
IAS Factsheet

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CONTENTS

The disease model	3
The integration model	3
The public health model	3
Factors influencing levels of consumption and harm	5
The public health model and prevention	6
Is moderate drinking good for health?	7

CAUSES AND PREVENTION OF ALCOHOL PROBLEMS

Three main models have been proposed to explain the occurrence of alcohol problems. They have notably different implications for prevention.

The Disease Model:

This suggests that there is a very sharp distinction between problem drinkers and alcoholics and the mass of the population who are normal drinkers and that the causes of alcohol problems are therefore to be sought in the psychological and/or physical make-up of the minority. The model is summarized in the dictum 'alcoholism comes in people, not bottles'.

The implication is that, short of the total removal of alcohol, little can be done to prevent the occurrence of problem drinking. Action to reduce the availability of alcohol will not be effective, only penalising the great majority of normal drinkers, who do not have problems, while failing to affect the behaviour of the small minority of problem drinkers. The best that can be done is improve identification of problem drinkers at an early stage, combined with the provision of help or treatment to prevent the disease progressing further.

The Integration Model:

This suggests that alcohol problems arise because alcohol use is insufficiently governed by consistent social norms, and by the existence of confused and unhealthy attitudes to alcohol use.

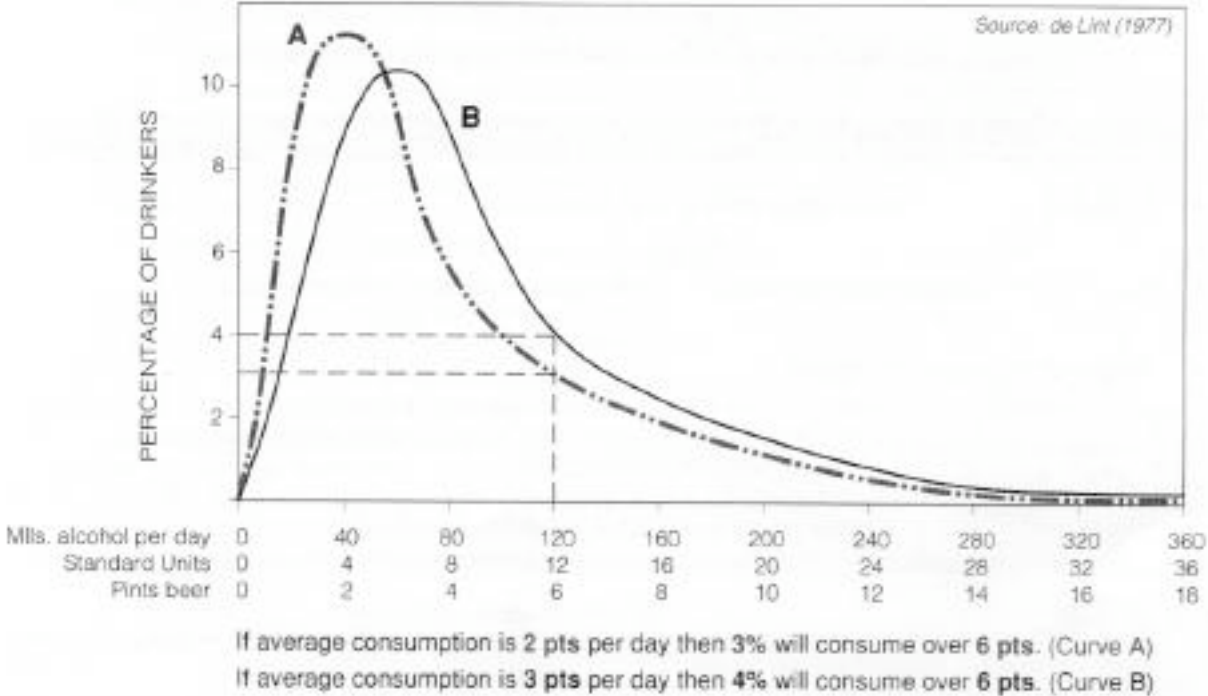
This model suggests that there is scope for primary prevention, and that it may be achieved by encouraging, through education and other means, a more healthy approach to the use of alcohol and its place in society. Alcohol use should be more effectively integrated into social and family life, so that it becomes an adjunct to other activities rather than an end in itself, and the mystique surrounding alcohol use is reduced.

