Intoxicating Stuff and Nonsense

Malcolm Bateson
Consultant Physician and Gastroenterologist

The classic unit of alcohol was invented to help patients and doctors communicate and estimate alcohol intake. Because strength of drink, size of glasses, and volumes of bottles and cans varied, this was only ever a rough approximation. In the UK a unit was defined as about 8 to 10 grams (10 – 12 ml) of absolute alcohol. (It was bigger in the USA). It was usefully proposed that there were about 2 units in a pint or can of beer, 1 in a glass of spirits, 6 in a bottle of wine, and 25 in a bottle of spirits. On this basis the Government initially recommended a safe ceiling for healthy individuals of 28 units a week for men and 21 units a week for women. Following protests from the Royal Colleges of Physicians and Psychiatrists this was reduced to 21 and 14 units respectively.

Very extensive research has consistently shown that teetotallers probably have a shorter life expectancy than modest drinkers, though methodology has recently been questioned over the problem of ex-drinkers rather than life-long abstainers. Longest life expectancy seems to be at about 7 – 10 units weekly (a glass or two a day). The abstainer's life expectancy is equalled by intakes of around 30 units per week and increasing levels above this definitely have a progressive life shortening effect.

Looking at it from the other end of the telescope, patients with alcohol dependence and alcohol-related disease will often report a sustained intake in the range of 50 to 100 units per week if an accurate history can be obtained. My personal record [I hope for a patient – ed] was 520 units per week taken as beer, an impressive total that brings tears to the eyes!

Things have definitely changed. People who drink cocktails abroad, sangria, punch at parties and mixed drinks from communal bowls with straws will have very little idea of how much alcohol they have taken in. The cynical launch of alco-pops has encouraged more younger people into the habit of drinking. For some reason quantities of served drinks are larger now, with little evidence of the old 125 ml glass which has been replaced by the 175 and 250 ml wine glass. People are importing cheaper alcohol in bulk from the continent, and the white van loaded with cases of beer and wine heading north from the channel ports is a standing joke.

Our medical practice is swamped by intoxicated attenders at Accident & Emergency Departments and there is a noticeable rise in admissions for alcohol related disease. On the public front under-age drinking is frequent, though this was uncommon 50 years ago. Binge drinking by adolescents and young adults has made our towns and cities unpleasant places at night.

In an attempt to get a grip on problems a move was made to make the unit of alcohol more scientific, so it was re-defined as 10 ml (8 g), though the recommended maximum safe intakes were not increased. We now learn that a measure of spirits is 1.4 new units, a pint of beer is 2.3 new units and a pint of cider is 3.4 new units. This may make for mathematical rigor, but is not terribly helpful in the clinical consultation. I suspect the only people influenced by these figures are the moderate middle class drinkers who are not our problem. The bottle of wine which now has "9.4 units" printed on the label is still the same as the old bottle of wine which contained 6 classic units, so there is clear scope for

confusion.

If the new system is to have any chance of succeeding it will need two changes. Alcohol would need to be sold in whole new units by adjustment of strength and volume, not necessarily attractive to all brewers, vintners and distillers. More importantly we need an evidence-based statement of the true safe limits to replace the current opinionated puritan levels, or the "do you drink more than your doctor?" criteria.

However, the news is not all bad. Though imaginative figures of 20,000, 28,000 or even 40,000 deaths from alcohol annually in the UK have been touted, the last official annual figure from the Office of National Statistics was 6,544 for England & Wales in 2004. The inflated estimates of campaigners seem to relate to faulty logic: everyone who dies and was drinking more than the currently prescribed upper limit for safety has their death blamed on drink. In fact the average intake of alcohol in the UK would likely be neutral or protective rather than harmful if it were spread evenly through the population. It could even be that prevention of deaths from ischaemic heart disease counter-balances deaths from alcoholism, alcoholic liver disease, cardiomyopathy, accidents, etc. The problem is maldistribution: some people consume far too much whereas others drink hardly anything at all.

Figures are available for official British alcohol intake because of the duty paid, and do show a marked rise in intake since 1950. But this was the absolute nadir. Intake had fallen dramatically over the previous 50 years, so that overall average intake for 2000 was similar to that for 1900. Furthermore data are available going back to 1684, and show that in the late 17th and 18th centuries people in the UK drank vastly more than now. There was, however, a decreasing trend which plateaued in the mid 19th century (ironically the time of the greatest activity of the temperance movements). The later fall in the first half of the 20th century may have been influenced by world wars and the depression.

Paradoxically, though public drunkenness even in women now seems to be acceptable, drunk driving is not, and is considered a shameful activity. Within living memory this was different. People used to boast that they could "hold their drink" and were safe behind the wheel when drunk. Such behaviour would now be considered boorish. This partly explains the very safe roads we have in Britain compared to the rest of the world.

Since behaviour does change, perhaps people will come to believe that binge drinking is not clever, so that they lose their street credibility.

But how to tackle what is a real medical and social problem? Clearly licensees are serving customers who are under-age and those who are already intoxicated, both of which are already illegal. The law needs enforcing. If it were known that detected offences would lead to closure of premises and the need to re-apply for a licence, practice would change overnight. Though the age of majority is 18, many pubs and clubs already declare they will only serve people over the age of 21 and this approach should be encouraged.

It is unlikely that the current tradition of public inebriety will be improved by laxity in

regulation of opening hours, though this was piously hoped to lead to emulation of continental controlled drinking patterns. This has not happened, and it tends to be forgotten that overall alcohol intake has traditionally been and remains higher in the wine growing countries such as France, Germany, Spain and Italy so the health problem remains.

The striking thing about alcohol is that it is so cheap and freely available. Even the unemployed and downright derelict can afford to be continuously under the influence. Not only should publicans be more carefully policed but the cost of alcohol should be markedly raised by increasing duty. This does not need a change in the law as the mechanism is already there. There would, of course, need to be more vigilance at our ports to ensure that shipments from abroad are indeed for "personal use".

We are continually threatened with Doomsday scenarios. Remember the Red threat, nuclear winter, and epidemic variant CJD as threatening the end of mankind? We now have AIDS, terrorism, possible pandemic 'flu and global warming to contend with. Alcohol is a problem but not in this league. Practical solutions would be welcome, but juggling with the mathematics of alcohol volumes and arbitrary recommendations to the basically sober are not the answer.