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Public health problems of alcohol consumption in the Region

Contents

Executive summary

Approximately 2 billion people worldwide consume alcohol, and an estimated 76 million of them have been estimated to be suffering from alcohol consumption disorders. The World Health Assembly of May 2005 adopted resolution WHA 58.26 Public health problems caused by harmful use of alcohol. According to the report on this issue by the Secretariat to the Health Assembly, "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 pattern of drinking mean that priorities in a country or region should be guided by available research evidence". Information regarding alcohol in the Eastern Mediterranean Region is inadequate; according to the WHO Global Status Report on Alcohol 2004, information was available from only 12 countries in the Region.

According to the findings of the Global Burden of Disease study for the year 2000, alcohol is not among the first 15 causes of disability-adjusted life years (DALYs) lost in the Eastern Mediterranean Region, while in Europe alcohol-related problems rank fourth and in the Americas they rank second. Even after taking into consideration the hazardous consumption pattern for the Region, it has been calculated that the overall burden of disease due to alcohol consumption in the Region is still the lowest in the world. However, questionnaires sent to ministries of health in 2003 showed that alcohol is generally perceived by the health authorities as being used "moderately to considerably", and in most countries there is perceived to be a rising trend. Some independent studies on groups of people, especially youth, support such a concentrated increase.

Triangulation of different data sources leads to the conclusion that though alcohol consumption is not an imminent major health problem in the Region, it is gaining considerable dimensions among groups of young people and is becoming a potential threat to health. This mandates that precautionary steps should be taken to prevent aggravation of the situation. A strong preventive and demand reduction strategy is needed in the Region. A regional policy, preferably integrated within the general mental health policy and coupled with other substance abuse prevention programmes of the Region, needs to be developed. Any measures taken cannot be exact imitations of the current programmes in progress in countries with high prevalence of alcohol consumption. Development of appropriate evidence-based preventive strategies and provision of relevant services within the health system may be the main areas of work. Because of the danger of neglecting other substances of abuse and the possibilities of shift to even more harmful substances or patterns of use, all interventions on alcohol should be integrated with general programmes on substance abuse prevention and treatment. There is a real need to promote well-designed research and to develop an evidence base to determine the magnitude, pattern and trend of alcohol consumption in the Region, and its health impacts. Awareness should be raised among Member States of the potential for public health problems arising from alcohol consumption and the need to develop integrated strategies at national level to address the prevention and treatment of substance abuse including alcohol, and to respect and make best use of the religious and cultural legacy of the Region in controlling public health problems of alcohol.

1. Introduction

Alcohol is not an ordinary commodity but a toxic substance in terms of its direct and indirect effects on a wide range of body organs and systems [1]. It is one of the most harmful risks to health. At least 61 different types of injury, illness or death which are potentially caused by the consumption of alcohol have been identified. For 38 of these conditions sufficient evidence for a direct causal association has been shown in a benchmark study with hazardous or harmful use of alcohol [2]. Adverse effects of alcohol have been demonstrated for many disorders, including liver cirrhosis, mental illness, several types of cancer, pancreatitis, and damage to the fetus among pregnant women. Alcohol consumption is also strongly related to social consequences such as drink–driving injuries and fatalities, aggressive behaviour, family disruptions and reduced industrial productivity [3]. Approximately 2 billion people worldwide consume alcohol, around 76 million or more than 1% of whom have been estimated to be suffering from alcohol consumption disorders [4]. In countries with high prevalence of alcohol consumption, occupational productivity is seriously affected by "hangover"-related absenteeism and poor job performance [5]. Alcohol-related problems are the end result of a complex interplay between individual consumption of alcohol and the cultural, economic, physical environment, political and social contexts.

The World Health Assembly of May 2005 adopted resolution WHA58.26 Public health problems caused by harmful use of alcohol. The resolution recognized that the patterns, context and overall level of alcohol consumption influence the health of the population as a whole, and that harmful drinking is among the foremost underlying causes of disease, injury, violence, disability, social problems and premature deaths. The religious, cultural and socioeconomic characteristics of the Eastern Mediterranean Region, and the different pattern of abuse of alcohol and other substances in the Region calls for customization and adaptation of the global strategies based on relevant evidence.

