

# THE DANGERS OF ALCOHOL AND COSTS TO THE NHS

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Alcohol misuse causes a large amount of preventable morbidity and mortality in the UK. Alcohol misusers are over-represented in a wide range of medical settings including primary care, general hospitals, Accident and Emergency departments, and psychiatric hospitals. For example, half of psychiatric inpatient admissions, and half of A&E attenders on weekend nights are related to excessive drinking. 20-30% of general hospital admissions and 30% of attenders in general practice have alcohol problems.

Alcohol is responsible for up to 40,000 premature deaths per annum, and 17,000 annual injuries due to drunk driving. Alcohol problems are increasing, particularly in women who have had a 70% increase in excessive drinking in the past 12 years. This paper will examine some of the research indicating the large burden of alcohol problems on the NHS. Well-targeted, brief interventions can reduce alcohol misuse by 20-30%, but to implement this nationally will require a commitment across the spectrum of agencies from government to individual practitioners.

#### THE SCALE OF THE PROBLEM

- 90% of males and 80% of females over 16 years of age drink alcohol.
- 29% of males and 17% of females drink over a “safe” level, as recommended by the government.
- 7% of males drink over 50 units a week. 3% of females drink over 35 units a week. This volume is significantly high.
- 38% of males and 25% of females can be classified as “hazardous drinkers,” scoring over 8 on an audit questionnaire used as a screening tool by the ONS.
- 12% of males and 3% of females can be classified as “alcohol dependent”.
- This compares to 0.5% of the population who can be regarded as being problem drug users.
- On a population level there is a significantly greater problem with drinking than with drug use.

#### THE HARM

- The Royal College of Physicians estimates 25,000-40,000 premature deaths per annum are alcohol-related.
- Alcohol consumption increases the risk of cancer, heart disease and mental illness (65% of suicide attempts are alcohol-related).
- Alcohol consumption increases the risk of accidents and injuries (20-30% of accidents, 47% of drownings, and 50% of assaults are alcohol-related).
- 20-30% of all medical inpatients are related to alcohol misuse.
- 17,000 injuries and 530 deaths result from drink driving each year.
- A conservative estimate of annual alcohol-related NHS costs is £1.7 billion in the UK.

#### AN INCREASING PROBLEM

- Alcohol misuse in 18-24 year old men has increased by 32% in the last 12 years.
- Alcohol misuse in women has increased by 70% in the last 12 years.
- In men aged over 65 alcohol misuse has increased by 31%.
- In women aged over 65 alcohol misuse has increased by 75%.
- Alcohol-related mortality has increased by 25% in the last 10 years, more in women than in men.
- There was a 23% increase in alcohol-related road injuries between 1993 and 2000.

#### ALCOHOL AND MENTAL ILLNESS (Barnaby et al., 2003)

- A survey of 200 inpatients in two psychiatric hospitals in Southwest London was conducted this year.
- The people included presented with a range of problems including severe mental illness, although specialist addiction units were excluded.
- Half of the patients were rated as having hazardous or harmful drinking behaviour and a quarter were rated as alcohol dependent. This is a much higher percentage than that found in the general population.
- The male to female ratio of hazardous drinkers (53% males and 44% females) was much smaller than that seen in the general population, indicating that women with psychiatric disorders are particularly vulnerable to developing problems related to drinking.

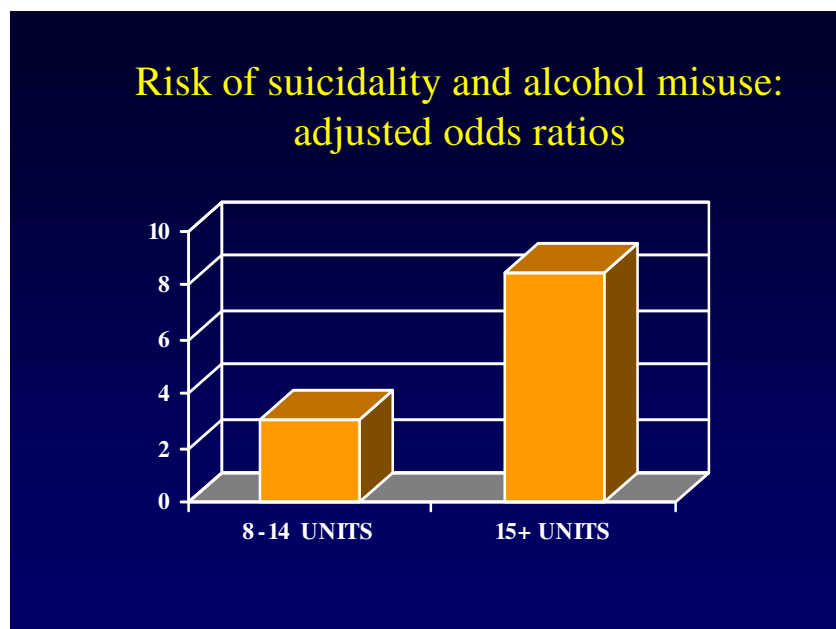
- Only one of the 200 patients had a full alcohol history and only a quarter had a partial alcohol history. The psychiatrists assessing these patients either did not detect or did not consider the importance of their alcohol misuse.

