

ALCOHOL CONSUMPTION – AN IMPORTANT PUBLIC HEALTH ISSUE

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Abstract

Harmful use of alcohol is associated with numerous health and social consequences, leading to diseases, injuries and even death and affecting not only the drinkers, but also the individuals that surround them. It is known to cause about 20-50% of all liver cirrhosis and it has been associated with some forms of cancer. In Europe, abusive alcohol intake represents the third largest risk factor for disease and disability and is responsible for 195.000 deaths each year. Reduction of harmful use of alcohol is becoming a priority area on national, regional and global levels. Alcohol-related harm can be reduced through the implementation of alcohol strategies.

Key words: alcohol consumption, statistics, strategies.

INTRODUCTION

According to The Global Status Report on Alcohol and Health 2011, alcohol consumption is the leading cause in about 4% of all deaths worldwide, being responsible for 6.2% of all male deaths and 1.1% of all female deaths (World Health Organization, 2011).

The Global Information System on Alcohol and Health (GISAH) reports the fact that 2.5 million people die every year as a consequence of harmful use of alcohol. In Europe, abusive alcohol intake represents the third largest risk factor for disease and disability and is responsible for 195.000 deaths each year (World Health Organization, 2010).

Harmful alcohol consumption is associated with numerous health and social consequences, leading to diseases, injuries and even death and affecting not only the drinkers, but also the individuals that surround them. Alcohol abuse has an important social impact related to the violence and crimes that can emerge from it and also an economic impact resulting from the medical costs related to alcohol consume.

Antisocial behavior, violence, traffic accidents, cirrhosis and other liver diseases, various cancers, alcohol dependency, infections secondary to immune suppression, like tuberculosis, are just some of many consequences of alcohol abuse (World Health Organization, 2005).

MATERIAL AND METHOD

This article represents a statistic perspective on the patterns of alcohol consume worldwide, based on the WHO Global Status Report on Alcohol and Health 2011 and the European Survey on Alcohol and Health 2010 and also based on the statistics generated by the European Health for All Database.

The aim of this article is to give an overview of the volume of alcohol consumption, beverage preferences and patterns of drinking among adults globally, but also in some European countries.

RESULTS AND DISSCUSIONS

The most recent statistic data reveal a worldwide adult (older than 15 years) pure alcohol consumption of 6.13 litres per capita.

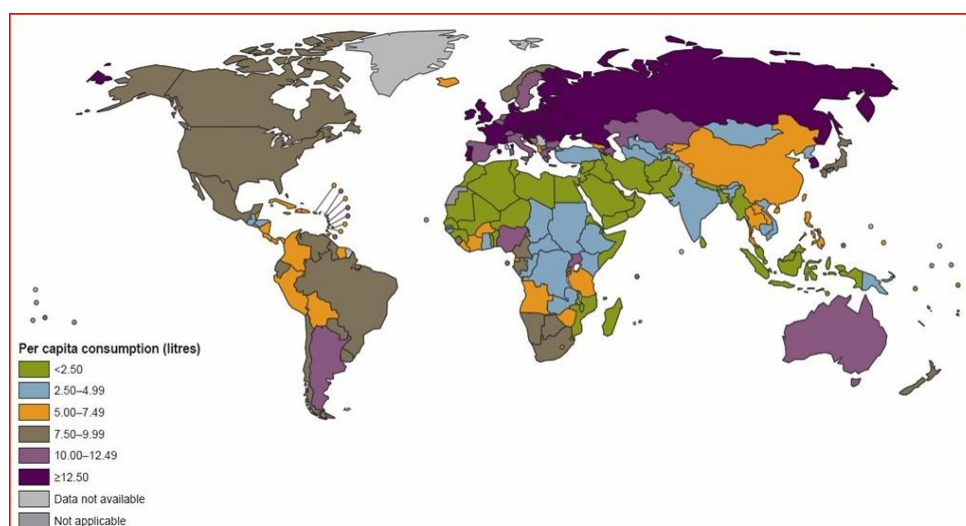


Fig. 1. Total adult (15+) per capita consumption, in litres of pure alcohol, 2005

There are important differences between the WHO regions as far as alcohol intake is concern, with the highest level of consumption recorded in the Northern Hemisphere, New Zealand, Australia and Argentina. The lowest consumption levels were found in regions with predominant islamic faith population, such as North and sub-Saharan Africa, the Eastern Mediterranean region (0.65 total adult per capita consumption - APC), Southern Asia (2.20 APC) and the Indian Ocean (fig. 1, table 1).