2. Global situation

The Global Burden of Disease study (1997) estimated that in 1990, alcohol was responsible for 773 600 deaths, 19.3 million years of life lost and 47.7 million disability-adjusted life years lost worldwide [6]. The level of harm has been shown to be related to the pattern, including level, of drinking in a country, with overall mortality rising by 1.3% for every extra litre of pure alcohol consumed per capita [7]. A similar study in 2000 estimated that alcohol was responsible for 3.2% of global deaths (estimated comparison for 1990: 1.5%) and 4% of global disability-adjusted life years (DALYs) lost (estimated comparison for 1990: 3.5%). In 2000, alcohol consumption was estimated to have caused 1.8 million deaths in the world [8]. This indicates that the number of attributable deaths doubled while the number of years with disabilities increased marginally over the decade. Although the data also showed that some patterns of drinking lead to beneficial effects, i.e. preventing 300 000 vascular deaths (more in women) in the established market economies of western Europe, North America and the western Pacific region, alcohol causes a total of almost 600 000 vascular deaths, resulting in a net total of 268 000 deaths in the world. Overall, the detrimental effects of alcohol on mortality, and on disease burden in general, by far outweigh the beneficial effects [7]. Even the beneficial effects of moderate consumption of alcohol have recently been questioned on methodological grounds [9].

3. Regional situation

The status of alcohol consumption and related harm in the Eastern Mediterranean Region is far from clear. Although recently a considerable amount of information has been gathered even from developing countries [8,10], the Region is quite poor in terms of generating and disseminating such information. According to the WHO Global Status Report on Alcohol 2004, information was available only from 12 out of 21 Member States in the Region, while in the Americas it was available for 32 out of 35. This could be attributable to either high stigma or lower prevalence in the Region. The same report states "The Eastern Mediterranean Region displays a steady low consumption" [4]. There is considerable variation in the extent of alcohol-related harm in different regions of the world [6,11].

Table 1 compares the estimated percentage of different outcomes of the Middle East to that of the world [6]. The data reflect the protective role of local religious and cultural factors in the Middle East, with MEC countries showing the lowest percentage of total deaths, years of life lost and DALYs lost not only in comparison with the average of the world, but also when compared with every other region.

According to the findings of the Global Burden of Disease study for 2000, alcohol-related problems are not among the first 15 causes of DALYs in the Eastern Mediterranean Region, while in Europe they rank fourth and in the Americas second. Alcohol-related problems comprise 4.4% of all DALYs, both in the Americas and the European Region [10]. To gain a clearer picture of the magnitude of alcohol consumption and its impact in the Region, regional data were extracted, summarized and compared with global data from the same research (Table 2). The data show that alcohol-related DALYS in the Eastern Mediterranean Region represent 0.25% of all DALYS in low-mortality countries and 0.35% in high-mortality countries of the Region.

In a more recent study, the percentage of all deaths attributed to alcohol has been reported to be lowest in the Eastern Mediterranean Region compared with other areas of the world: 0.35% compared with 4% [12].

The average volume of consumption of alcohol in the Region is estimated to range from 6 to 11 litres of pure alcohol per year for each adult drinker, which is relatively low compared to, for example, Europe where it ranges from 9.9 to 16.5 litres per year (range depends on the region and type of alcoholic beverage). Moreover, while in the Eastern Mediterranean Region the percentage of alcohol dependence is 0%, it ranges from 0.2% to 3.4% in Europe [13].

The average consumption of brand alcohol per year per drinker is estimated even lower. Based on the annual reports of the International Trade Statistics and UNSD database on commodities trade (2006) for imported/exported trade values of alcoholic beverages in Member States [14], average annual expenditure on imported alcohol purchase per capita aged 15–65 years ranged from US$ 0.005 to US$ 13.1. This shows that even if alcohol consumption is discovered to be a hidden epidemic in the Region, it would be mainly based on home-made or bootleg alcohol.

