QUESTIONS AND ANSWERS ON THE PREVENTION AND CONTROL OF ALCOHOL-RELATED HARM

World Health Organization
Representative Office for Viet Nam

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FOREWORD

Alcohol consumption is a factor that hinders sustainable development in three dimensions: health, the economy and society. The harmful use of alcohol is one of the five leading causes of global disability and deaths. Each year, the harmful use of alcohol accounts for 5.3% of global deaths, resulting in six deaths every minute and the loss of 3 million lives. Alcohol consumption causes death and disability relatively early in life. Among those aged 20–39 years, approximately 13.5% of total deaths are attributable to alcohol. Alcohol use is a barrier to countries meeting the Sustainable Development Goals, including those related to ending poverty and hunger and promoting good health and well-being, quality education, gender equality, clean water and water security, economic growth, reduced inequalities, and sustainable cities and communities. Viet Nam is one of the few countries in the world with a sharp increase in alcohol consumption, especially among men. In 2016, alcohol per capita consumption in Viet Nam was the second highest in South-East Asia and the third highest in Asia.

To reduce the harm caused by alcohol consumption, the World Health Assembly has called upon countries to develop and enforce policies to reduce the harmful use of alcohol. In Viet Nam, on 12 February 2014, the Prime Minister issued a decision to promulgate the national policies through 2020 for the prevention and control of the harm of alcoholic beverage abuse, demonstrating the strong political commitment of the Government of Viet Nam to the prevention and control of the harmful use of alcohol and its consequences.

This publication, *Questions and Answers on the Prevention and Control of Alcohol-Related Harm*, has been developed to provide basic information on the harm of alcohol use. It also shares evidence and experience with managers and policy-makers on global efforts to control alcohol to facilitate the development, refinement, and enforcement of policies and regulations on the prevention and control of alcohol-related harm in Viet Nam, thus contributing to the prevention of economic losses, the social and health consequences attributable to alcohol, and the enhancement of the well-being of society and sustainable development.

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PART I

THE HARMFUL USE OF ALCOHOL AND ITS CONSEQUENCES

Question 1: What is the harmful use of alcohol?

Answer:

Alcohol is a psychoactive substance with dependence-producing properties that has been widely used in many cultures for centuries. The harmful use of alcohol causes a large disease, social and economic burden in societies.

According to the World Health Organization (WHO) *Global Strategy to Reduce the Harmful Use of Alcohol*, the concept of the harmful use of alcohol is broad and encompasses drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, as well as patterns of drinking that are associated with increased risk of adverse health outcomes *(1)*. It has a serious effect on public health and is considered to be one of the main risk factors for poor health globally. It can ruin the lives of individuals, devastate families and damage the fabric of communities.

Question 2: Does drinking beer cause less harm to health than drinking wine/spirits?

Answer:

No, it does not. Harm is mainly caused by ethanol in the beverage; therefore, alcohol-related harm does not depend on the type of beverage (beer or wine/spirits). Instead, it depends on the total volume of drinking (how many grams of alcohol are consumed) and the pattern of drinking (frequency of use or heavy episodic drinking) *(2)*.

Question 3: What is a standard drink?

Answer:

In order to help visualize and estimate the amount of pure alcohol consumed, many countries integrate the definition of an alcoholic beverage and the definition of a standard drink into national drinking guidelines. Fifty countries provided a definition of a standard drink in grams of absolute alcohol. By far, 10 grams was the most common size for a standard drink (26 responding countries) *(3)*.

The pure alcohol mass consumed can be calculated by the following equation:

Pure alcohol mass = volume x (alcohol by volume x volumetric mass density)

For example, a 0.33 litre glass of beer with alcohol by volume of 4.0% has 10.4 grams of pure alcohol. Volumetric mass density of pure alcohol has a density of 0.793g/cm³ (at 20 °C). Each of the following serves as an example of one standard drink (10 grams of pure alcohol).

Three quarters of 330 ml bottle/can of beer (5%); one 100 ml glass of wine (13.5%); one 330 ml glass of draught beer (4%); and one 30 ml cup of spirits (40%).

Three quarters of 330 ml bottle/can of beer (5%)

One 100 ml glass of wine (13.5%)

One 330 ml glass of *Bia Hoi* (4%)

One 30 ml cup of spirits (40%)

Question 4: What is heavy episodic drinking?

Answer:

Heavy episodic drinking (HED) is defined as drinking at least 60 grams or more of pure alcohol (six standard drinks) on at least one occasion in the past 30 days. HED is one of the most important indicators for acute (health and social) consequences of alcohol use, such as injuries *(4)*.

Question 5: Is there a risk threshold of alcohol consumption on health?

Answer:

The 2016 *Global Burden of Disease Study* concluded that the safest level of alcohol drinking is no drinking at all *(5)*. The widely held view of the health benefits of alcohol needs revising, particularly as improved methods and analyses continue to show how alcohol use contributes to global death and disability.

The level of alcohol consumption that minimized harm across health outcomes was zero grams of pure alcohol per week. Although some previous studies found alcohol can have protective benefits for the heart – but only if you drink within the low-risk level (less than 10 standard drinks per week, with two days of abstinence from drinking) and you are over 45 years old. More recent studies with better methodology increasingly show either a non-significant or no protective effect of drinking on cardiovascular outcomes and on all causes of mortality. Moreover, these protective effects found in the studies did not take into account the overall health risks – especially the strong association between alcohol drinking and risk of cancer, injuries and communicable diseases *(5)*.