Europe is the heaviest drinking region in the world with the highest rates of morbidity and mortality related to alcohol consume and a prevalence of heavy episodic drinking of one fifth of the adult population.

Table 1

Total adult per capita, unrecorded APC, proportion of unrecorded APC, by WHO region, 2005

WHO region	Total APC	Unrecorded APC	Proportion of unrecorded APC of total APC (%)
AFR	6.15	1.93	31.4
AMR	8.67	2.01	23.1
EMR	0.65	0.36	56.2
EUR	12.18	2.67	21.9
SEAR	2.20	1.52	69.0
WPR	6.23	1.63	26.2
WORLD	6.13	1.76	28.7

According to The Global Status Report on Alcohol and Health 2011, Europe has a total adult per capita consumption of pure alcohol of 12.18 litres, from which 2.67 litres (21,9%) is represented by unrecorded alcohol consumption (fig. 2.) (World Health Organization, 2011).

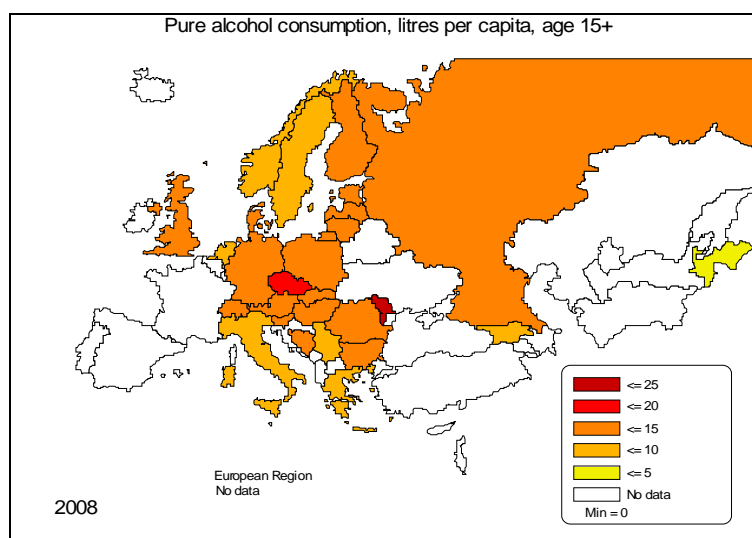


Fig. 2. Total adult (15+) per capita consumption, in litres of pure alcohol in Europe, 2008

In Europe there are geographical differences among the type of alcohol that people consume, either if it is beer, wine, spirits or other alcoholic beverages. Northern Europeans drink mostly beer, while those in Southern Europe drink more wine. Beer accounts for the largest proportion

of alcohol consumed (around 37.1% of the total volume), followed by spirits (34.6%) and wine (26.4%) (Popova S. et al., 2007).

The traditional differences in beverage preferences, according to whom northern Europeans once preferred beer while southern Europeans drank more wine, are diminishing. Today, in Spain the most consumed alcoholic beverage is beer, while in Sweden, it is wine (Anderson P., Baumberg B., 2006).

As far as Romania is concerned, The European Status Report on Alcohol and Health 2010 presents a country profile. This profile uses data recorded between 2001-2005, data that were validated at the WHO Regional Consultation Meetings in april 2009. According to this report, the total recorded alcohol consume in adults is situated somewhere around 11.3 litres of pure alcohol per capita, with an unrecorded alcohol consume of aproximately 4 litres per capita, leading to a global consume of 15.3 litres of pure alcohol. The same study reports, in terms of beverage type preferred, an equal consume of spirits and beer (39%) and the rest of 22% is represented by wine. In terms of abstinence (individuals that have not consumed alcohol in the past 12 months), the study reveals a 37.5%, with 24.4% individuals that used to drink alcohol and 13.1% individuals that never consumed alcohol (World Health Organization, 2010).

We used the most recent statistics provided by the European Health for All Database (2008) to compare drinking patterns in five european countries (Romania, Moldova, Russian Federation, Germany, Hungary), considering the total consume of pure alcohol per capita and the type of alcoholic beverages preferred. The latest data presents Moldova as the worldwide number one drinking country, with a total consume of pure alcohol per capita of 20.61 litres, followed by Germany (12.02 litres/capita), Hungary (11.79 litres/capita) and Russian Federation (11.5 litres/capita) (fig. 3). This statistic data reveals a total consume of pure alcohol of 13.85 litres per capita, a value that places Romania right after Moldova (fig. 4).

