



# Alcohol consumption: A grossly underestimated factor for public health and social welfare\*

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## Introduction

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To many, the consumption of alcoholic beverages brings pleasure, fun and relaxation. It is an important aspect of social and cultural life in many societies of Europe. Moreover, the production and distribution of alcoholic beverages provides a significant income for many people and for the State. However, alcohol consumption also brings about very high costs to public health, social welfare and the economy. Whereas these costs affect all socio-economic groups and society as a whole, in general, they hit disadvantaged groups more severely.

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This policy brief summarises the current state of scientific knowledge about the problems caused by alcohol consumption and about ways and means to reduce these. Following a brief description of the size and the extent of socio-economic and health-related problems, a review of the opportunities to reduce these, and an analysis of the difficulties in implementing harm reduction policies, a call for active involvement of the health and social welfare sector concludes this policy brief.

## Alcohol-related harm

### Alcoholism

In the perception of many people, the biggest problem with alcohol is alcoholism or alcohol dependence (which is replacing the term alcoholism). Indeed, alcohol dependence is a very serious issue. It is included as a chronic disease in the International Classification of Diseases (ICD). It is characterised by a loss of control over intake, tolerance (the need to increase the quantity to reach the desired effect), withdrawal symptoms, and continuing involvement with alcohol, despite overwhelmingly negative consequences. In the USA, according to the 2021 National Survey on Drug Use and Health, 10.6% of the population aged 12 years and over had an alcohol use disorder in the past year (SAMHSA, 2021). Based on data from the Global Burden of Disease studies, it is estimated that in the EU

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5% of adult men and 1% of adult women are alcohol dependent (Anderson & Baumberg, 2006). In Austria (with a population of around 9 million people) it is estimated that for the year 2021 there were some 380,000 alcohol-dependent persons (approximately again 5% of the population over 15) (Uhl et al., 2022). Alcohol dependence causes huge mental, physical and economic problems to the drinker him- or herself, and also to his or her social environment; bringing financial and emotional misery to family members and other relationships of the drinker.

### **Alcohol causes a multitude of other problems beyond dependence**

Yet, alcohol dependence, however serious it may be, is not the only problem associated with drinking. The consumption of alcoholic beverages is associated with a long list of harms in the health, social and economic spheres. As a matter of fact, much of this harm to social and economic welfare and to health, is not caused by alcohol-dependent persons, but by so-called social or occasional drinkers.

First, there is the well-known issue of drinking and driving. It is estimated that, for instance, in Germany, with around 5% of all traffic accidents including personal harm, alcohol consumption is involved. In Sweden and Finland estimates hold that in 24 to 28% of all fatal traffic accidents, alcohol consumption played a role. Europe-wide, between 19 to 26% of all road fatalities are alcohol-related; while about only 1% of all kilometres driven are driven by drivers with 0.5 g/l or more alcohol in their blood (European Commission, 2022).

**Studies show that alcohol is further an important factor when it comes to workplace productivity: 12% of companies in Ireland mentioned alcohol as a cause of short-term absence from work**

Next, there is the well-established connection between alcohol intake and violence, varying from domestic violence, suicide, sexual abuse, to street and football violence as well as hooliganism. According to Scottish Government estimates, 44% of violent crimes committed in 2019-2020 involved offenders under the influence of alcohol (Birtwistle et al., 2022). A report by the University of Maastricht mentions that '61.7 % of students who reported experiencing an incident of sexual violence indicated that the perpetrator had consumed alcohol prior to the incident' (Wellum et al., 2021).

Furthermore, studies show that alcohol is an important factor when it comes to workplace productivity. 12% of companies in Ireland mentioned alcohol as a cause of short-term absence from work (IBEC, 2004). One of the findings of the Science Group of the European Alcohol and Health Forum is that '(l)ost productivity costs are shown to be the dominant element in social costs studies arising from the harm done by alcohol, being about half of the total social cost of alcohol to the European Union' (Science Group of the European Alcohol and Health Forum, 2011).



## Alcohol and health

Turning now to the typical negative effects that alcohol can have on health, the list is long, varying from liver disease, cancer, communicable diseases, mental health issues and hypertension to Fetal Alcohol Syndrome Disorder as well as other health problems.

### Liver disease

There is a direct causal relationship between chronic drinking and liver diseases such as fatty liver, hepatitic fibrosis, alcoholic hepatitis and liver cirrhosis. Approximately 50% of all liver cirrhosis cases are due to alcohol consumption (World Health Organization, 2018).

### Cancer

During the last years, great progress has been made in the science about the relationship between drinking alcohol and the incidence of various kinds of cancer. There is now no doubt about the causal link between alcohol consumption and seven types of malignant cancer including mouth and throat, oesophagus, liver, colorectal, and female breast cancer (Secretan et al., 2009). The International Agency for Research on Cancer defines alcohol as a toxic, psychoactive and dependence-producing substance, classifying it as a group 1 carcinogen. This connection is certainly not about heavy drinking only. It is estimated that more than a third of the cancer cases mentioned must be attributed to light to moderate drinking (Rovina & Rehm, 2021). So far, there is, however, very little awareness about this association in the general public.