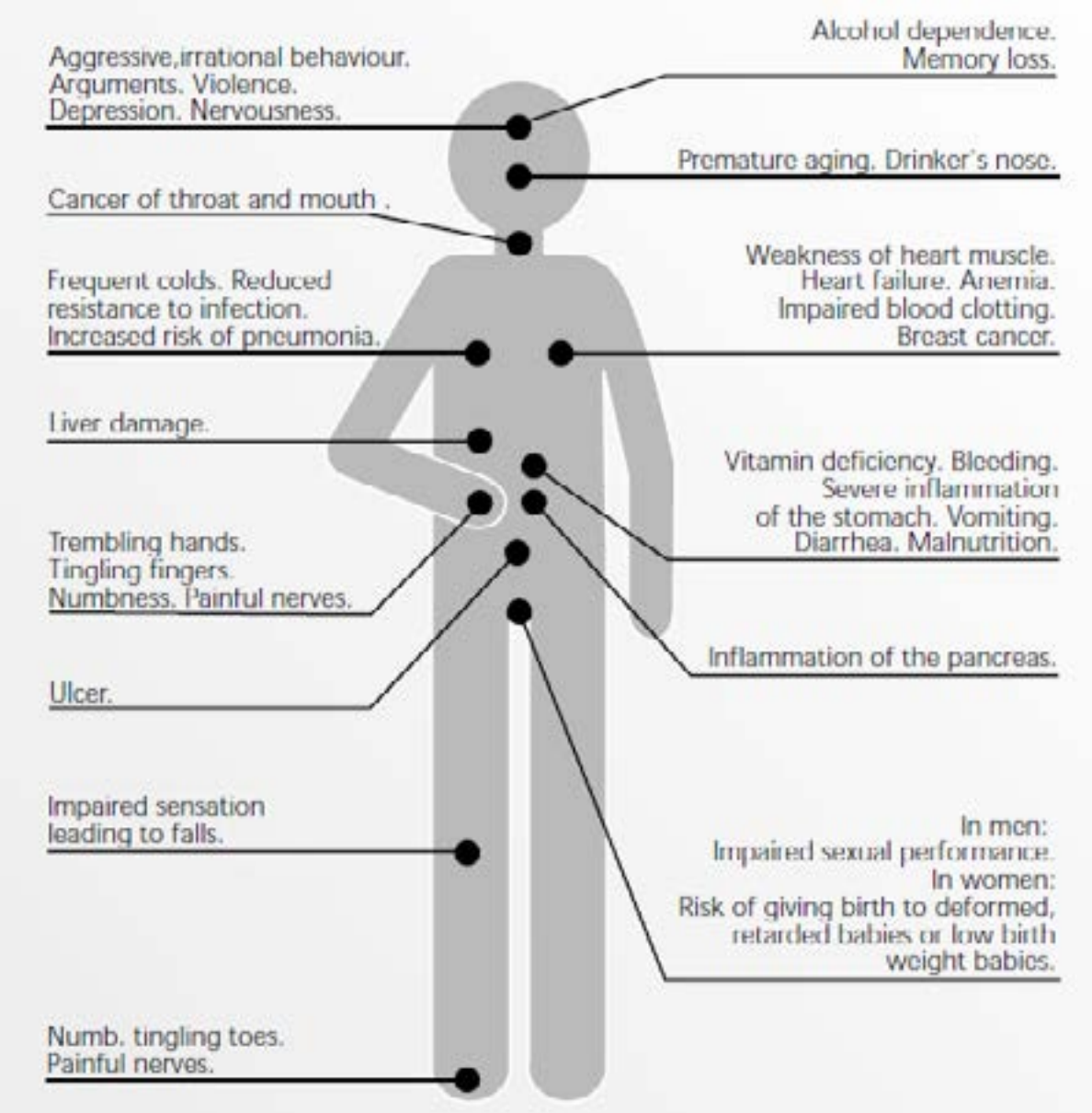
Question 6: What diseases can be caused by alcohol use?

Answer:

Alcohol is a causal factor in more than 230 diseases and injury conditions, as described in the *International Statistical Classification of Diseases and Related Health Problems, 10th revision (3)*. Alcohol is a psychoactive substance with dependence-producing properties. Drinking alcohol is associated with the risk of developing health problems such as mental and behavioural disorders, including alcohol use disorder (AUD), major noncommunicable diseases (NCDs) (see Fig. 1), and injuries resulting from violence and road crashes and collisions *(6–8)*. Some major diseases/injuries caused by alcohol use include:

1. **Cardiovascular diseases.** Alcohol use increases the risk of cardiovascular diseases including haemorrhagic stroke, heart failure, hypertensive heart disease and fatal aortic aneurysm *(9)*.
2. **Digestive diseases/gastrointestinal disorders.** Excessive alcohol consumption can cause liver trauma and liver cirrhosis, worsen traumas caused by the hepatitis C virus, and result in acute or chronic pancreatitis.
3. **Cancers.** The International Agency for Research on Cancer classified ethanol contained in alcohol as a carcinogen. Alcohol consumption is causally related to oral cavity, hypopharyngeal, oropharyngeal, laryngeal, oesophageal, liver, colon, rectal, intrahepatic bile duct and breast cancer.
4. **Injuries.** A significant proportion of the disease burden attributable to alcohol consumption arises from unintentional and intentional injuries, including those due to road traffic crashes, violence and suicides, and fatal alcohol-related injuries tend to occur in relatively younger age groups. Alcohol has been identified as an important risk factor for road traffic injuries, accounting for 41% of total death due to alcohol-related injuries in 2016.
5. **Alcohol use disorder (AUD)**. AUD is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake and a negative emotional state when not using. In 2016, 283 million people aged 15 years or older (accounting for 5.1% of adults) had an AUD *(3)*.

Fig. 1. Alcohol-related health problems *(10)*



Question 7: What is the impact of alcohol consumption on traffic safety?

Answer:

Alcohol use increases the risk of being involved in a crash for drivers, motorcyclists and pedestrians due to impaired body reactions, limited physical coordination, limited vision and sleepiness. Research has shown that a motorbike rider with a blood alcohol concentration of 50 mg/dl has an accident risk 40 times higher than that of a non-user *(11)* .

Question 8: What are the alcohol-attributable consequences for social behaviour?

Answer:

In addition to harming health, alcohol consumption can contribute to many severe social problems such as aggression, violence, reduction of public order and safety, crimes, and social discrimination *(2)*.

Aggression, violence and crimes

A dose-response connection between blood alcohol concentration (BAC) and aggression was found, with the effects becoming significant with a BAC of 0.05%, and rising with higher levels *(12)*. Alcohol users are responsible for 88 000 interpersonal violence-related deaths in 2016 globally *(3)*, 47% of interpersonal violence cases occurring in England and 63% in Scotland, and 33% of family violence cases in India and 51% in Nigeria *(2)*.

In relation to crimes, 19% of criminal cases and 11% of antisocial behaviours in Northern Ireland are associated with alcohol use *(13)*. In Thailand, in 2008, 40% of crimes committed by young people are associated with their use of alcohol *(14)*.

Impairment of social function

Alcohol consumption affects the social functioning of the drinker. It impairs work and learning ability, the function of being a spouse or parent, diminishes social/family relations and increases the risk of crimes.

A WHO global status report showed that alcohol consumption is the cause of 15–20% of absenteeism and 40% of workplace accidents in India. Some 30% of absenteeism and workplace accidents in Costa Rica are attributable to alcohol dependence *(6)*.

Question 9: What are the consequences of alcohol use and its economic burden?

Answer:

There is a wide array of economic losses associated with alcohol consumption. At the household level, alcohol consumption by family members can cause significant financial losses and distress for families, especially among the poor families, which worsens poverty *(15–17)*.