**Inpatient psychiatric survey –  
Use of other drugs in patients with  
Alcohol Misuse**

Drug	Ever used	Last 30 Days
Sedatives	68%	54%
Cannabis	51%	18%
Cocaine	28%	11%
Amphetamine	27%	2.5%
Hallucinogens	26%	1%
Codeine	25%	6%
Heroin/Methadone	18%	10%

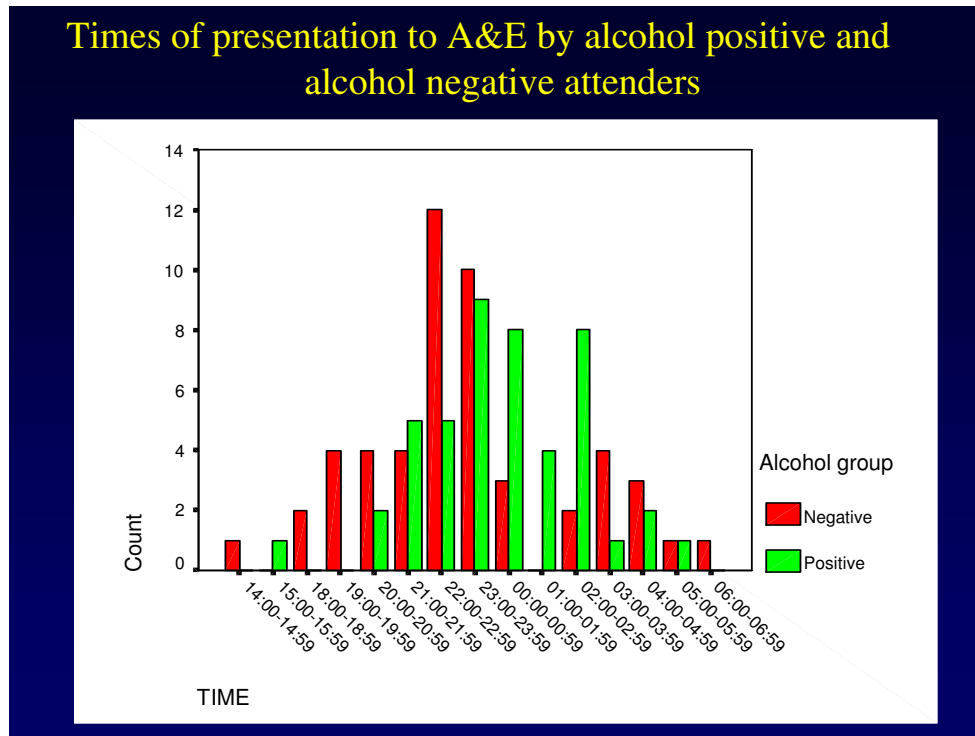
(McCloud et al., 2003)

- Drug misuse in the same set of patients was significantly less, around 10-20% across the range of substances. Sedative use was very high (54%) but these drugs are likely to be prescribed to psychiatric patients. Problem drug use was also poorly detected.
- Alcohol misuse was related to an increased risk of suicidal presentation to hospital. 40% of the population who came into hospital had suicidal ideas or had made a suicide attempt before they were admitted. Alcohol consumption was directly related to having suicidal ideas and behaviour.



## ACCIDENT & EMERGENCY (Drummond et al, 2002)

- An outpatient study was conducted at St. George's Hospital A&E department in London looking at all admissions between 10pm and 6am on Friday and Saturday night.
- 1/2 of all admissions had a positive alcohol breath test.. 2/3 were over the legal limit for driving (80mg/dl). 1/5 were intoxicated to a toxic level (200mg/dl).



- Most of the alcohol-related attendees were male and many were young.
- 83% of all assault cases, 64% of falls and 100% of collapses were alcohol positive.
- Alcohol-related attendance peaked between 11pm and 12pm and again at 2am, correlating with pub and club closing hours.
- Non alcohol-related attendance peaks shortly before 11pm, suggesting these people are aware of and consciously avoid what occurs in A&E departments at this time.
- A 24-hour national survey of 36 randomly selected A&E departments across the country, funded by the Department of Health and the Cabinet Office, was recently conducted to study the burden of alcohol-related trauma on hospitals.
- Researchers were measuring blood alcohol concentrations and using shortened versions of an audit questionnaire.
- Around 5000 people were assessed between 8am on a Saturday and 8am on a Sunday morning. Data analysis was not complete at the time of the talk.

### BRIEF INTERVENTIONS

- Because of the prevalence and frequency of attending, medical settings may be ideal for early detection and interventions. People who have drinking problems visit their GPs

about twice as often as those who do not, and attend A&E departments more frequently than the general population.

