

# ALCOHOL AND CHILDREN

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**Summary.** One of the major challenges faced by states and communities is the prevention of underage alcohol access. Underage drinking is widespread and, to a large extent, tolerated by society. It is also implicated in a range of health and social problems that are both tragic and costly. There are good reasons for a high level of concern about underage drinking: alcohol is the drug most commonly used by youth—more than tobacco and far more than marijuana or any other illicit drug; alcohol is one of the most common contributors to injury, death, and criminal behavior among young people; in addition to the immediate and potentially tragic consequences of underage drinking, early onset of alcohol use increases the risk for chronic alcohol addiction. The bad news is clear and all too visible. Underage alcohol use is a serious problem. But fortunately there is good news as well: a variety of effective strategies have been developed to reduce underage drinking. These strategies can be applied in all sectors of the nation, state, and community – in all areas of the systems that produce, distribute, promote, and consume alcohol. Preventing underage drinking saves lives and saves futures.

**Key words:** *alcohol, underage alcohol access, underage drinking*

**A**lcohol is a legal product with toxic and psychotropic effect that causes tolerability and dependency in long-lasting usage. The production, sale and alcohol consumption are well regulated. The lowest alcohol concentration subjected to taxation (0,5% alcohol content) serves as a starting point for determining the term alcohol beverage.

The oldest method for production of alcohol beverages is the process of fermentation, during which there is enzyme transformation of fruit-sugar, glucose and fructose predominantly, into alcohol derivatives. There is an increase in the produced alcohol during the process of fermentation and reaching alcohol concentration above 12-14%, the process of fermentation stops. Fermentation exists for more than 6000 years, documented as present in Egypt and Babylon. Later the method of distillation is brought into use. Using this method, the alcohol beverages with low alcohol content convert into such with high-alcohol content (e.g. distillates)

by means of removal of water. Brandy, vodka, cognac, whisky, tequila, etc are all distillates. Compared with the products of fermentation (wine, beer), they possess stronger effects.

The literature defines the term one standard drink (boisson standard, BS) as equal to 10 gr pure alcohol. Thus 1 bottle of wine (750 ml 12° alcohol) is equal to 7,5 standard drinks; 1 bottle of whisky (700 ml 40° alcohol) is equal to 23 standard drinks; 1 bottle of port (750 ml 20° alcohol) is equal to 12 standard drinks; 1 bottle of ouzo (700 ml 45° alcohol) is equal to 25 standard drinks; 1 bottle of beer (330 ml 5° alcohol) is equal to 1.32 standard drinks.

The toxicity of alcohol beverages depends mainly on the alcohol concentration in them and varies from drink to drink.

Alcohol consumption up to the level of poisoning varies in the different parts of Europe being considerably lower in the southern regions of Europe (reports of one poisoning per month). In summary adults report for getting drunk 5 times a year, and for consumption of 5 and more drinks in one and the same connection – 17 times a year.

The annual report of the Health Department of England and Wales (Donaldson, 2001) states there is a dangerous trend among the teenagers to drink more and more alcohol. In 1998, the average alcohol consumption among the teenagers at the age between 11 and 15 was 9,9 units weekly (1 unit contains 8 g pure alcohol); while in 1992 it was only 6 units.

Large-scale European study on the problem of alcohol consumption has summarized comparative international data. The European Scholl Project for surveillance of consumption of alcohol and other drugs (ESPAD, 1999) is focused on 15-16 years old young people. Its results show that approximately 40% of the young people have drunk alcohol before the age of 13. Approximately 1/5 of the students have had poisonings 3 times for the last 30 days.

Certain trends in the alcohol consumption can be identified in relation with the socio-economic status. Despite the quite complicated picture of all the aspects of alcohol consumption, the alcohol poisonings and alcohol dependency are much more likely to occur in the drinking people with lower socio-economic status.

According to the WHO convention for the children rights, part I, article 1 'child' is every human being under the age of 18. Young people are those under the age of 25.

In the recent years, there is a well marked trend of rapid increase in the alcohol poisonings among the children and the grown-ups of Bulgaria. Summarized data of studies in the country show that the relative part of alcohol poisonings in childhood in Bulgaria increases from 2.6% in 1976 to 19.5% in 2006. Increased frequency of alcohol poisonings in childhood has been reported by a number of authors in other European countries as well. Alcohol is definitely a

substance, causing a lot of somatic problems due to which its influence on the organs and systems and especially the brain in this age group is subjected to detailed investigations.