At the societal level, economic loss associated with alcohol consumption includes burdens to social response services, such as social welfare, health and criminal justice systems. The social costs of alcohol consumption have been estimated across the world, including the following components *(18)*:

- Direct costs: health-care costs of diseases and injuries related to alcohol, property losses due to traffic crashes and accidents, and law enforcement and legal service costs.
- Indirect costs: losses in productivity due to absenteeism, reduced on-the-job productivity, and premature deaths and absenteeism for the resolution of other alcohol-related consequences.

- Intangible costs: a diminished quality of life, pain, grief and suffering.

Economic losses due to alcohol use accounts for 1.3–3.3% of gross domestic product (GDP) of studied countries (see Table 1) *(19)*.

Table 1. Economic costs attributable to alcohol in some countries

Country	Canada	France	Scotland	United States of America	Republic of Korea	Thailand
Year	**2002**	**1997**	**2001–02**	**1998**	**2000**	**2006**
Population (million)	31.9	58.6	5.1	280.6	47.5	64.6
GDP, purchasing power parity (PPP)*	929 912	1 301 087	133 719	8 587 884	760 549	604 575
Total cost (US$ million)	**13 406**	**22 506**	**1 813**	**234 854**	**24 914**	**7 903**
Total costs (% GDP, PPP)	**1.4**	**1.7**	**1.4**	**2.7**	**3.3**	**1.3**

*Adjusted to 2007 US$ milllion

Source: Rehm et al., 2009.

PART II

ALCOHOL USE IN VIET NAM AND ITS CONSEQUENCES

Question 10: What is the alcohol use and drinking pattern in Viet Nam?

Answer:

Alcohol use in Viet Nam is currently at a high level and has dramatically increased over the years, demonstrated by three indicators:

(1) alcohol per capita consumption level

(2) prevalence of last-month drinkers

(3) prevalence of heavy episodic drinking.

➢ ***Alcohol per capita consumption level***

Viet Nam has faced a sharp increase in the annual consumption level per capita of pure alcohol by adults (age 15 and older for both genders), from 3.8 litres between 2003 and 2005 to 4.7 litres between 2009 and 2011 to 8.3 litres from 2015 to 2017 (see Table 2). WHO also forecasts that this consumption level will further increase to 9.9 litres by 2020 and 11.4 litres by 2025 in the absence of effective interventions to control the harmful use of alcohol *(3)*.

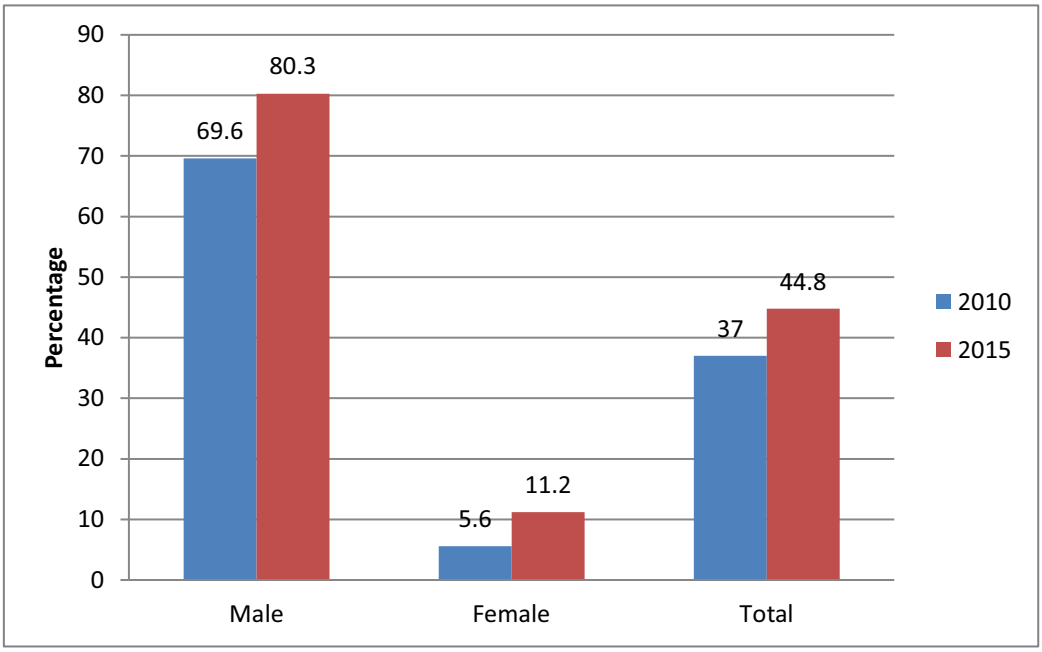
Table 2. Pure alcohol per capita annual consumption (15 years and older) in Viet Nam, Western Pacific Region and the world 2005, 2010 and 2016 (litres) *(3)*

	2005	**2010**	**2016**	% change **2010–2016**
Viet Nam	**3.8**	**4.7**	**8.3**	**77%**
Western Pacific Region	4.6	7	7.3	4.3%
World	5.5	6.4	6.4	0

➢ ***Prevalence of last-month drinkers***

The proportion of the population currently using alcohol in Viet Nam is high and has dramatically increased among both men and women in recent years. Results of national surveys on NCD risk factors showed that in 2015, 80.3% of men between the ages of 25 and 64 used alcohol, an increase of nearly 11% compared to 2010, and 11.2% of women in the same age bracket used alcohol, double the number compared to 2010 (see Fig. 2) *(20)*.