The pattern of drinking is as important as the volume of drinking. Much of the damaging effect of alcohol, particularly in young people, results from episodic (binge) drinking rather than dependent daily consumption of alcohol. This is particularly a problem of young people, especially in developing parts of the world, who drink with the intention of becoming intoxicated [15,16,17]. So it is important to consider consumption pattern in estimating alcohol-related problems. Patterns of consumption are ranked on a scale of 1 to 4, where level 1 is the least hazardous and level 4 is the most detrimental [7]. The hazard level for the Eastern Mediterranean Region has been calculated at 2.0, against levels of 1.0 for western Pacific countries such as Australia and Japan, 1.3 for western European countries such as France, Germany and the United Kingdom, and 3.0 for the Russian Federation and Ukraine [12]. Even factoring in the relatively hazardous drinking patterns estimated for the Region, however, its disease burden due to alcohol consumption is still the lowest in the world [18]. The data are summarized in Table 3.

Table 1. Comparison of Middle East with the world in terms of percentage of alcohol-related death and disability, 1997

As percentage of	Middle Eastern Crescent (MEC)[*]	World
Total deaths	0.1	1.5
Total YLLs	0.2	2.1
Total DALYS	0.4	2.6

* Includes all countries on southern shore of the Mediterranean, and all countries from Turkey east to Pakistan and from Kazakhstan south to Yemen.

Table 2. Alcohol-related deaths and DALYs in the Eastern Mediterranean Region compared with the world, 2000 [11]

Percentage attributable to alcohol	Eastern Mediterranean Region						World		
	(LMC, LMA[*])			(HMC, HMA[**])					
	F	M	Total	F	M	Total	F	M	Total
Deaths	0.3	1.5	0.9	0.1	0.5	0.3	0.6	5.6	3.2
DALYs	0.2	0.3	0.25	0.1	0.6	0.35	1.3	6.5	4.0

* Countries with low mortality for children (LMC) and low mortality for adults (LMA): Bahrain, Cyprus, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, Syrian Arabia, Tunisia, United Arab Emirates.

** Countries with high mortality for children and high mortality for adults: Afghanistan, Egypt, Iraq, Morocco, Pakistan, Somalia, Sudan, Yemen

Table 3. Comparison of alcohol-associated burden of disease*

Proportion of total disease burden that is alcohol related	(%)
Islamic Middle East	1.3
Poorest countries in Africa and America	2.0
Better off developing countries in America, Asia, Pacific	6.2
North America, western Europe, Japan, Australia	6.8
Eastern Europe and central Asia	12.1
World	4.0

* Data in thousands of disability-adjusted life years (DALYs), corrected for hazardous pattern of use (adapted from 2005 [18])

Additionally, taking as an example the estimated risk of alcohol consumption and its detrimental effect on liver functions, the Disease Control Priority Project estimates that alcohol accounts for 8% of the population attributable fraction (PAF) of mortality in the Middle East and North Africa, compared with 58% in Europe.

Importantly, the study on alcohol-related burden of disease estimated the burden due to alcohol-related injuries in the Middle East and North Africa at 144 000 DALYs in 2001, which is relatively low compared with the burden in Europe and Central Asia (5 949 000 DALYs) or East Asia and Pacific (4 540 000 DALYs) [12,19]. However, there are areas where more information is needed on the consequences of alcohol consumption. It would be important, for example, to measure the added impact of alcohol use to already damaged livers among people in the Eastern Mediterranean Region, especially in countries where chronic hepatitis is a public health concern [20].

The above data imply that in the Eastern Mediterranean Region, even after taking into consideration the hazardous pattern of consumption, alcohol harm is not comparable to the average global situation. Even accounting for some methodological differences in data collection and analysis between 1990 and 2000, the situation did not change considerably during the decade.