### Cardiovascular diseases

Alcohol raises blood pressure and thus increases the risk of hypertension. Episodic heavy drinking is an important risk factor for stroke and for heart arrhythmias. Heavy drinking over long periods can lead to cardiomyopathy.

### Alcohol-related brain damage

Persons with alcohol-related dementia struggle with ordinary day-to-day tasks. Their dementia is linked to long-term drinking of too much alcohol. Korsakov and Wernicke-Korsakov syndromes are special forms of alcohol-related brain damage linked to concomitant low thiamine levels from poor nutrition.



### **Fetal Alcohol Syndrome Disorder (FASD)**

Fetal Alcohol Syndrome Disorder (FASD) is the damage done to the neurological and physical development of the unborn child, resulting from the consumption of alcohol by the mother during pregnancy. FASD is a multifaceted disability, which is associated also with particular environmental adversity (e.g. stigma) (Flannigan et al., 2020). In Germany it is estimated that each year approximately 12,650 babies are born whose neurological development and/or physical appearance is affected by the alcohol consumed by the mother during pregnancy (Kraus et al., 2019).

### **Other alcohol-related health issues**

Alcohol consumption is associated also with the risk of weakening the immune system and of developing mental disorders such as depression, and of infectious diseases such as tuberculosis and HIV.

### **Young people**

The impact of drinking is particularly serious for young people. There are various reasons for this. Childhood and adolescence are critical for the development of the brain: brain modelling goes on well into the 20's and can be significantly impacted by alcohol consumption. Young people further tend to underestimate the risks associated with their behaviour involving heavy drinking such as acute intoxication, (road traffic) accidents, violence and unsafe sex. Peer pressure plays a great role. Young people also experience a relatively greater reward from drinking than adults as the social and dis-inhibiting effects of alcohol consumption are stronger.

It is, therefore, no wonder that in emergency departments of hospitals in many countries, admissions of young people with acute alcohol intoxication or as victims of violent acts committed under the influence of alcohol are increasingly becoming a 'normal' event. It is estimated that approximately 13.5% of all deaths in the age group 20-39 years are alcohol-attributable (World Health Organization, 2019).

### **Alcohol's Global Burden of Disease**

Since 1992, starting at the Harvard School of Public Health, and now led by the Institute for Health Metrics and Evaluation in partnership with the WHO, the Global Burden of Disease Studies (GBD) collects and analyses data on morbidity and mortality in over 200 countries and territories on 369 diseases and injuries and 87 risk factors. Their estimate is that overall, 5.1% of the global burden of disease and injury is attributable to alcohol, as measured in disability-adjusted life years (life expectancy lived without disability) (Park & Kim, 2020).



### Safe drinking or health benefits of drinking?

Over the past decades there has been a good deal of debate over so-called safe drinking limits, as well as over the question whether moderate alcohol consumption might have some health benefits. Governmental and semi-governmental agencies in many countries currently recommend to drink, if at all, at any rate no more than 7 units of alcoholic beverages per week (a standard unit of any alcoholic beverage contains 10 ml or 8 grams of pure alcohol) so as to avoid substantial risk to health. Observing the trends in this regard over the past years, it is remarkable to see that these 'safe drinking limits' have gone down, reflecting increased knowledge about the harmful effects of even smaller quantities. As a matter of fact the risk of alcohol consumption depends on many factors such as weight, gender, age, overall physical and mental health of the individual concerned, intake of pharmaceuticals, occupation, and environmental factors. Consequently a really safe drinking limit does not exist.

The next much debated and researched question is about the validity of the familiar tune 'a glass per day keeps the doctor away'. The summarising conclusion of the research that has gone into this myth is that there might be a slight positive effect on cardiovascular disease of very low alcohol consumption. However, if at all, then this effect applies only to people over approximately 35 years of age, and, if consumption goes up over this one glass a day, alcohol rapidly becomes a significant risk factor. All together the conclusion is that 'safe drinking limits' is a risky concept and real health benefits to alcohol consumption do not exist.

## Opportunities for reducing harm

**The science about the effectiveness of various ways to reduce alcohol-related harm has increased significantly over the last decades**

In the face of all this it is fortunate that there are many ways to reduce alcohol-related harm. The science about the effectiveness of the various ways to reduce alcohol-related harm has increased significantly over the last decades.

### Policy options

Among public health experts and researchers in the field there is a broad consensus that the most effective ways to reduce alcohol-related harm are:

- a) restricting the physical availability of alcoholic beverages;
- b) increasing the price (by raising taxes), and
- c) banning or restricting the marketing of alcoholic beverages.

Other strategies include: special measures against drink – driving (including tougher sentences for exceeding the limit); minimum drinking age measures



and their enforcement; promote and implement early identification and brief intervention of harmful drinking in the primary health care system; ensure essential consumer information on containers of alcoholic beverages (extensive labelling, including health warnings); provide effective treatment for alcohol-related disorders; regulate informally produced alcohol; and in general, provide information and education in appropriate settings.