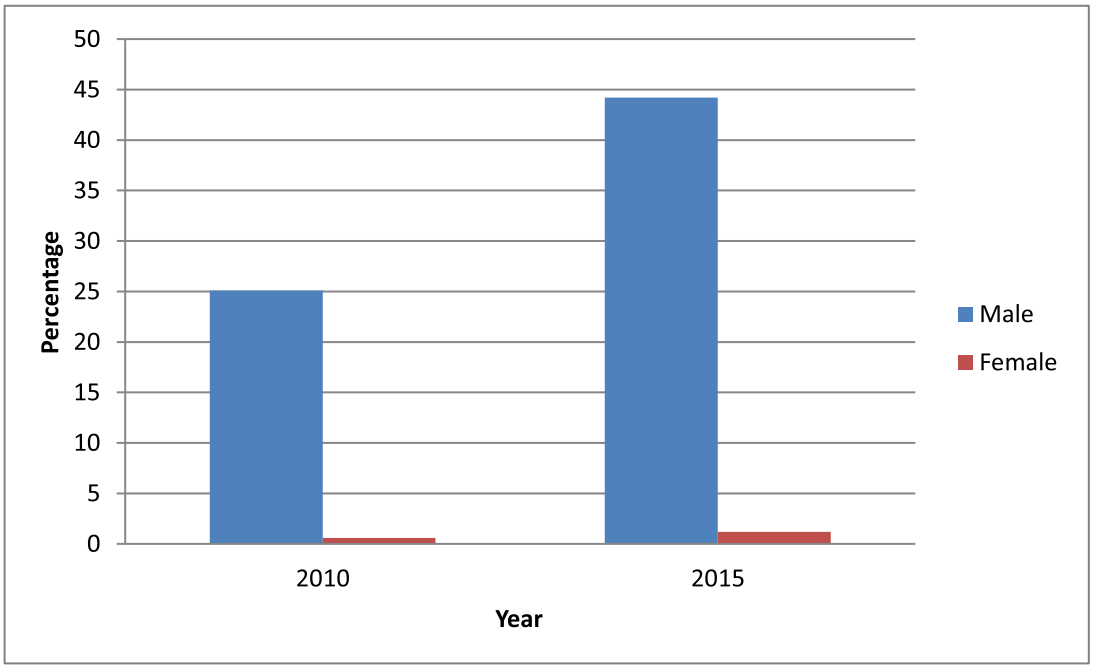
Fig. 2. Percentage of adults (aged 25–64 years) who used alcohol over the past 30 days in Viet Nam between 2010 and 2015 *(20)*



➢ *Prevalence of heavy episodic drinking*

In addition to a high level of per capita consumption, heavy episodic drinking (HED) is common among Vietnamese adults. In 2015, almost half of adult males (44.2%) engaged in HED, nearly doubling the percentage of 2010 (25.1%) (see Fig. 3) *(20)*.

Fig. 3. Percentage of the population with heavy episodic drinking, 2010–2015 *(20)*



Question 11: How widespread is alcohol use among the young people in Viet Nam?

Answer:

For Vietnamese adolescents, alcohol consumption is at an alarming level and increasing.

According to the national survey of adolescents and youths in 2008, approximately 80% of young men and 36.5% of young women aged 14–25 years used alcohol, an increase by 10% among males and 8% among females over five years. Some 60.5% of young males and 22% of young females had ever been intoxicated *(21)*.

It is notable that prevalence of underage drinking – drinking (14–17 years) – is high at 47.5% for both sexes. 67% of young people aged 18-21 years used alcohol *(21)*. According to a 2013 school-based student health survey, 52.7% of students in the 8th to 12th year of school had ever used alcohol, among them, 43.8% drank their first glass of beer or wine/spirits before age 14 and 22.5% had been intoxicated at least once *(22)*.

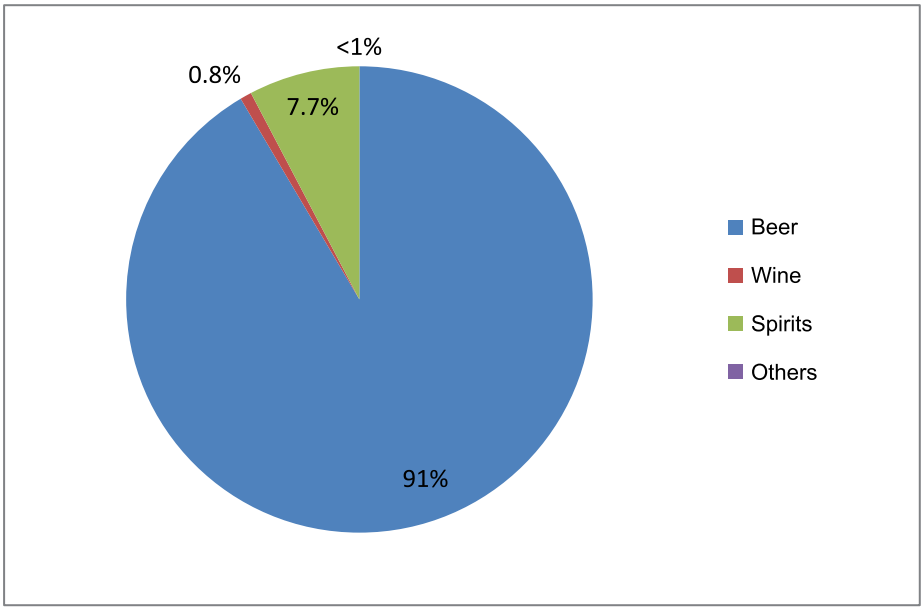
Question 12: Which types of alcoholic beverages are commonly consumed in Viet Nam?

Answer:

WHO estimated that unrecorded alcohol, mainly home-made alcohol, represents about 64% of alcohol consumption (in litres of pure alcohol) in Viet Nam *(20)*. Recorded alcohol (commercial alcohol products) claims the remaining 36% of alcohol consumption in Viet Nam. Regarding recorded alcoholic beverages, beer is primarily consumed in Viet Nam, accounting for 97% and 91% of pure alcohol consumed in 2010 and 2016, respectively (see Fig. 4) *(3, 23)*. Beer sales increased from 2.8 billion litres in 2012 *(24)* to more than 4 billion litres in 2017 *(25)*.

About 51% of commercial alcohol is consumed in HED occasions. This means that recorded/commercial alcohol consumed is slightly more likely to be consumed in harmful drinking occasions compared with informal alcohol *(26)*.

Fig. 4. Recorded alcohol per capita (15 years and older) consumption (in litres of pure alcohol) by type of alcoholic beverage, 2016 *(3)*



Question 13: What are alcohol-attributable morbidity and mortality in Viet Nam?

Answer:

Viet Nam is facing increasingly severe growth in NCDs. WHO estimated that in 2016, the country recognized 549 000 deaths for all causes, of which fatal NCDs accounted for 77%. Deaths due to cardiovascular diseases took the leading position at 31%, followed by cancer (19%), chronic obstructive pulmonary disease (6%) and diabetes mellitus (4%) *(27)*. Alcohol is one of the four major risk factors for such NCDs.

According to research on the global burden of disease in 2016, 12% of deaths in Viet Nam are associated with alcohol use. Alcohol is the second highest risk factor among the 10 leading factors causing disability and mortality and is the cause most associated with injuries, traffic crashes, mental and behavioural disorders, liver cirrhosis, cardiovascular diseases, cancer, and certain communicable diseases *(28)*.

Question 14: To what degree does alcohol use in Viet Nam contribute to traffic crashes?