- Systematic reviews indicate brief alcohol interventions are most successful in primary care settings, usually resulting in a 20-30% reduction in excessive drinking and are relatively cost effective. American research shows reduced re-hospitalisation and health care costs following brief intervention.
- Although most evidence comes from primary care, implementing interventions across a range of health settings is likely to have an overall impact, which will have significant public health implications.
- Research shows alcohol interventions are effective in a range of medical settings with a range of drinkers but brief interventions are better suited to treat early stage drinking problems where as more severe drinking problems are likely to require more intensive treatment.

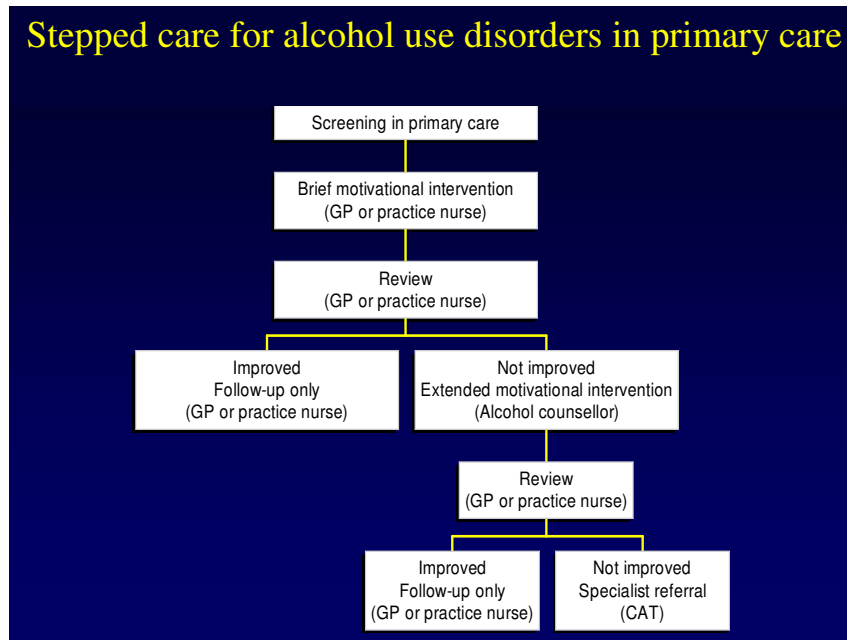
#### PROBLEMS OF INTERVENTION

- There is a very high prevalence of problem drinkers but very low levels of detection.
- One of the major problems is getting doctors to screen patients, detect problems and intervene.
- Potential misusers are the individuals that are most likely to be open to treatment and should be the focus of primary care interventions but these are least likely to be detected by GPs.
- GPs attitudes form potential barriers to intervention success. Although they generally agree primary care is the appropriate place to carry out alcohol treatment, the majority find problem drinkers difficult to manage. They are considered unrewarding to treat, and GPs felt they were neither sufficiently well trained nor supported to do this type of work.
- Alcohol interventions are not being implemented in practice due to the attitudes of GPs and the rest of society, lack of primary care training, competing priorities, prior bad experiences with the group and the gap between research and practice in terms of how effective interventions actually are.

#### STEPPED CARE

- A model of treatment has been developed to deal with problem drinking in primary care settings but also to apply to use in general and psychiatric hospitals.
- *Stepped care* caters for a range of needs, giving intensive treatment only to those that do not respond to briefer interventions. This type of treatment strategy is already used for a number of other conditions, e.g. high blood pressure and diabetes.
- The *STEPWISE trial* is the first randomised control trial of *Stepped Care*, opportunistically screening for hazardous and harmful alcohol consumption in the primary care setting.
- A practice nurse screens patients and follows up those screened at 6 months to assess changes in drinking behaviour.
- The brief intervention (Step1) is one hour-long behaviour change counselling session with a nurse. The extended intervention (Step2) is four hour-long sessions with a trained alcohol counsellor. The specialist referral to a community alcohol team (Step3) has no limit on intensity and duration of intervention.

- 30% of the 1300 screened were judged to be problem drinkers but only 10% were included in the study. However, this is a significantly higher proportion than in other brief intervention studies.
- Half of those randomised entered *Stepped Care* and the other half received a control intervention.
- Almost half of those entering *Stepped Care* did not respond to Step1 and were referred on to Step2. Only 2 of these needed to be referred to Step3, so there is little increase in the numbers referred on to specialist help using this type of intervention.



#### CONCLUSIONS

- Alcohol misuse is common in medical settings but is currently seldom identified or treated.
- Some interventions are effective but implementation is very poor.
- It is crucial to have a system available that caters for the full spectrum of users, from the early stage problem drinkers to those with severe dependence. *Stepped Care* has this potential.
- Funding and political will are essential to overcoming the obstacles preventing effective technology coming into practice.