To triangulate information from different sources, abstinence rates from the global alcohol status report [4] show that the rate of last-year abstainers among the adult population is quite high in some countries of the Region (82.5%–99.5%) and supports the low incidence of alcohol consumption in the Region. By comparison, the rate of abstinence for most European countries from the same source was less than 25%; in Denmark it was 4% and in France it was 6.7% [4]. However, since the report includes also 100% abstinence rates in countries where there are independent reports of considerable consumption, the reliability of such information should be re-examined. Data on abstinence are derived from surveys, and the impact of stigma on such surveys needs to be studied. Regarding consumption data, the possibility of metabolic variations among ethnic groups also deserves investigation.

Despite the reassuring nature of these figures from the Region, concern is rising. In a regional survey on substance use conducted by the Regional Office [21], 15 countries stated the extent of alcohol use to range from moderate to considerable, and 11 of those countries estimated the trend as rising over the past 5 years. Generally alcohol is perceived by the health authorities in the Region as being used

moderately to considerably, and in most countries there is perceived to be a rising trend. Seven countries (Jordan, Lebanon, Morocco, Afghanistan, Islamic Republic of Iran, Somalia and Pakistan) reported that alcohol is the substance most used by youth under the age of 20. In most countries, opiates, followed by cannabis, receive the highest attention of the public and the policy-makers. However, in Morocco, Oman, Pakistan and United Arab Emirates irrespective of the different prevalence rates of opiate abuse, alcohol has received more attention. These data are based on information which seems to reflect mainly qualitative assessment of the situation. Indeed, the source of most of the information on patterns of substance abuse is the opinion of experts or people responsible for dealing with substance abuse in the countries, and/or from the reports of admissions to treatment centres [22]. Most data are estimates rather than hard data, as only eight Member States have an established national body responsible for data collection on substance use, and only five have official estimates on current substance users/addicts. Epidemiological surveys (before 2002) were conducted in nine countries of the Region, while only six countries reported having studies on substance abusers that address pattern, attitudes, behaviour etc.

Despite the low prevalence of alcohol-related problems and high abstinence rates reported among the general population of the Region, alcohol-related problems may be concentrated in pockets of the population. The population of the Region is young and growing evidence is accumulating that there is a considerable degree of hazardous consumption, particularly among youth and students. Numerous epidemiological studies conducted in different countries show that some 22%–50% of students have ever used alcohol and that its use has been rising among them in some countries. Research also indicates that in vulnerable groups, patterns of use might be quite hazardous, for example among medico-legal referrals and police referrals related to injuries and violence (23–29).

Summing up, all available information reflects a low consumption rate in the general population but a hazardous pattern of alcohol consumption in groups of young people. Alcohol cannot be defined as a major imminent public health problem in the Eastern Mediterranean Region, but because of the youth of the population in the Region it can be perceived as a potential threat for the future. Globalization intensifies trade and tourism, two factors which might increase future exposure to and consequent consumption of alcohol in the Region.

4. Policy and strategy issues

4.1 Availability of information

Resolution WHA58.26 (2005) re-affirmed previous resolutions related to alcohol and to reducing alcohol-related burden of disease. A number of so-called proven strategies are used in many parts of the world to reduce alcohol-related problems: institution of a 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; lower limits for blood alcohol concentration for drivers; and interventions in health care settings.

According to the report by the Secretariat to the Fifty-eighth World Health Assembly regarding the public health problems caused by harmful use of alcohol, "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 pattern of drinking mean that priorities in a country or region should be guided by available research evidence" [30].

The Regional Committee in resolution EM/RC52/R.5 (2005) made two specific recommendations on alcohol when it urged Member States to:

1. Establish an information system and undertake focused research to monitor the changing trends in substance use and dependence and alcohol consumption, and foster the building of an evidence base;

2. Address alcohol consumption as a potentially major public health issue and develop mechanisms for monitoring production, import and smuggling and ways to control consumption and deal with the health hazards of alcohol.

The first recommendation highlights the fact that the amount of available information in the Region is not sufficient to allow clear-cut practical regional recommendations, and the second implies that, based on the available information so far, alcohol in the Region should be perceived as a potential major public health problem. This review of the available evidence provides further support for both recommendations.