Answer:

Alcohol is one of the three leading causes of increasing traffic injury rates in Viet Nam in men aged 15–49 years *(28)*.

Alcohol-related road crashes in Viet Nam account for 32.4% of total road crashes in men and 19.6% in women *(3)*.

An analysis of survey data of 1061 deaths due to road crashes in Viet Nam shows that one fifth of deaths due to road crashes are caused by alcohol use *(29)*. It is notable that forensic examination results by Hanoi Medical University and Viet Duc Hospital of 100 fatal cases due to alcohol-related road crashes show that approximately 59% of victims were in the age group 15–29 years and 24% in the age group 30–44 years; 97% were men and 82% of the victims had a BAC of > 50 mg/100 ml of blood. A majority of alcohol-related road crashes are severe, and 68% of victims die within 30 minutes of the accident.

Question 15: How severe are alcohol-related social consequences in Viet Nam?

Answer:

In Viet Nam, according to the 2015 report of the People's Police Academy, more than 70% of criminal cases in Viet Nam were caused by people under the age 30 years who had been drinking *(30)*. Some 46.2% of families had an HED person within their family and 41.7% of families an HED person as their breadwinner. Eighty-nine per cent of households had a last-year drinker, of which more than 11% of those households suffered alcohol-related domestic violence over the past 12 months *(31, 32)*. Harm from the drinking of others is highly prevalent. Among nine countries studied, as reported by parents/caregivers, children in Viet Nam were most vulnerable to specific harm from the drinking of others *(33)* and women were most vulnerable to their partner's heavy drinking *(34)* in the previous 12 months. Nearly 70% of adults suffered one or several types of harm (physical health, mental health, and loss of work time, money or properties) from the drinking of people around them (friends, acquaintances, co-workers, strangers and especially family members) in the previous 12 months *(35)*.

- Of married women or those living with their partners, 32.5% experienced some form of harm from their partner's or husband's heavy drinking *(34)*.
- Further, 21% of parents/caregivers said that children in the family suffer harm from the drinking of others and 14% said children suffered at least one of the specific harms – being yelled at, criticized or verbally abused; being left unsupervised or in unsafe place; witnessing serious violence in the home; suffering physical harm; lacking essential needs due to a shortage of money *(33, 36)*.

  Alcohol use is also one of the causes of increased gender inequality and socioeconomic inequality, challenging efforts to end the "poverty trap" for poor and near-poor households.
- Studies have shown that a higher proportion of poor and near-poor households suffer a combination of having a HED individual and alcohol-related harm compared to the other households: 20.3% of poor and near-poor families having an HED individual and alcohol-related domestic violence and 9.6% had an HED individual and alcohol-related injury, accident or property loss, compared to 6.7% and 3.4% among the other families, respectively. There was a persistent high-level inequality disadvantaging lower-living-standard families, especially in rural areas, in suffering all of these measured types of alcohol-related harm *(31, 32)*.

- Some 11.6% of the poor and near-poor households had to spent part of their scare financial resources on solving alcohol-related consequences of an accident, injury or damaged property or pay fines for breaking the law while under the influence of alcohol, for example drink–driving. Some 4% of the poor families had to borrow money to address these problems *(32)*.
- Some 8.8% of poor households reported a lack of food due to alcohol use and alcohol-related consequences *(32)*.
- The risk of being most affected by a heavily drinking family members among women is seven times higher than it is for men, and among ethnic minority people it is 3.4 times higher than it is for the Kinh people *(35)*.

Question 16: What are the consequences of alcohol use and what is the economic burden in Viet Nam?

Answer:

The economic cost for beer consumption equals US$ 4 billion in 2017 (4.06 billion litres of beer consumed in 2017), and is estimated to be equal to nearly 7% of the country's budget revenue (not to mention indirect cost), while contribution from the beverage industry to the State Budget in 2017 was approximately 50 000 billion Vietnamese dong (VND), equivalent to about US$ 2 billion, according to the General Statistics Office. The direct cost for alcohol consumption alone is twice as high as the amount contributed to the State Budget from the alcohol and beverage industries.

Meanwhile, the health-care cost is extremely high. The report of the Viet Nam National Institute for Cancer Control shows the total direct and indirect medical costs of the six common cancer types in Viet Nam for which alcohol use is one of the main causes (liver cancer, colorectal cancer, cancer of the mouth, gastric cancer, breast cancer, cervical cancer) reached VND 25 789 billion. The economic burden for direct medical cost of cancer is placed on households (48%), health insurance (25%) and the Government (27%) *(37)*.

In 2017, at least 6.2% of households direct and indirect cost from one or several alcohol-related acute consequences (non-fatal injury, accident/property loss, caring drunken drinkers, breaching law under the influence of alcohol, and compensations to outsiders due to household and/or non-household members' drinking). Average cost borne by one affected households was VND 5 893 000. At least 25.3 million working days of household's income earners lost due to these measured consequences.

Besides this, there is the loss due to erosion of the culture, personal qualities, ethics and way of life caused by alcohol use, a severe social burden that is incomparable and difficult to quantify.

PART III

RECOMMENDED MEASURES TO REDUCE THE HARMFUL USE OF ALCOHOL AND ITS CONSEQUENCE IN VIET NAM

Question 17: What is the global context of alcohol policy?

Answer:

At the global level, public health leaders have made tackling the harmful use of alcohol a priority. The harmful use of alcohol is emphasized in the 2030 Agenda for Sustainable Development *(38)*. Political commitments were made at the NCD high-level meetings of the United Nations General Assembly in 2011 and 2014, at the World Health Assembly through the 2010 WHO *Global Strategy to Reduce the Harmful Use of Alcohol (1)* and in the WHO *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 (39)*, with the 2017 update of Global Action Plan's Appendix 3 on "best buys" *(40)*. The *WHO Global Monitoring Framework for NCDs* includes a target to reduce harmful use of alcohol by at least 10% by 2025. WHO's five-year strategic plan, the 13th General Programme of Work 2019–2023, notes that action to reduce the harmful use of alcohol is a global priority.

The WHO *Global Strategy to Reduce the Harmful Use of Alcohol (1)* was adopted in 2010, with the aim to increase the commitment of governments, strengthen the knowledge base, enhance the capacity of Member States, foster partnerships and coordination, and improve monitoring and surveillance systems in order to curb the harmful use of alcohol. The Strategy also includes recommended evidence-based interventions grouped into 10 action areas (see Table 3).

