



From Dr A majid Katme

One Quarter Of Admissions To Scottish

A quarter of patients admitted to Scottish intensive care units have alcohol problems and the majority of those have chronic alcohol disease, with particular problems among men and younger people.

Those are key findings of a survey of all 24 Scottish intensive care units, carried out by the Scottish Intensive Care Audit Group and published online early by *Anaesthesia*, ahead of inclusion in an issue.

"Alcohol disease adversely affects the outcome of critically ill patients and the burden of this in Scotland is higher than elsewhere in the UK" says co-author Dr Timothy Geary, Anaesthetic Registrar at the Victoria Infirmary in Glasgow.

"Our study of 771 patients admitted to intensive care units in Scotland showed that a quarter of admissions were alcohol related and that nearly three quarters of those affected were male.

"Patients with alcohol problems tended to be significantly younger and admissions from deprived areas of the country were also more likely to be alcohol related. Patients with alcohol problems also needed to be mechanically ventilated for longer. We estimate that, overall, alcohol related admissions cost intensive care units across Scotland £9 million a year."

The World Health Organization suggests that alcohol consumption now accounts for 3.2% of global death rates and 4% of the global ill health. Annual alcohol consumption has grown steadily in the UK, from five litres of pure alcohol per head of population in 1963 to ten litres in 2006.

This rise has been associated with increasing deaths and ill health. Between 1992 and 2008, deaths directly caused by alcohol almost doubled in the UK, from 6.9 to 12.8 per 100,000 people. Death rates in Scotland were particularly high for men during this period, with an average of 63.1 per 100,000 and up to 105 per 100,000 in some parts of the country.

A recent review re-examined the 2003 mortality figures in Scotland and suggested that the values underestimated the number of deaths related to alcohol by half. In 2003 the estimated direct cost to the Scottish National Health Service of alcohol misuse was £96 million. By 2007 this had risen to between £143.6 million and £392.8 million

Key findings of the study include:

- Of the 771 admissions, 83% were unplanned, 25% were alcohol related and 22% of the patients had chronic alcohol disease. A third of the alcohol related admissions were acutely intoxicated at the time of admission.
- Patients admitted with alcohol related problems were significantly younger than those admitted without alcohol problems (51 years versus 63 years).
- 71% of the patients with alcohol-related issues were men, compared with just over 50% of the non alcohol-related patients.
- Patients admitted with alcohol-related problems did not have significantly longer stay or death rates, but they did require a median level of two days' ventilation, compared to one day for patients without alcohol issues.

- When admissions were analysed by levels of multiple deprivation, it was clear that alcohol related admissions were much higher in the most deprived areas and fell steadily as areas became less deprived.

"The major strength of our study is that it was performed across an entire country's healthcare system over one month, in contrast to previous single centre studies" says Dr Geary. "This has enabled us to estimate the annual cost of alcohol-related admissions, based on the daily cost of an intensive care unit bed, at just under £9 million.

"In Scotland the frequency and volume of alcohol consumed is significantly higher than in the rest of the UK, as is the proportion of people with hazardous drinking habits. This corresponds to higher death rates, particularly for Scottish men, but only indicates a fraction of the deaths attributed to alcohol.

"It is very clear that the increased costs identified by our intensive care unit study are part of a much wider problem caused by rising levels of alcohol abuse."