4.2 Information system

No strategic intervention would be feasible without clear background information regarding alcohol consumption in the Region. Developing the knowledge base for the Region is a necessary prerequisite for policy-making. It is important to document the levels and patterns of consumption that contribute to the burden of alcohol-related problems, and to assess and disseminate knowledge of strategies that are effective in reducing the rates of alcohol-related problems [17]. Once society builds up a tradition of such surveys, they become tools for monitoring trends in different social groups and sometimes for evaluating the effects of policy interventions [7]. There is a serious need for the following information: prevalence and demography; volume of alcohol consumption; pattern of alcohol consumption; religious, cultural and socioeconomic determinants as protective or risk factors; and possibilities for substitution by other harmful substances in case of shifting policies toward more restrictive measures against alcohol. The religious and cultural taboos surrounding alcohol in the Region have contributed positively to the low level of alcohol consumption. This characteristic and the high stigma attached to alcohol, however, also prevent both the community and governments from reporting the facts regarding alcohol issues in a transparent manner. More transparent reporting on alcohol and substance-related problems remain a major challenge in the Region. There are, however, examples of courageous steps taken by some Member States in the right direction which provide good models for others to follow.

The reliability of existing data in the Region needs to be re-examined, as the data may not be evidence-based, mainly due to the stigma attached to alcohol consumption in the Region. There is a need for more reliable data and thus studies need to be undertaken to develop a profile of alcohol consumption and its impact on health in the Region. There is also a need to collect data through collaboration with other sources, such as academic institutions and nongovernmental organizations, working in this area as well as other sectors, such as customs, interior, commerce, police, judiciary and others, regarding production, import and sale of alcohol. This will greatly improve the knowledge base.

Monitoring the situation is one essential step. Equally important is trend assessment among different groups, as well as monitoring alcohol-related problems among some groups and the place of such groups in the health system. The health care response to alcohol-related health problems also merits study.

4.3 Policy issues

Policy-making on alcohol consumption is complex in the Region. The high level of religious and cultural motivation for abstinence among the general population in many countries of the Region is a facilitating factor. At the same time, alcohol is prohibited and considered a crime in some countries, yet consumption may be growing among groups of people in the same countries.

"An effective alcohol policy needs to be not simply a scattershot collection of specific measures, but rather an integrated response to the complex social system that produces alcohol problems… Strategies for preventing alcohol problems appear to be synergistic in their effects but in certain situations they can work at cross-purposes: a prohibition policy, for instance, makes it difficult to pursue measures that insulate drinking from harm." [30] The various policy issues are discussed below.

a) Religious and cultural issues and interventions

Alcohol consumption is banned in Islam and the lower prevalence of alcohol-related problems in the Eastern Mediterranean Region can be perceived as a direct consequence of the predominant religious

beliefs and culture in the Region. Even in countries outside the Region, Islam has been shown to have a protective role against alcohol [7,10]. Baasher, in his comprehensive review of the role of Islam in the prevention and treatment of substance abuse, explains how the policy was effective in the beginning of the Islamic era [31], through adopting the general principles of the "step by step method" and appealing to human intelligence, rational thinking and demonstration by example, in order to enforce the power of persuasion and logical conviction".

Baasher refers to the distinction between "intoxicants" and "good nourishment" made in the first Quaranic revelation, which addressed itself to the good judgment and rational sense of the people concerned to differentiate between beneficial and detrimental practice. The second revelation refers to "intoxicants" and "games of chance" and states that in both is both great detriment and (some) benefit for men, but that their detriment is greater than their benefit. However, the final decision to abstain from or to continue the consumption of *khamr* (intoxicating drink) was still left to personal decision. The third revelation recommends Muslims not to pray when intoxicated. These steps provided a gradual withdrawal from alcohol with the last revelation being a commandment to desist. This appeared three years later, stressing that both intoxicants and gambling are "infamy of Satan's work" that excite among the Muslim community "enmity and hatred, and hinder them from the remembrance of God and from prayer".