From this standpoint, restrictions on hours of sale, age of legal consumption etc may be counter productive, as they are likely to act as impediments to integrated, healthy drinking attitudes and practices.

Public Health Model:

Research and experience have challenged the principal assumption and conclusions of both the Disease and Integration Models. For example, research has failed to show that 'problem drinkers' share some common pre-existing psychological or physical abnormality which distinguishes them from the rest of the population. Additional defects in the other models are apparent in the main findings which form the basis of the Public Health Model. This is sometimes also known as the 'Availability' or 'Consumption Model' because of the principal finding that the amount of alcohol-related harm in any society tends to rise and

fall in line with changes in the total or average level of consumption. The more alcohol is consumed by a society, the higher its level of alcohol-related harm is likely to be. Equally, the lower its level of consumption, the lower its level of harm. This is partly because societies with a relatively high average consumption also tend to have relatively high proportions of heavy and excessive drinkers in the population.



An additional factor is that the major part of the social burden of alcohol problems arises from light and moderate drinking. This is because problems from alcohol use can occur at all consumption levels, and while the heaviest drinkers suffer more problems individually, as there are many more light and moderate than heavy drinkers in the population, collectively they contribute the larger share. This is shown in the table calculated for Norway. As can be seen, although the heaviest drinkers were individually much more likely than those who drank less to experience alcohol problems, most of those who experienced problems were low and moderate drinkers.

(Source: Slog 1985d)

Consumption (litres/year)	% of sample	Percent reporting:			The group's share of the problem		
		Absent work	Fight	Accident	Absent work	Fight	Accident
Low (0 - 5)	85	3	1	1	46	30	27
Moderate (5 - 10)	10	12	8	4	22	26	23
High (10 - 30)	4	27	19	10	24	30	27
Very high (30+)	1	50	43	43	9	14	23
All	100	6	3	2	100	100	1

Factors influencing levels of consumption and harm

- Cultural and religious traditions.
- The legal availability of alcoholic drink - the number and kind of licensed premises and their hours of opening.
- The price of alcoholic drink and consumer purchasing power.

Since the 1950's, alcohol consumption in Gt Britain, as in many other countries, has risen substantially because of the operation of factors such as:-

- The declining influence of cultural and religious traditions limiting or proscribing alcohol use
- New patterns of consumption (eg wine with meals) have been added to traditional patterns
- Greatly increased availability of alcohol from more outlets, especially off-licenses and supermarkets
- In relation to consumer purchasing power, alcohol has become much cheaper

The importance of economic factors is shown in the following graph. Trends in deaths from liver disease are regarded as providing a measure of health damage from alcohol in general.

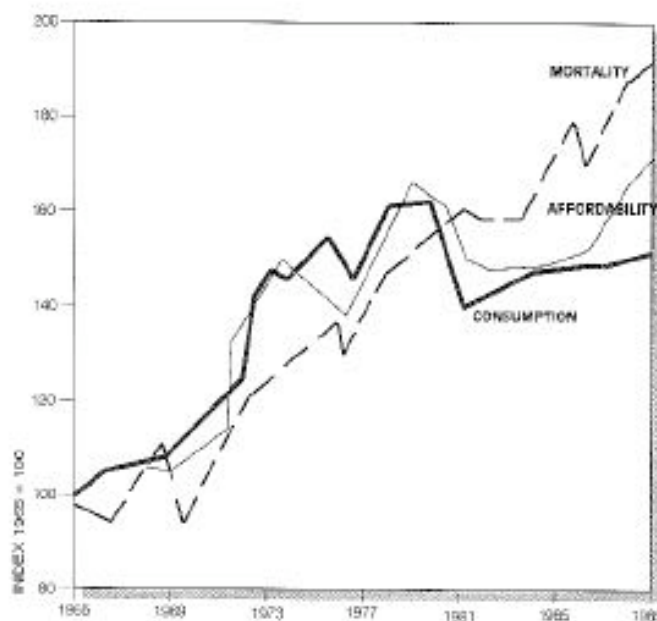
Alcohol Consumption, Affordability (personal disposable income/price of alcohol) and Mortality from Chronic Liver Disease United Kingdom 1965 - 1989.