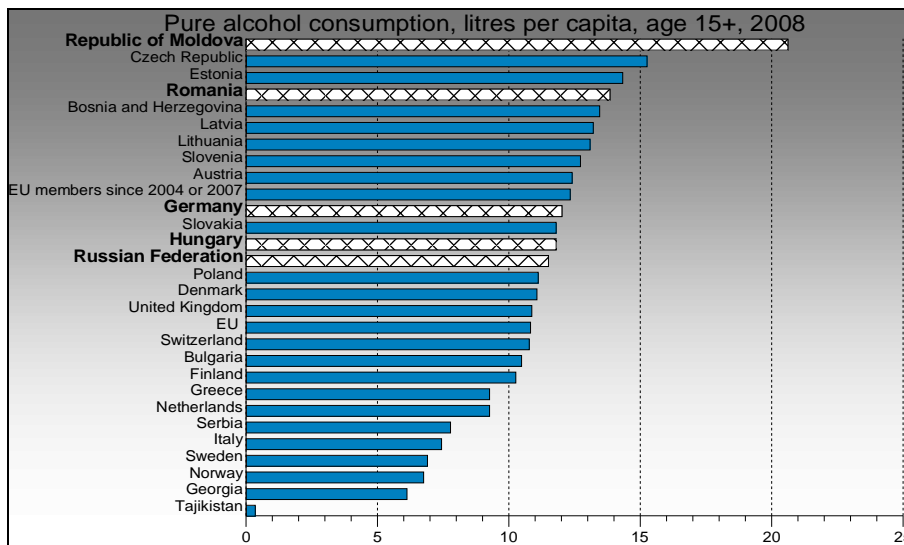


Fig. 3. Total adult (15+) per capita consumption, in litres of pure alcohol in Europe, 2008

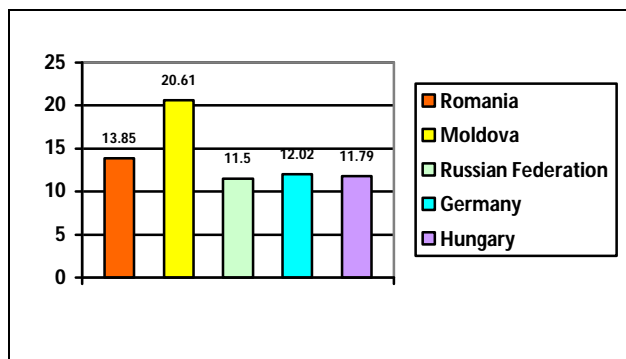


Fig. 4. Total adult (15+) per capita consumption, in litres of pure alcohol, in five European countries, 2008

In terms of type of alcohol consumed, people in Romania, Moldova and Germany prefer beer, while russians have a higher consume of spirits and a low consume of wine. In Hungary, spirits and beer are consumed in aproximately equal proportions, while the wine intake reaches a 3.4 litres/capita value (fig.5)(WHO/Europe, European HFA Database, 2012).

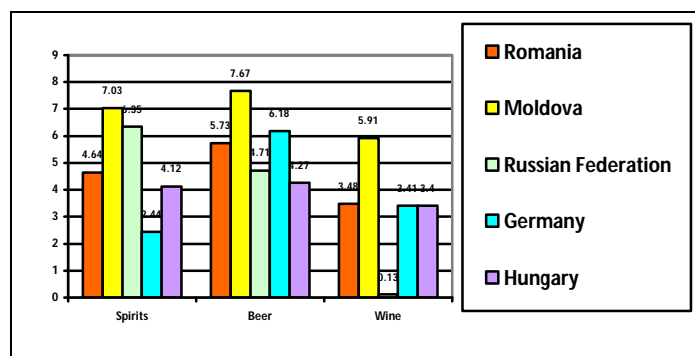


Fig. 5. Type of alcohol consumed in five European countries, 2008

Pathology generated by alcohol consumption.

Alcohol is a toxic substance and its consumption is associated with more than sixty different medical disorders. It is known to cause about 20-50% of all liver cirrhosis and it has been associated with some forms of cancer (colorectal, liver, esophagus, larynx, pharynx, oral cavity, breast cancer) (Szucs S. et al. 2005). Alcohol also increases the risk of acute and chronic pancreatitis in a dose dependent manner. Alcohol consumption can lead to numerous neuropsychiatric disorders such as anxiety and sleep disorders, depression, cognitive function impairment, dementia; alcohol also increases the risk of hemorrhagic stroke. The risk of alcohol-dependence increases as the volume consumed gets higher. Alcohol abuse is considered an important risk factor for cardiovascular diseases, such as hypertension, coronary heart disease, cardiomyopathy. Episodic heavy drinking can determine heart arrhythmias and sudden coronary death, even in people without any evidence of pre-existing heart disease. Chronic alcohol abuse determines immunodeficiency, exposing individuals to infectious diseases, including pneumonia, tuberculosis or even HIV. Alcohol can affect fertility in both men and women. Heavy drinking is a well known factor involved in intentional injuries (violence, suicide) and unintentional injuries (drinking and driving – traffic accidents, falls, poisoning) (fig. 6)(Rehm J et al., 2010).