Table 3. The WHO Global Strategy to Reduce the Harmful Use of Alcohol: 10 areas for policy options and interventions

Target areas	Options for policies and interventions
Leadership, awareness and commitment	Expressing political commitment through adequately funded, comprehensive and intersectoral national policies that are evidence-based and tailored to local circumstances.
Health services response	Providing preventive services and treatment to individuals and families at risk of, or affected by, alcohol use disorders and associated conditions.
Community and workplace action	Harnessing the local knowledge and expertise of communities to change collective behaviour.
Drink–driving policies and countermeasures	Introducing measures to deter people from driving under the influence of alcohol; creating a safer driving environment to minimize the likelihood and severity of alcohol-influenced road traffic accidents.
Availability of alcohol	Preventing easy access to alcohol for vulnerable and high-risk groups; reducing the social availability of alcohol so as to change social and cultural norms that promote the harmful use of alcohol.

Marketing of alcoholic beverages	Protecting young people by regulating both the content of alcohol marketing and the amount of exposure to that marketing.
Pricing policies	Increasing the prices of alcoholic beverages to reduce underage drinking, to halt progression towards drinking large volumes of alcohol and/or episodes of heavy drinking, and to influence consumers' preferences.
Reduction of the negative consequences of drinking and alcohol intoxication	Reducing the harm from alcohol intoxication by managing the drinking environment and informing consumers.
Reduction of the public health impact of illicit alcohol and informally produced alcohol	Reducing the negative consequences of informal or illicit alcohol through good market knowledge, an appropriate legislative framework and active enforcement of measures.
Monitoring and surveillance	Developing surveillance systems to monitor the magnitude of and trends in alcohol-related harms, to strengthen advocacy, to formulate policies and to assess the impact of interventions.

Recently, WHO has released SAFER (41), a new initiative and technical package outlining five high-impact strategies that can help governments in taking practical steps to accelerate progress on health, beat NCDs through addressing the harmful use of alcohol and achieve development targets. The SAFER action package include: S (Strengthen restrictions on alcohol availability); A (Advance and enforce drink–driving countermeasures); F (Facilitate access to screening, brief interventions and treatment); E (Enforce bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion); and R (Raise prices on alcohol through excise taxes and pricing policies).

Three key strategies that will ensure country success include: (1) Implementation: strong political will, adequate resources and technical and institutional capacity are critical to enacting the SAFER interventions at the country level; (2) Monitoring: strong monitoring systems must support implementation to enable accountability and track progress; and (3) Protection: alcohol control measures must be guided and formulated by public health interests and protected from industry interference and commercial interests.

Question 18: What are effective interventions to prevent alcohol-related harm according to WHO recommendations?

Answer:

WHO considers interventions that are the most cost-effective and feasible for implementation are those with an average cost-effectiveness ratio of ≤ Int'l $100 per disability-adjusted life year (DALY) averted in low- and middle-income countries. Three best buys or effective interventions with a cost-effectiveness analysis ≤ Int'l $100 per DALY averted in low- and middle-income countries *(42)* include:

- increasing excise taxes on alcoholic beverages;
- enacting and enforcing bans or comprehensive restrictions on exposure to alcohol advertising, across multiple types of media; and
- enacting and enforcing restrictions on the physical availability of retailed alcohol (via reduced hours of sale).

Two best buys or effective interventions for which a cost-effectiveness analysis found > Int'l $100 per DALY averted in low- and middle-income countries *(42)* include:

- enacting and enforcing drink–driving laws and BAC limits via sobriety checkpoints; and
- providing brief psychosocial interventions for people with hazardous and harmful alcohol use.

Other recommended interventions from WHO guidance that have been shown to be effective but for which no cost-effective analyses were conducted, include:

- carrying out regular reviews of prices in relation to level of inflation and income;
- establishing minimum prices for alcohol, where applicable;
- enacting and enforcing an appropriate minimum age for purchase or consumption of alcoholic beverages and reducing density of retail outlets;
- restricting or banning promotions of alcoholic beverages in connection with sponsorships and activities targeting young people;
- providing prevention, treatment and care for alcohol use disorders and co-morbid conditions in health and social services; and
- providing consumer information about and labelling alcoholic beverages to indicate the harm related to alcohol.

Question 19: What is the value of the implementation of effective interventions to prevent alcohol-related harm?

Answer:

Investing in alcohol control interventions not only reduces consumption and negative consequences, it can improve health and save lives, as well as improve a country's economic productivity. According to a 2018 WHO estimate, for every US dollar invested in implementing best-buy strategies (taxation, physical availability controls, and a ban or comprehensive restrictions of alcohol advertising) the return is US$ 9.13. This return is higher than for a similar investments in tobacco control (US$ 7.40) or the promotion of physical activity (US$ 2.80) *(43)*.

PRICING POLICIES FOR ALCOHOL AND ALCOHOLIC BEVERAGES

Question 20: What are the effects of alcohol price increases on consumption and alcohol-related problems?

Answer:

Alcohol taxation and pricing policies have several public health, economic and social benefits. The benefits of taxation and pricing policies are: (1) tax revenue generation; (2) the control of alcohol consumption and associated harm among various groups, including young people and heavy drinkers; and (3) the prevention of drinking initiation, which is an important preventive strategy in low- and middle-income countries in which the majority of the population are abstainers *(44)*. Alcohol consumption and control by taxation and pricing policies operate via a demand–supply equilibrium mechanism, with elements related to price increases, consumption decreases, price decreases and consumption increases. However, the effects of taxation and pricing policies vary depending on different market structures and the lag time to measure the effects after implementation *(44)*.

There is a reverse correlation between price increase and alcohol consumption. The price elasticity of alcohol consumption ranges from -0.50 for beer to -0.79 for other alcohol (including spirits and wine), and -0.65 for total consumption, meaning a 10% increase in the price of alcohol can lead to a decrease of 5% in consumption of beer, 7.9% for spirits or wine, and 6.4% for total consumption *(45)*. Additionally, increasing the price of alcohol is also associated with reductions in alcohol-related harm and alcohol-related morbidity and mortality, including traffic fatalities, liver cirrhosis deaths, violence, suicide, crime, teenage pregnancy and sexually transmitted infections *(46–49)*.

Question 21: What are possible policy options for alcohol pricing control?

Answer:

Consumers, including heavy drinkers and young people, are sensitive to changes in the price of alcoholic beverages. Pricing policies can be used to reduce underage drinking, to halt progression towards drinking large volumes of alcohol and/or episodes of heavy drinking, and to influence consumers' preferences.