Acute alcohol poisonings in childhood represent a serious medical problem of children pathology. Alcohol damages to a great extent the susceptible children organism. Alcohol causes damage of the metabolic processes of the affected cells by means of toxic enzymopathy and as a result acid metabolic products are being accumulated in the cells. Acute alcohol poisoning is a transient condition, arising after alcohol intake and leading to disturbances of consciousness, cognitive processes, perceptions, emotions and changes in the course of various physiologic, psychologic and behavioural functions and reactions. These disturbances are directly connected to the acute pharmacologic effects of alcohol; and they decrease with time and disappear in case no new doses of the substance are ingested.

In contemporary world, unprecedented efforts are made to decrease the harm of alcohol. The initial alcohol consumption and distribution, as well as the damages caused by alcohol abuse among young people are problems treated by health authorities, law system, social workers, teachers and parents. Therefore it is important that there's a clear understanding of the effectiveness of alternative interventions among people.

Alcohol policy of each country is a complex of measures, directed towards the control over proposals and/or influences about the problem of alcohol beverages among population, including educational treatment programs, alcohol control, strategies about diminishing of damages. The necessity of coordination of the governmental efforts in terms of social health and social system is taken for granted. The term originates in Scandinavian countries and is widely spread during the 60ies of the last century.

In 1992, the European plan for warning about the health risks and the unfavorable outcomes of alcohol consumption is adopted. The aspects of alcohol policy are part of the social activities of each country and government. There are a lot of convincing proofs about the effectiveness of politics that are aimed at regulating the alcohol market in order to reduce the damages caused by alcohol. In all the countries, the alcohol taxes play important role, especially in regard to young people.

The endeavour is to draw the attention towards the control over the production, marketing and advertisements of alcohol beverages, restrains on the access to alcohol according to age, creating a strategy in social medicine, creating antialcohol programs addressed to different social strata of the society.

In recent years, a lot of attention is paid to the restrains on the marketing advertisement of alcohol. Putting of restrains on the quantity and content of the ad-

vertisements reduces the harms. The advertisements play important role in the cultivation of attitudes in favor of alcohol consumption among young people. In countries with restrains on advertisement the consumption is lower by 16%. Restrains on advertising of strong alcohols are present in 14 of the European countries. Less legal instructions are present in regard to the press media and billboards. Up to the current moment the alcohol industry has not shown effective practice for self-control in regard to advertisements.

There are increasingly more proofs about the efficacy of the strategies directed towards change in the context of drinking in order to limit the damages caused by alcohol. Their efficacy depends on their adequate implementation. For example, enactment of a law about the minimal age for alcohol consumption would have limited effect if it is introduced without a real threat for suspension of licenses of tradesmen who systemically sale to persons under that age. Besides such strategies are more efficient when they are accompanied by prevention programs, based in the community.

Taxation of alcohol beverages is another specific feature of the European countries. There are considerable differences in the tax amount. This can be clearly seen for wine, which is not subjected to any taxes in about half of the countries. As a whole the average effective tax rate the highest in the North and the lowest in the South and part of Central and East Europe.

In most of the EU countries, executions on the alcohol sales are levied. More than one third of the countries (as well as some separate regions) have levied executions on the hours of sale as well. In all the countries, the sale of alcohol to young people under a given age is forbidden. The exact age under which the sales of alcohol are allowed varies between the different regions of Europe (in North of Europe it is 18 years of age, while in South Europe it is 16 years of age).

If the various aspects of alcohol policy are summarized in one whole scale, the total coefficient of stringency of alcohol policy would vary from 5,5 for Greece to 17,7 for Norway (the allowed maximum being 20 and medium value being 10,8). The most stringent are the policies in North Europe, while in South Europe they are the least stringent.

Implementation of one integral package of effective policies and programs within the boundaries of the European Union, including accidental alcohol inspections, taxations, limitation of accessibility, restrains on advertisements and short-term medical consultation would have cost the European governments about 1,3 million euros. Such package would have prevented about 2% of the whole amount of damages and premature deaths in the EU.

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