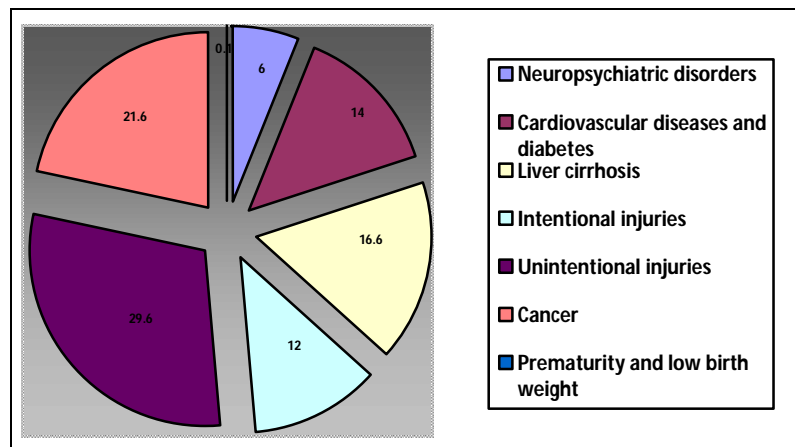


Fig. 6. Global distribution of all alcohol-attributable deaths by disease or injury

World Health Organization strategies to reduce alcohol abuse.

Given the fact that disorders and injuries caused by alcohol consumption kill millions and harm tens of millions individuals every year, strategies aimed to minimize the health and social harmful consequences are imperative.

The World Health Assembly had implemented in 2010 a global strategy in order to diminish the harmful use of alcohol. The Global Strategy to Reduce the Harmful Use of Alcohol includes political options focused on ten targets:

1. leadership, awareness and commitment
2. health service response
3. community action
4. drink-driving policies and countermeasures
5. availability of alcohol
6. marketing of alcoholic beverages
7. pricing policies
8. reducing the negative consequences of intoxication
9. reducing the public health impact of unrecorded alcohol
10. monitoring and surveillance (World Health Organization, 2010).

Leadership refers to national policies and campaigns developed by each country in order to make their population aware of all the consequences related to alcohol consumption; these campaigns are most frequently focused on drinking and driving, drinking in young people, social harm - domestic or family violence. In order to control the availability of alcohol, legislation imposes age limits for the purchase and consumption of alcohol. Age restrictions are as low as 15 years (Angola) and as high as 25 years (Nepal).

Distribution and sale of alcohol can be restricted by banning the sale at petrol stations, by limiting the hours it can be sold and by requiring licence from the producers, distributors and sellers. The most restrictive form of government control is by monopolies. The alcohol consumption can also be restricted by pricing policies: raising the taxes will determine higher price. Legislation that sets a maximum blood alcohol concentration for drivers and random breath testing can reduce alcohol related traffic accidents.

Policies to control alcohol advertising and marketing are also, very important and they comprise warning labels on alcohol advertising and containers, bans on product placement on public or private television, restrictions on sponsorship of sporting events, restrictions on sales promotion (low cost alcohol). Croatia, Israel, the Republic of Moldova and Ukraine allocate an important part of their national budgets for alcohol treatment (World Health Organization, 2010).

CONCLUSIONS

Four percents of all deaths around the world are caused by abusive alcohol consumption; numerous disorders can be linked to alcohol intake and also social issues, such as violent behavior, are important consequences of harmful use of alcohol.

Europeans are the heaviest drinkers in the world, with a total adult per capita consumption of pure alcohol of 12.18 litres. Most of them prefer beer (around 37.1% of the total volume), followed by spirits (34.6%) and wine (26.4%).

According to the country profile, Romania has a total global consume of 15.3 litres per capita, with a total recorded alcohol consume situated somewhere around 11.3 litres of pure alcohol per capita and an unrecorded alcohol consume of approximately 4 litres per capita. The Romanians are reported with an equal consume of spirits and beer (39%) and the rest of 22% is represented by wine. 37.5% of the Romanian people are abstinent; from those, 24.4% used to drink alcohol and 13.1% never consumed alcohol.

National policies and campaigns aimed to limit the availability of alcohol are imperative, in order to influence the abusive alcohol consumption and its consequences in all individuals.

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