Public health problems caused by alcohol

Report by the Secretariat

1. Alcohol use is deeply embedded in many societies, and about 2000 million people drink alcohol in most parts of the world. In recent years some constraints on the production, trade and patterns of consumption of alcohol have been weakened by increasing availability and accessibility of alcoholic beverages, leading to changes in drinking patterns across the globe. Public health problems associated with alcohol consumption have reached alarming proportions, and alcohol has become one of the most important risks to health globally; it is the leading risk factor in developing countries with low mortality rates and ranks third in developed countries, according to *The world health report 2002*.1

2. In 2000 alcohol use was responsible for 4.0% of global disease burden, slightly less than the damage caused to society by tobacco use (4.1%) and high blood pressure (4.4%). In developed countries it is responsible for 9.2% of all disability-adjusted life years (DALYs) lost, with neuropsychiatric conditions (e.g. dependence, psychoses and depression) and unintentional injuries (e.g. road traffic crashes, burns, drowning and falls) accounting for most DALYs lost. Alcohol consumption contributes to disease, injury, disability and premature death more than any other risk factor in developing countries with low mortality, where alcohol is responsible for 6.2% of DALYs lost. Globally use of alcohol is estimated to have caused 1.8 million deaths, or 3.2% of the total, in 2000.

3. Alcohol consumption is also responsible for many negative consequences that are not taken into account in the analysis of global disease burden. By definition, estimates of that burden and DALYs lost are restricted to the consequences of disease and injury, and do not account for the effects on society as a whole or the social problems that affect drinkers and those close to them, including nondrinkers.

4. Several interacting factors contribute to the harm caused by alcohol consumption, three important elements of drinking being: how much the drinker consumes over a year, how much is consumed on one occasion, and in what environment and circumstances alcohol is consumed.

5. Alcohol can damage nearly every organ and system in the body; it is psychoactive and can induce alterations in most if not all brain systems and structures. Its use contributes to more than 60 diseases and conditions, including chronic diseases such as alcohol dependence and liver cirrhosis,

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and acute health problems such as injuries. The prevalence of disorders linked to alcohol use varies widely across different regions of the world, reaching around 10% in adult men in North America and parts of Eastern Europe in 2000.

6. Drinking to intoxication is a significant cause of alcohol-related harm that accounts for the greatest proportion of DALYs lost in countries with high mortality. This loss is due in large part to acute events such as some cardiovascular diseases and injuries. Unintentional and intentional injuries are responsible for up to 10% of the global burden of disease. Alcohol use accounts for 13% of DALYs lost due to unintentional injuries and nearly 15% due to intentional injuries (e.g. suicides and homicides). The amount of alcohol consumed on each occasion is a major determinant of both risk and severity of injury. This factor applies to injuries associated with alcohol-impaired driving and other types of unintentional injury; alcohol consumption is one of the top five risk factors for road traffic injuries.

7. Alcohol consumption is associated with a range of high-risk behaviours, including unsafe sex and use of other psychoactive substances. As a result, alcohol-use disorders carry a high degree of comorbidity with other substance-use disorders, including nicotine dependence, and sexually transmitted infections. Recent evidence suggests an association between alcohol-use disorders and HIV/AIDS.

8. Low or moderate consumption of alcohol has been shown to benefit people who are 40 years and older because of its protective effects for coronary heart disease. In some industrialized countries where this condition is common and injuries and violence are rare, alcohol consumption may prevent about as many deaths as it causes in some segments of the population. The patterns of drinking in many countries, however, often with heavy episodic consumption, are likely to increase rather than decrease the occurrence of coronary heart disease.

9. Although per capita consumption has stabilized or declined in some industrialized countries, rates of consumption, drinking to excess among the general population and heavy episodic drinking among young people are on the rise in many countries throughout the world. The reasons may be increased availability of alcoholic beverages, aggressive marketing and promotion of such drinks aimed at young people, and a breakdown in the lines of authority and taboos related to age. Young drinkers in developing countries are increasingly emulating drinking styles that are identified as those of the developed world.