Policy options and interventions include:

- Establishing a system for specific domestic taxation on alcohol, accompanied by an effective enforcement system, which may take into account, as appropriate, the alcoholic content of the beverage.
    - In order to target alcoholic beverages specifically to generate tax revenue or control consumption, excise taxes with adjustments for inflation and the per capita income growth rate *(2)* are the best tool the Government can use, as compared with custom and general taxes. Several types of alcohol excise taxation methods are employed around the world. These include: uniform tax methods – such as specific taxation, in which the tax is calculated based on the amount of ethanol a beverage contains; ad valorem taxation, in which the tax is based on the price of the alcoholic beverage; and unitary taxation, in which the tax is based on the volume of the alcoholic beverage – and combination tax methods, which is a

combination of two or more of the basic taxation methods – such as mixed specific and ad valorem taxation and ad valorem with a specific "floor" taxation. These methods have different attributes that may be appropriate to different contexts and different alcohol control objectives.

  * Ad valorem with specific floor taxation and mixed specific and ad valorem taxation may be appropriate for low- and middle-income countries since they promote consumption of medium alcohol-content beverages, which are expected to reduce total alcohol consumption among heavy drinkers and prevent drinking initiation among young people *(44)*.

- Regularly reviewing prices in relation to level of inflation and income.
- Banning or restricting the use of direct and indirect price promotions, discount sales, sales below cost and flat rates for unlimited drinking or other types of volume sales.
- Establishing minimum prices or bans on low-cost selling and volume discounts to control problems caused by inexpensive alcoholic beverages, as applicable.
- Providing price incentives for non-alcoholic beverages.
- Reducing or stopping subsidies to economic operators in the area of alcohol.

Question 22: How do tax policies in Viet Nam relate to alcohol price?

Answer:

At present, the tax on alcohol in Viet Nam is low, accounting for approximately 30% of retail price, while in many other countries tax ranges from 40–85% of retail price *(50)*. A cross-country study found that the tax on beer in Viet Nam was lower than the tax on beer in Australia, New Zealand and Thailand. Using purchasing power parity (PPP) for the sake of comparison, in 2011 the tax on beer in Viet Nam was 0.12, about half that of Australia (0.24), Thailand (0.26) and New Zealand (0.28) *(51)*.

RESTRICTIONS ON THE AVAILABILITY OF ALCOHOL

Question 23: What are the policy options for the control of the availability of alcohol?

Answer:

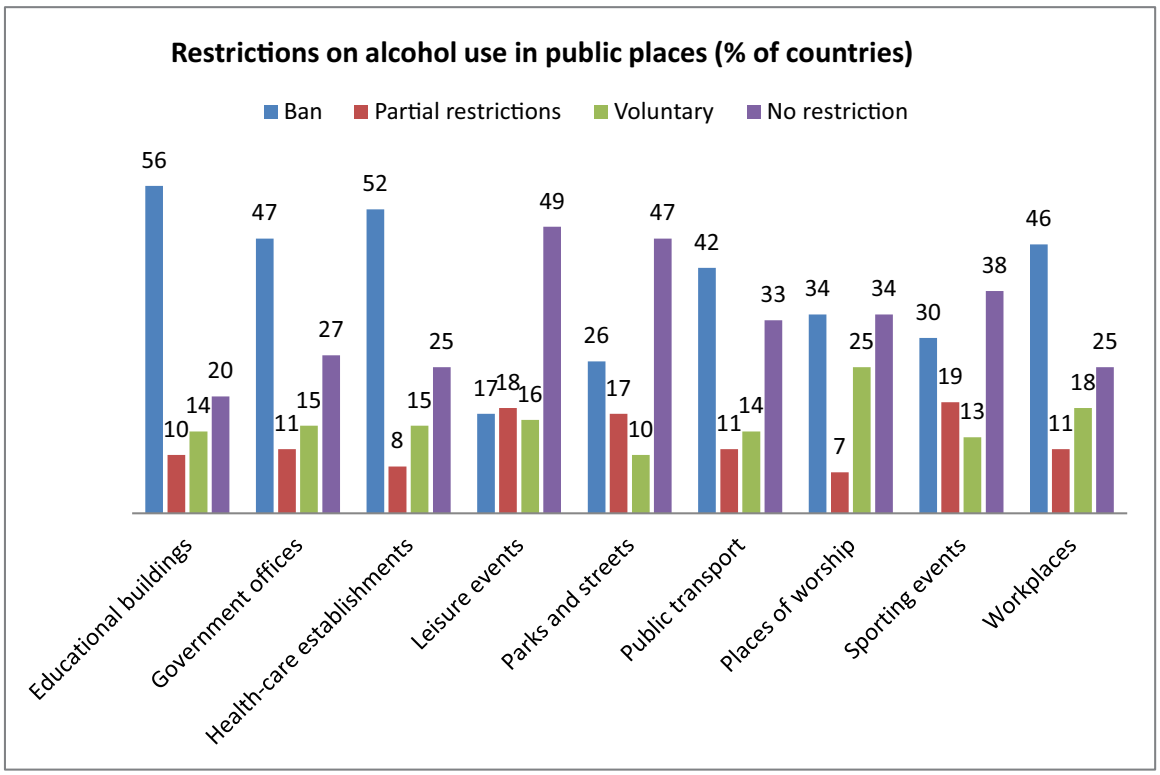
Commercial and public availability of alcohol can have a reciprocal influence on the social availability of alcohol, and thus contribute to changing social and cultural norms that promote alcohol consumption. The level of regulation on the availability of alcohol will depend on local circumstances, including social, cultural and economic contexts, as well as existing binding international obligations. Such strategies provide essential measures to prevent easy access to alcohol by vulnerable and high-risk groups.

Policy options and interventions include *(1)*:

- Establishing, operating and enforcing an appropriate system to regulate production, wholesale and serving of alcoholic beverages that places reasonable limitations on the distribution of alcohol and the operation of alcohol outlets in accordance with cultural norms, by the following measures (see Fig. 5):
  - regulating the number and location of on- and off-premise alcohol outlets;
  - introducing, where appropriate, a licensing system on retail sales, or public- health-oriented government monopolies;
  - regulating the days and hours of retail sales;
  - regulating modes of retail sales of alcohol; and
  - regulating retail sales in certain places or during special events.
- Establishing an appropriate minimum age for the purchase or consumption of alcoholic beverages and other policies in order to raise barriers against sales to, and consumption of, alcoholic beverages by adolescents.
- Adopting policies to prevent sales to intoxicated people and those below the legal age and considering the introduction of mechanisms that place liability on sellers and servers in accordance with national legislation.
- Setting policies regarding drinking in public places or at official public agencies' activities and functions, such as hospitals, health facilities, educational buildings or governmental offices (see Fig. 6).
- Adopting policies to reduce and eliminate availability of illicit production, sale and distribution of alcoholic beverages as well as to regulate or control informal alcohol.

