Introduction

“Binge drinking” and associated harms in terms of health, crime and disorder have been extensively highlighted and are a cause of considerable concern in urban areas of the United Kingdom. This research set out to quantify the number of patient attendances at a busy adult and children’s Emergency Department that are directly attributable to binge drinking, and investigate ways in which inter-agency sharing of anonymised information may be used to design, implement and monitor interventions that will work to reduce these harms.

In this study, intoxicated patients attending either the adult or children’s ED of the United Bristol Healthcare Trust were identified by nursing staff, and anonymised data collected by a dedicated researcher. Collaboration and data sharing between health, police, social services, university experts and local authorities was achieved through the establishment of steering and operational groups with agreed objectives and the formation of a shared, anonymised database relating to alcohol use and harms.

This research was undertaken by Jonathan Benger and Rebecca Carter of the Academic Department of Emergency Care, University of the West of England and United Bristol Healthcare Trust, and suggests that effective data-sharing and inter-agency cooperation can successfully modify alcohol-related harms in an urban setting.

Findings

- The proportion of patients attending the ED as a direct result of binge drinking was 4% in adults, and less than 1% in children.
- 70% of patients were male, with a mean age of 30 years, and 72% attended between the hours of 8pm and 8am.
- The commonest reason for ED attendance was accident (34%), followed closely by assault (30%).
- 27% of patients had done most of their drinking at home, 36% in a pub and 16% in a nightclub.
- There was a striking concordance between health and police data in relation to alcohol-related harms and “problem premises” within the city centre.
Inter-agency collaboration proved highly successful: pooling of anonymised data created a much clearer picture of the extent of the problem and immediately suggested strategies for intervention, which could be effectively directed and monitored by the steering group.

The Challenges of Emergency Department Research

This study illustrated the difficulties facing researchers who undertake work in a busy Emergency Department (ED):

- Complex ethical issues arise when recruiting and studying patients in the ED: there is limited decision-making time for potential participants, and many of those eligible may be impaired by the nature of their illness or injury, the drugs administered by healthcare professionals, and/or alcohol or illegal drugs used prior to ED attendance.

- Ethics committee restrictions can significantly hamper research, and this has been further compounded by EU Directive 2001/20/EC, which requires prior informed written consent before subjects can be recruited to clinical trials of medicinal products. This has led to the development of recommendations for changes to the EU Directive that will allow such research to proceed under clearly defined conditions. Good relations with local ethics committees, clear central guidelines and perhaps the development of specialist ethics committees familiar with emergency care may all help to address these issues in the future.

- It can be challenging to motivate ED staff, who are perpetually busy delivering direct clinical care, and see themselves as life-savers rather than social workers or researchers. This problem is exacerbated if consecutive, rather than convenience, sampling is employed because staff will tend to abandon research activity when they become busy with clinical care.
• It is particularly difficult to collect data through the night, when morale tends to be low. This problem is best overcome by ensuring the engagement and participation of staff from the outset.

• Accurate data is only likely to be obtained with a fully automated system, or through a dedicated researcher who is not required to treat patients, but who is familiar with the relatively chaotic and fast-paced nature of emergency care.

**Implications**

Our figures appear accurate, but much lower than some previous reports. This may be attributable to a requirement that patients be both objectively intoxicated and attending the ED as a result. Specific issues were identified in relation to “pre-drinking” and “drink spiking”, but the change in licensing law that occurred during November 2005 does not appear to have had a significant impact to date.

The initiative to achieve inter-agency collaboration and data-sharing was highly successful, with considerable potential for the development and implementation of interventions that will reduce binge drinking and its associated harms.

We recommend further qualitative studies to identify the factors that lead to ED attendance following heavy alcohol consumption, and quantitative research to demonstrate the ways in which effective data-sharing and inter-agency cooperation can successfully reduce alcohol-related problems.