### **Current trends in alcohol policy making**

**More and more people and governments are appreciating now that alcohol is not an ordinary commodity**

As mentioned before, the science about the size and the extent of alcohol-related harms has increased substantially over the last decades and can no longer be ignored or overlooked. More and more people and governments are appreciating now that alcohol is not an ordinary commodity, and that special policy measures are needed to control the harm. Slowly but surely, in spite of increasing efforts by the alcohol industry and its partners to keep things as they are, the attitudes of the general public and politicians in many countries vis-à-vis alcohol are changing.

Positive developments are under way in various countries and internationally. Restrictions on advertising for alcoholic beverages are increasingly coming into force in European countries. Advertising of alcoholic beverages is now totally forbidden in Norway and an almost total ban exists in Lithuania and Finland. In Ireland the parliament recently adopted legislation whereby it will be mandatory for the packaging on alcoholic beverages to display information including calorie content, risk of cancer, and liver disease as well as the dangers of drinking during pregnancy. In Scotland a minimum unit price for alcoholic beverages is in force. Newspaper articles increasingly report on the development and implementation in local communities of restrictions for selling or consuming alcohol in certain areas or at certain times.

### **Trends at global level**

For the World Health Organization (WHO) alcohol-related harm has become one of its priorities: at the World Health Assembly in 2010 the 193 Member States of the Organization endorsed the Global Strategy to Reduce the Harmful Use of Alcohol. Later in May 2022, the Member States endorsed the Global Alcohol Action Plan 2022-2030.

The UN adopted in 2015 targets for achieving the 17 Sustainable Development Goals. Here also figures specifically the reduction of alcohol-related harm as one of the targets (SDG 3.5: 'strengthen prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol'). This demonstrates the awareness of the relevance of alcohol even for global development. Alcohol-related harm impacts many of the Sustainable Development Goals (such as e.g.

child health, infectious diseases, housing, poverty and education) (World Health Organization, 2020).

### **Barriers to effective policies**

In spite of the abundant evidence that we now have on the significant negative impact on public health and social welfare, as well as on existing opportunities to reduce alcohol-related harm, and also some positive developments in a number of countries, progress towards implementing effective alcohol harm reduction policies and strategies is slow. On the one hand this may be explained by the lack of knowledge in the general public of the harmful effects of alcohol intake. Further, increasing prices and implementing controls are almost by definition unpopular measures. And, last but not least: a well-organised and financially strong lobby is constantly at work, at every possible level, to make sure that any action to decrease consumption is met with powerful opposition.

### **The role of the industry**

Public health interests are often in conflict with commercial interests. We have seen that with the production and marketing of tobacco. We observe this in the food and nutrition sector; alcohol is no exception. Globally, the production of alcoholic beverages is in the hands of a small number of companies; to name just a few important ones: Pernod Ricard, Anheuser Busch, Asahi, Bacardi, Carlsberg, Heineken, and a few others. These huge companies own and control the total global alcohol market, which in 2022 had a market value of some 1,546.6 billion USD. They use the whole range of marketing techniques to extensively promote their products. Diageo, for example, increased its marketing expenditures in the years between 2017 and 2022 by 51%. In 2022 they spent 2.7 billion GBP to promote their drinks (Stewart, 2022).

Advertising – increasingly over the internet, using social media – is one way of marketing. Sponsoring sports and cultural events is another popular strategy. The industry and its partners are very efficient in liaising with politicians and with other sectors. Lobbying at political institutions at international, national and local levels, is an everyday activity for representatives of the industry and its partners.

A popular overall strategy of the industry is to express social responsibility, to become active in prevention work, and to promote ‘responsible drinking’ (thereby implicitly suggesting that drinking alcohol itself is a normal thing to do, and that if anything goes wrong, it is the drinker who is to be blamed and not the substance alcohol). A recent study found that the majority of social responsibility actions in the alcohol industry lack scientific support and 11% even had the potential for doing harm (Babor et al., 2018).



## Conclusion

Alcohol, often being associated with pleasure, fun and relaxation brings along very high costs to public health and social and economic welfare. These costs have so far been widely underestimated and disregarded.

Recent years have seen growing scientific evidence on the wide range and extent of alcohol-related costs as well as on the effectiveness of opportunities to reduce alcohol-related harm. Consequently, a range of efforts at national and international levels has been developed, implemented and these efforts effectively reduce alcohol-related harms in a growing number of countries and communities.

A wealth of information and tools is available from national public health institutions, from the European Centre, and in particular, from the World Health Organization – both from Headquarters and the European Regional Office (see here: [www.who.int](http://www.who.int)).

Institutions in the health and social welfare sector are well placed to play an important role in the social debate about alcohol and in preventing and responding to alcohol-related harm. They are being confronted daily with the adverse effects of alcohol consumption. They are a trustworthy source of information and education. And they can and should have a strong voice in the political debates at international, national and local levels.

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