10. Patterns and volume of drinking differ significantly between men and women. Throughout the world men consume more alcohol and drink more heavily than women. The drinking behaviours of men and women are, however, converging in many industrialized countries – where the rates for women who abstain from drinking are generally lower than elsewhere – and also in some developing countries when unrecorded consumption is taken into consideration. In some developing countries heavy drinking is a characteristic of alcohol use by both men and women. Men experience more alcohol-related problems than women, but women are often the direct victims of the consequences of men’s drinking. Evidence shows that women who live with heavy drinkers are more exposed to those hazards and suffer more serious violence than other women. Drinking by women of childbearing age may increase the risk of unwanted pregnancies and prenatal exposure of a fetus to alcohol with a subsequent wide range of birth defects and developmental abnormalities, including fetal alcohol syndrome.
STRATEGIES TO REDUCE THE ALCOHOL-RELATED BURDEN

11. Evidence is accumulating that implementation of appropriate strategies and measures can significantly lessen the frequency of alcohol-related problems at local and national levels. In a recent analysis of 31 policy options an international group of experts on alcohol rated the following 10 as “best practices”: minimum legal age to buy alcohol, government monopoly of retail sales, restrictions on hours or days of sale, restrictions on the density of sales outlets, taxes on alcohol, sobriety checks, lowered limits for blood alcohol concentration, administrative suspension of licences for driving under the influence of alcohol, graduated licensing for novice drivers (i.e. issuing licences with initial limitations on driving privileges, such as a zero limit for blood alcohol concentration, and brief interventions for hazardous drinkers). Prevention strategies, such as education and persuasion, although perhaps the most widely applied, are not necessarily effective. Recent evidence suggests that population-based policy measures such as taxation are the most cost-effective public health response to the alcohol-related disease burden in countries with moderate and high levels of alcohol consumption, whereas measures targeted at high-risk or harmful drinkers, such as brief interventions, appear to be more effective where the rates of hazardous consumption of alcohol are lower.

12. Although rating strategies for effectiveness favours those that seek to limit availability of alcoholic beverages and to change the drinking context, the health-care sector has an important part to play in mitigating alcohol-related harm. Effective treatment interventions exist that can improve the health and functioning of affected individuals and their families. Interventions need not be complex or expensive, and their institution after early identification of hazardous or harmful patterns of alcohol consumption is an effective and cost-effective strategy.

13. Strategies and interventions in health-care settings, communities or societies at large are not equally effective in every country or society. Regional variations in average alcohol consumption and patterns of drinking, mean that priorities in a country or region should be guided by available research evidence. Generally, system-wide strategies that are complementary and intersectoral stand a better chance of succeeding than single-sector strategies.

WHO’S FUTURE WORK ON ALCOHOL

14. WHO’s Secretariat is undertaking work in several areas, in order to tackle all aspects of alcohol use and related health issues. Such work includes collecting, compiling and disseminating scientific information on alcohol consumption; preparing global and regional research and policy initiatives on alcohol; and providing support to countries on promoting identification and management of alcohol-use disorders in primary health care.

15. The Secretariat will continue its work on strengthening the evidence base and to disseminate scientific information that is culturally and gender sensitive and regionally specific. It will pay particular attention to patterns and health consequences of alcohol consumption, and effective policies and interventions, including those for prevention of alcohol-impaired driving. Regional collaborative activities will be supported through the formulation, implementation and evaluation of regional and multilateral action plans (for example, the European Alcohol Action Plan) to reduce the negative health and social consequences of alcohol consumption.

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16. Continued support and guidance will be provided to Member States for strengthening their capabilities to monitor levels and patterns of alcohol consumption and its related harm. Special attention will be given to better ways of preventing alcohol consumption and related harm among young people through effective health-promotion strategies implemented in settings that are most relevant to young people’s lives: at school, in the family, among peers, in the community and through the media.

17. For health care, WHO will continue to promote the early identification and management of hazardous and harmful alcohol consumption, including the prevention of alcohol-related harm through antenatal health-care services, and the provision of evidence-based treatment of alcohol dependence.

**ACTION BY THE EXECUTIVE BOARD**

18. The Board is invited to note the above report.