Mortality: Office of Population Census and Surveys - not all these deaths are due to alcohol. Discontinuity between years 1978 and 1979 due to change in coding.

Affordability: Economic Advisors Office - Department of Health.

Consumption: Customs and Excise with Department of Health.

Source: Peter Anderson. *The Health of the Nation - Responses, Alcohol as the key area.* *British Medical Journal*, vol 303, 28 Sept 1991, pp 766-768



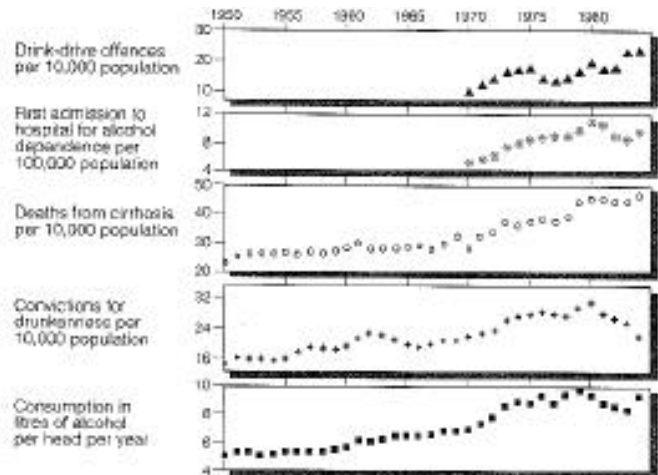
The graphs on the right show how other sorts of problems also tend to rise and fall in line with consumption levels.

The relationship between indicators of harm and alcohol consumption in England & Wales.

Note that as consumption increases, indicators of harm also tend to increase.

Data on consumption, drunkenness and cirrhosis are for the UK; drink-drive offences data is for Britain and psychiatric admission data is for England.

The base denominator population used is those aged 15 and over, except for cirrhosis, where the total population is used. (Faculty of Public Health Medicine, The Royal Colleges of Physicians 1991)



The Public Health Model and Prevention

It follows from the evidence on which the Public Health Model is based, that policies for prevention should be aimed at reducing the overall level of consumption in society. This is partly because of the close relationship between average consumption and the proportion of the population who are heavy or excessive consumers. The fact that a substantial part of the burden on society is generated by light and moderate drinkers, also means that preventive policy cannot be aimed just at the heaviest drinkers, those individually most at risk.

Policies for reducing alcohol harm should therefore be aimed at the whole drinking population and must be concerned with the two aspects of supply and demand.

The supply or availability of alcohol can be reduced by:

- Controls of production and trade
- Controls on distribution and sales (eg regulating the number of licensed outlets and their hours of opening; drinking age laws)
- Increasing the price of alcoholic drink by taxation.

Measures to reduce the demand for alcohol include:-

Health Education

- Promotion of alternatives to alcoholic drinks
- Provision of alternative meeting places to alcohol outlets
- Provision of alternatives to drinking as a leisure-time occupation
- Reducing incentives to drinking by controls on advertising and promotion of alcohol.

IS MODERATE DRINKING GOOD FOR HEALTH?

It is sometimes claimed that moderate drinking should be encouraged because it is good for health, reducing the risk of heart disease. The main facts are:

- The claim that alcohol protects against coronary heart disease is still controversial and a matter of scientific dispute.
- Moreover, while the evidence is not consistent, it suggests in the main that if there is a protective effect, it affects a very small proportion of heart attacks and is most pronounced at levels of consumption known to increase by an even greater amount the risk of death or disease from other causes.
- Because of the known relationship between average consumption and the level of harm, promoting the health benefits of alcohol, even if they exist, is likely to increase consumption and thus the overall level of harm in society.
- This is why the leading British researcher who supports the notion of a protective effect in relation to heart disease has nonetheless concluded that “the balance of harm and benefit does not weigh in favour of making a recommendation to the public to drink in order to prevent coronary heart disease”. (M. Marmot, E Brunner - ‘Alcohol and Cardiovascular Disease: The status of the U-Shaped Curve’. British Medical Journal 1991: 303.565-8 [7 September]).

Institute of Alcohol Studies

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