15 ALCOHOL INSIGHT

‘Optimal’ levels of alcohol consumption for men and women at different ages

INTRODUCTION

Alcohol consumption has long been known to increase the risk of various diseases and injuries. More recently it has become clear that light to moderate alcohol consumption protects against ischaemic heart disease, the commonest cause of death in older people. This study, carried out by Ian White, Dan Altmann and Kiran Nanchahal at the London School of Hygiene and Tropical Medicine, investigated optimal levels of consumption for men and women at different ages. The best available evidence on the risks of diseases related to alcohol consumption was used, together with patterns of mortality from different diseases. Alcohol consumption levels were derived from figures for England and Wales in 1997. The findings make evidence-based guidelines for sensible drinking possible.

The Royal Colleges recommend that women should not drink more than 14 units of alcohol per week and that men should not drink more than 21 units of alcohol per week. (1 unit of alcohol is roughly half a pint of beer, a small glass of wine, or a measure of spirits). The Government recommends limits of 3 units of alcohol per day for women and 4 units of alcohol per day for men, but not every day. The findings of the current study suggest that recommended limits should be age related.

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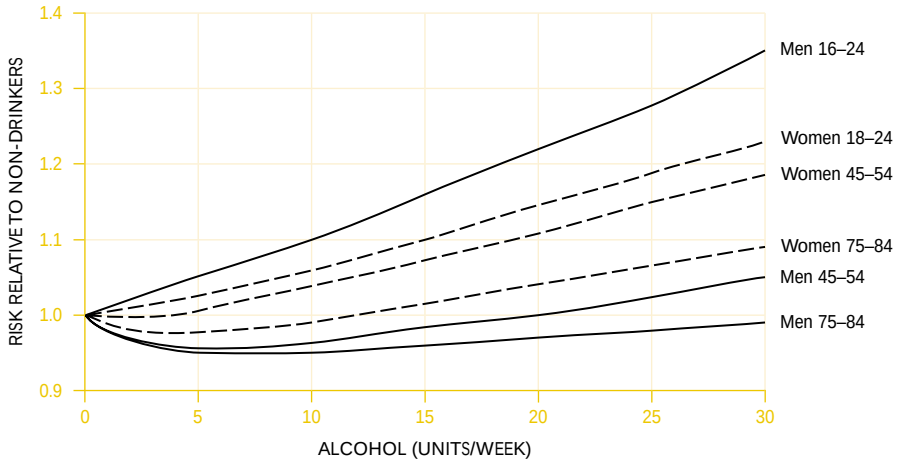
FINDINGS

The figure shows how total mortality risk relates to alcohol consumption for selected age groups.



- For men and women aged 16–34, the lowest risk is among non-drinkers. Even drinking at the Royal Colleges' recommended limit increases risk by 9% in women aged 16–24 and by 23% in men aged 16–24.
- Most lives lost due to alcohol consumption in young men are from injuries.
- Recommended limits could be defined as levels of consumption that allow a 5% increase in risk above the lowest risk. For women, aged 16–24, this "5% excess risk level" is 8 units/week, increasing to 11.5 units between 45 and 54 and to 20 units/week for women aged over 85. In men it increases from 5 units/week at ages 16–24 to 21 units per week between 45 and 54 and then to 34 units/week over age 85.
- Overall in England and Wales in 1997, over 13000 deaths were attributable to alcohol consumption, while over 15000 ischaemic heart disease deaths were prevented. The overall balance suggests that alcohol consumption prevents 2000 deaths; however, because the attributable deaths occur at younger ages, alcohol consumption on balance causes the loss of 98000 years of life before age 65 (8.6% of all years of life lost before age 65).

- If all men and women drinking above the Royal Colleges' recommended limit had reduced their consumption to these limits then nearly 8000 deaths in 1997 would have been avoided. Further reduction to the level of lowest risk would have saved a further 3000 deaths.

IMPLICATIONS

- Sensible drinking messages should be different for younger and older people.
- Sensible drinking could be defined as drinking behaviour that is associated with a mortality risk within 5% of the minimum risk for women or men of a particular age. This view agrees closely with current sensible drinking messages for older adults but not for younger adults.
- These findings present policy makers with a challenge. On the one hand, the cultural expectation is that young people drink the most. This binge drinking stage is then followed by a gradual reduction in consumption through maturity and senior citizenship. On the other hand, these epidemiological data on risk indicate that recommended safe levels of consumption should actually be lowest in the young. This is mainly because older people get some benefits from alcohol that are not evident in young people. This message is clearly a difficult one to promote.
- Public health policy should aim to encourage safer patterns of drinking in young men and women to reduce the large number of injury deaths.
- Non-drinking men aged 55–84 also have a level of risk slightly more than 5% above the minimum risk. It does not follow that these men should be advised to commence drinking. Some may have cultural or religious reasons for abstaining. It is possible that, in taking up drinking at a later age, some might become heavy drinkers, which would increase the public health burden.

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FURTHER INFORMATION

- It is likely that alcohol consumption is under-reported. If all drinkers under-report to the same extent then optimal levels are under-estimated to this extent. However, it is possible that heavier drinkers under-report the most. It is important to interpret optimal levels as the level of reported alcohol consumption at which risk is minimised.
- The benefits of having different advice for younger people must of course be balanced against the disadvantages associated with a more complex message.
- This work has recently been published in the *British Medical Journal* BMJ 2002;325:191–4 (27 July) Alcohol consumption and mortality: modelling risks for men and women at different ages.

ENQUIRIES AND COPIES OF THE REPORT

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ALCOHOL INSIGHTS

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