Fig. 5. Global licensing requirements for alcohol retail sales by beverage type (percentage of countries), 2016 *(3)*

Fig. 6. Global restrictions on alcohol use in public places, 2016 *(3)*



ALCOHOL MARKETING REGULATION

Question 24: What are possible policy options to regulate alcohol marketing?

Answer:

Alcohol is marketed through increasingly sophisticated advertising and promotion techniques, including linking alcohol brands to sports and cultural activities, sponsorships and product placements, and new marketing techniques such as social media (email, SMS and podcasts) and other communication techniques. The transmission of alcohol marketing messages across national borders and jurisdictions on channels, such as satellite television and the Internet, and the sponsorship of sports and cultural events is emerging as a serious concern in some countries. Policy options and inventions to protect young people against these alcohol marketing techniques *(31)* include:

- Setting up regulatory or co-regulatory frameworks, preferably with a legislative basis, and supported when appropriate by self-regulatory measures, for alcohol marketing by:
  - regulating the content and the volume of marketing (marketing could refer, as appropriate and in accordance with national legislation, to any form of commercial communication or message that is designed to increase, or has the effect of increasing, the recognition, appeal and/or consumption of particular products and services). It could comprise anything that acts to advertise or otherwise promote a product or service;
  - regulating direct or indirect marketing in certain or all media;
  - regulating sponsorship activities that promote alcoholic beverages;
  - restricting or banning promotions in connection with activities targeting young people; and
  - regulating new forms of alcohol marketing techniques, for instance social media.
- The development by public agencies or independent bodies of effective systems of surveillance of marketing of alcohol products.
- Setting up effective administrative and deterrence systems for infringements on marketing restrictions.

Question 25: How effective is a ban on alcohol advertising in the media?

Answer:

Data from the studies in low- and middle-income settings found there was an inverse association between increased marketing restrictions of alcohol advertising, particularly beer advertising, and total drinking volume and usual average quantity. A 3% reduction in drinking volume per additional level of restriction for beer, wine and spirits across multiple types of media (national TV, national radio, print media and billboards) can be achieved *(52)*. Research in 17 countries over 13 years show that countries that ban advertising of alcohol and beer on radio and TV have 11% lower alcohol and beer consumption and 23% fewer traffic crashes in comparison to countries without a ban *(53)*.

Question 26: What are the legal gaps in regulations in Viet Nam on advertising, promotion and sponsorship of alcohol?

Answer:

- No regulations in place restricting beer advertisements. Beer and wine/spirits cause equal harm upon conversion into pure alcohol content, but legal regulations only ban the advertising of wine and spirits with an alcohol content of 15%.
- No regulations in place on sponsorship or social responsibilities of beer enterprises.

Question 27: What effect does the lack of a ban on beer advertisements have on the transition of young people to become drinkers?

Answer:

The lower potency in beer, a popular drink, in the context of widespread marketing by commercial beer producers, means beer is likely to be a popular drink with young people as they transition to becoming alcohol drinkers *(54, 55)*.

Question 28: What are challenges and opportunities in global alcohol control?

Answer:

Alcohol policy development and implementation have improved globally, but they are still far from accomplishing effective protection of populations from alcohol-related harm, especially in the context of the growing concentration and globalization of economic actors and the strong influence of commercial interests. There is a need for greater resources and for a priority to be placed on supporting the development and implementation of effective actions in low- and middle-income countries *(3)*.

Among the challenges in addressing alcohol-related problems are: low levels of political will and commitment; a lack of effective coordination for multisectoral action in implementing alcohol policies or integrating alcohol into other policies, for example other drugs, mental health, NCDs; the significant influence of powerful commercial interests on political decisions or in lobbying against public health objectives; and widespread and biased information about the "health benefits of drinking" and the misconception of "responsible drinking" introduced by the industry in some societies that turns attention from risks inherent in the product that cause problems to individual responsibility of the drinker *(3)*.

Among the opportunities for addressing alcohol problems worldwide are inclusion of alcohol-related targets in major global policies and strategic frameworks (the Sustainable Development Goals, United Nations political declaration on the prevention and control NCDs); increased health consciousness about alcohol consumption, particularly its causal relationship with cancers, brain damage and liver diseases; recognition of the role of alcohol control policies in reducing gender and social inequalities, that is WHO's "alcohol best buys" tend to have a greater effect on poorer drinkers than on more affluent ones; role of alcohol intervention in the prevention violence against women; and accumulating evidence of the cost-effectiveness of alcohol control measures and existing tools *(3)*.

ANNEX. POLICY ON THE CONTROL OF ALCOHOL ADVERTISING IN SOME COUNTRIES *(56)*

Country	Control of advertising forms	Control of advertising content
France	Bans all advertisements on television channels and in cinemas Bans advertising on the radio from 17:00 to 24:00 Bans advertising in publications, Internet websites targeting children; bans advertising on Internet sports websites Bans sponsorship for cultural and sports events	Advertising contents: only related to product quality, such as alcohol content, origin, ingredients, production method, name and address of producers Health warning: applicable to all advertisements
Sweden	Bans all advertisements on television and radio Bans advertising in publications for products with alcohol content > 15% From January 2018: the Government is discussing regulations to ban Internet advertising	
Finland	Advertising on television and radio: bans all products with alcohol content > 22%; bans from 07:00 to 21:00 for products < 22%; fully bans advertising on movies for children and young people Advertising in publications: fully bans products with alcohol content > 22%; fully bans products < 22% except for public events. From 2015: bans advertising on games, lottery and products shared on the Internet	Limits the advertising content of publications

Australia	Bans all advertisements of beer, wine/spirits and alcoholic beverages on television programmes for children or in a time frame for children	No imagery encouraging drinking No association with health, success No use of imagery of young people
Republic of Korea	Bans all advertisements of alcoholic beverages with content > 17%	For beverage < 17% of alcohol: - no association with health, success - no encouraging of heavy drinking - no use of imagery of people aged < 19 years
India	Bans all forms of alcohol advertising	
Malaysia	Bans all advertisements	From 22:00, may advertise logos, name of alcoholic beverages No use of imagery of people aged < 18 years
Singapore	Bans all advertisements on television programmes for children or broadcast periods for children	No association with health, success No use of imagery of young people No use of imagery of people aged < 18 years No encouraging of heavy drinking
Thailand	Bans all forms of direct or indirect advertisements indicating the benefits of alcoholic beverages or the promotion of consumption of alcoholic beverages	Advertisements may only provide information without showing imagery of the product or its packages

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