No reference is made in the Quran with respect to the punishment of an alcoholic, but the Prophet ﷺ prescribed a disciplinary punishment for an alcoholic whose intoxication is seen in public, as being a defier of the community. This punishment was subject to change according to the discretion of the ruler. Baasher stresses that the degree of success of prohibition orders depends on a number of factors, "particularly the willingness, conviction and effective support of the people. This by necessity takes time…". In the model first implemented at the dawn of Islam, due consideration was given to the "religious restraint and step-by-step system of gradual desensitization, persuasion and effective community involvement". The Prophet ﷺ defined explicitly "*khamr*" (strong drinks) saying "Anything that intoxicates is *khamr*, and any *khamr* is forbidden and all that clouds the mind is forbidden".

Although Islam makes no distinction between mind-altering substances, alcohol carries a stigma higher than other substances in most countries of the Region due to the commonly-held belief among lay people that religious prohibitions are directed specifically against alcohol. Such stigma may result in hiding the problem, rendering surveys on alcohol consumption more difficult.

Making the best use of the religious assets in the Region in strengthening demand reduction, and dealing effectively with the traditional subculture of hiding and denying alcohol-related problems, are two different aspects which need to be taken into consideration in policy-making.

b)   Consequences of careless intervention and possibility of a shift to more hazardous patterns of substance abuse

It has been shown that high levels of unrecorded alcohol consumption can diminish the effectiveness of state policies, even if they are enforced faithfully [32,33]. Homemade or illicit production of alcohol of questionable quality may have increased the hazard related to drinking in Russia [16,30]. In India prohibitionist policies failed to be effective, and this has been mainly attributed to high use of home-made and illicit alcohol by men [32]. It is thought that home-made or bootleg alcohol may be the main source of alcohol in the Region, but firm data are lacking. Information is needed on the extent to which enforcing restrictions on limited open sale in some countries diverts the users to the black market and to home production. Research on methanol consumption is also lacking in the Region.

One of the main concerns regarding any new policy on substances is the possibility of drug-by-drug substitution, especially when such a substitution is towards a more harmful use. There is sufficient evidence with some types of substances [34] to indicate that shifts can occur when one substance is withdrawn, for example heroin–cocaine transition. Although there is insufficient evidence to confirm similar alcohol–opiate shifts, there are indications of a common attitude towards intensive smoking, use of alcohol and use of other illicit substances [35,36]. There is also some regional experience that

starting strict prohibitionist measures against alcohol has not necessarily been accompanied by eradication of other harmful substances. There has been an increase in use of opiates and heroin, and in heroin injection (with consequent increase in HIV/AIDS cases) in some countries. The Eastern Mediterranean Region is the main producer of opium in the world, and heroin use is very common in some countries. Injecting drug use has been reported to be rising in many countries of the Region (Afghanistan, Bahrain, Egypt, Islamic Republic of Iran, Jordan, Libyan Arab Jamahiriya, Pakistan, Somalia, Syrian Arab Republic and Yemen) [22].

Further studies are needed to clarify the possibility of shift between alcohol and opiates.

c)   *Applicability of the so-called proven strategies to the Eastern Mediterranean Region*

Restriction strategies

Some of the common restrictive strategies to reduce alcohol-related burden of disease are: institution of a minimum legal age to buy alcohol; government monopoly of retail sales; restrictions on hours and/or days of sale; restrictions on the density of sales outlets; and taxes on alcohol. This does not seem to be applicable to most countries where alcohol is already not sold as freely as it is in countries of other regions, and where most of the alcohol consumed is bought from the black market or is home made.

However, there are differences between countries, and in those where alcohol is sold more freely, some of the above mentioned strategies may be adapted for local application. For example, in those countries where alcohol is sold freely on the market, more restrictive tax policies, limitation on working hours for bars and more control to restrict under-age selling can be applied.

Screening strategies

Random breath testing, sobriety checks and setting of limits for blood alcohol concentration for drivers are common strategies used in countries with high alcohol consumption. These techniques do not seem to be applicable to most of the countries of the Region. First, the predictive validity of these methods has an inverse relationship with prevalence. In situations of low prevalence of alcohol consumption, it would be problematic to use tools with low predictive validity. Second, the cost-effectiveness of these methods in communities with low levels of alcohol consumption is highly questionable. Third, both the legal and social consequences of false positive results are much graver in the Region. For example, some countries in other regions measure blood alcohol levels in pregnant women to prevent fetal alcohol syndrome. Because of the very low possibility in the Eastern Mediterranean Region of true positive cases, the predictive validity of the test would be quite low, and screening would be neither cost-effective, nor ethically acceptable. Research-based information is needed, however, regarding the impact of use of alcohol and other substances on road crashes as a first step in prevention. Based on such information, some Member States may find specific areas suitable for locally customized interventions.

