBA, that there was a lack of time available for such activity and that patient's are likely to respond negatively to being asked questions about their alcohol use.

## **Discussion**

The prevalence of hazardous drinking among patients presenting to the MIU is similar to that of the general ED population [3,9] with those aged under 36 years significantly more likely to be identified as drinking at a level whereby they would benefit from help or advice. Interestingly very few participants accepted such an offer, and the reasons for this remain unclear, although this may be related to the low numbers of hazardous drinkers who associated their MIU attendance with their alcohol consumption. However, the prevalence of hazardous alcohol consumption is such that the MIU should be considered alongside EDs as an appropriate location to identify and intervene with patients whose drinking places them at risk of future harm. The low rate of response from practitioners is partly explained by absence at the time of the study (6/25), and we suggest that others may have resulted from clinical inertia. Clearly the ENPs involved in this study had a low level of interest in alcohol IBA

therefore we suggest that lessons learnt about effective implementation in the ED; the provision of training linked to evidence based practice, and the definition of a clear role for nursing staff [10], could and should be applied in the MIU setting.

Competing Interest: None to declare.

#### Reference List

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