Interventions in health care settings

It is particularly in the area of health system interventions where most of the global experience may be found to be applicable to the Region. An area of serious need concerns the lack of treatment facilities for alcohol-related medical problems. Establishment of such centres not only provides a good opportunity to help those affected, but also provides health systems with sound information regarding the extent and patterns of alcohol abuse in the Region.

Brief interventions or advice for young people with hazardous levels of alcohol consumption can be applied in primary health care settings and are reported to be effective [37]. There are, however, some new areas where more information is needed to be able to develop relevant policies. One example is methanol intoxication leading to blindness or death which is assumed to be more common in the Region because of higher use of home-made and illicit alcohol.

Preventive strategies

Public awareness-raising and provision of information and education to all young people is important. It is preferable to do this through applying social marketing models, based on needs assessment and subsequent evaluation. Although a systematic review supports the view that mass media campaigns are effective in reducing alcohol impaired driving and crashes [38], an evidence-based approach should be followed for all awareness-raising and training activities to make sure that such activities are effective and cost-effective. Other preventive programmes, such as life skills education in schools, are important means of addressing the issue. Again, regional studies are needed to base such interventions on solid evidence. Because of the high level of stigma against alcohol in the Region, it would be interesting to explore use of the internet in communicating with and raising awareness among young people regarding alcohol and other substances [39].

Religious belief is a strong asset against all kinds of substance abuse. Religious institutions of the Region have played an important role in protecting young people against substance abuse and will continue to do so. For those young people who are less interested in partaking part in formal religious practices and who seem to be more vulnerable to substance abuse, it would be valuable to help them build up their own spiritual and meaningful life, through encouraging a healthy lifestyle, and developing well defined life goals, without seeking pleasure in alcohol and other substances.

5. Conclusions

Because of the religious prohibition and consequent regulation, alcohol is not an imminent major public health problem in the countries of the Region. However, it is considered to be a potential threat for the health of the public, especially youth, and a regional policy should be developed for the Region. Such measures cannot be imitations of the current programmes in progress in countries with high prevalence of alcohol consumption and different religious and cultural backgrounds. Evidence-based preventive strategies and provision of relevant services within the health system are the main areas of work. Great care should be taken to respect and make use of the religious and cultural legacy of the Region in the best way possible. Because of the danger of neglecting other substances of abuse and the possibilities of shift to even more harmful substances or patterns of use, all interventions on alcohol should be intertwined and integrated with general strategies and programmes on prevention and treatment of substance abuse. Since countries of the Region have relatively different policies regarding free supply of alcohol, intercountry differences in regard to strategies against alcohol-related health problems would be expected.

6. Recommendations

Member States are recommended to:

1. Promote the conduct, in collaboration with WHO, nongovernmental organizations, medical colleges and other academic institutions already working in this area, of well designed research and case studies to determine the magnitude, pattern and trend of alcohol consumption in the Region, and the impact for specific disease conditions and population groups.

2. Develop an evidence base in order to project the magnitude of the problem on the health of the population in conjunction with other risk factors and problems, such as liver diseases, road traffic injuries and violence.

3. Raise awareness of the potential for public health problems arising from alcohol consumption and the need to develop integrated strategies at national level to address the prevention and treatment of substance abuse, including alcohol.

4. Support preventive interventions and awareness-raising through healthy lifestyle programmes, especially for children and youth, building on cultural and religious values to counter the glamorization of substance use, including alcohol, in the media.

5. Initiate capacity-building at different levels of care to address alcohol-related clinical problems including brief intervention treatments in Member States with more prevalent alcohol-related health problems.

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