

**Title:**

Types of alcoholic drinks consumed and beliefs related to alcohol intake in eight countries of the former Soviet Union

**Short title:**

Alcohol intake in the former Soviet Union

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## **Abstract**

**Background:** With the exception of Russia and the Baltic States, little information is available on current patterns of drinking in the former Soviet Union (FSU). This paper describes patterns of beer, wine and spirits consumption in Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, and Ukraine.

**Methods:** Data from eight cross-sectional surveys were used. Surveys used standardised methods and representative samples of the adult population of the countries (overall sample size 18,428; response rates between 71-88%). Between-country variations in consumption frequency and intakes of beer, wine and spirits and beliefs were examined.

**Results:** Between 11-34% of males and 26-71% of females reported never drinking alcohol. Wine was most commonly drunk in Moldova (particularly in older respondents) and to a lesser degree in Georgia. In Russia, Ukraine and Belarus spirits were most frequently consumed but beer intake was relatively high. In Kazakhstan, Kyrgyzstan and in Armenian males, spirits was the preferred alcoholic beverage. Beer was more frequently drunk by younger compared with older respondents. More frequent drinkers were more likely to believe that alcohol is a good way to mark special occasions, relax, and forget problems, and that it is advantageous for health.

**Conclusions:** The results of this study confirmed important regional variations in the types of alcoholic beverages consumed in eight countries of the FSU. It provides an important baseline for future comparisons as markets open to new products, as has been the case elsewhere in Europe.

**Key words:** alcohol consumption, alcoholic beverages, beliefs, Soviet Union, Armenia, Byelarus, Georgia (Republic), Kazakhstan, Kyrgyzstan, Moldova, Russia, Ukraine.

## **Introduction**

Although reports of the use of alcoholic beverages reach back to the dawn of recorded history, the drinks consumed and the circumstances in which they are consumed has continuously evolved as societies changed.<sup>1</sup> The European Region, as defined by the World Health Organization, has the highest alcohol consumption in the world, but with major regional variations in drinking habits, beliefs and attitudes. Wine drinking, for example, is predominant in southern European countries while beer is more common in northern and western Europe. It is sometimes assumed that alcohol is consumed solely as spirits in countries of the former Soviet Union (FSU) but this hides the rich diversity of regional traditions, as well as the growing choices available as countries open to global markets.

Recent studies of the amounts and types of alcohol drinks consumed in the FSU have highlighted the dramatic decrease in alcohol intakes that followed Gorbachev's 1985 anti-alcohol campaign and which accelerated in market reforms of the early 1990s.<sup>2,3,4</sup> However, these studies have generally been limited by the inherent short-comings of aggregate statistics on per capita alcohol intake, in particular the difficulty of estimating quantities of alcoholic drinks produced illegally (e.g., samogon, homemade wine and beer) or smuggled. They have also focussed mainly on Russia and the Baltic Republics, and on total alcohol consumption, rarely describing trends in the consumption of different types of alcoholic drinks.<sup>2,5</sup> Compared with trade statistics, survey data have the advantage of providing more detailed information on actual levels and patterns of intakes. However what data exist have, again, been mainly from Russia and the Baltic Republics.<sup>6,7,8,9</sup>

The Living Conditions, Lifestyles and Health (LLH) Project began in 2000 and investigated social conditions, health and lifestyle in the adult populations of eight countries of the former Soviet Union, that is, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia and Ukraine.<sup>10</sup> The major strength of the study is that it used standardised methods of data

collection that allow for the comparison of results among countries. This paper reports variations in the consumption frequency and mean intakes of beer, wine and spirits using data from eight representative cross-sectional surveys (total of 18,428 respondents) conducted within the framework of the LLH Project. Beliefs related to alcohol consumption were also examined.

## **Methods**

### Survey methods

In the fall of 2001, quantitative cross-sectional surveys of the population aged 18 years and over were conducted in each country using standardised methods.<sup>11</sup> Samples were selected using multi-stage random sampling (with stratification by region and rural/urban area) to obtain samples representative of the national population. However, a few small regions had to be excluded from sampling in Georgia (3% of population), Moldova (15% of population) and the Russian Federation (2% of population) due to geographical inaccessibility, socio-political situation, or prevailing military actions. Exclusion criteria included being in the military force or in prison (valid for all countries), or being mentally disabled, institutionalised, hospitalised, homeless, or suffering from heavy alcoholic intoxication (variations among countries for these criteria). Within each primary sampling unit (about 50 to 200 per country), households were selected using standardised random route procedures, except in Armenia where systematic random sampling of households from a household list was done. Within each household the adult with the nearest birthday was selected for the interview. If after three visits (different days and times) there was no one at home, the next household on the route was selected. Some countries allowed for substitution when the household was not used for residence, the building was ruined (disaster zone), or the selected individual was not in the country at the time of the survey. Some pre-specified quota control was used in Belarus,

Kazakhstan, Moldova, and Ukraine (combination of region, area, gender, age, and/or education level). In Georgia and Russia a sampling repair procedure based on area, gender, age and education level was used. Quality control procedures generally included re-interviews with the respondents to assess the work of both the interviewers and the interviewers' supervisors. It was decided to include at least 2000 respondents in each country, but to boost this number to 4000 in the Russian Federation and to 2500 in Ukraine to reflect the larger and more regionally diverse populations in these countries. Response rates varied between 71% and 88% among countries (calculated on the basis of the total number of households for which an eligible person could be identified).

The questionnaire was developed and piloted in consultation with representatives of all countries using questionnaires from pre-existing surveys conducted in countries in transition<sup>8,12,13,14</sup>, and adapted to each national context. It was first written in English but then translated into appropriate national languages. The final 125 questions covered general demographic and socio-economic characteristics, living conditions, health behaviours, use of health services, health status, and health beliefs. The questionnaire was administered by trained interviewers in Russian or in each country's main language using face-to-face interviews conducted in the respondents' homes. Questions related to alcohol intake first inquired about the overall frequency of alcohol consumption. Respondents were categorised as never drinkers, rare drinkers (drinking once every two to three months or less frequently), occasional drinkers (drinking between once a month to once every two to three weeks), weekly drinkers (drinking between one to three times a week), or frequent drinkers (drinking at least four times a week). The questionnaire also asked about the frequency of beer, wine and spirits consumption in all respondents who reported consuming alcohol, as well as the amounts usually drunk at one time in those drinking these types of drinks at least once every two to three weeks. Categories of intake were as follows: a) beer: "Less than 0.5 litre", "About 0.5 litre", "About 1 litre", "About

1.5 litre”, “About 2.0 litres”, and “More than 2.0 litres”; b) wine: “Less than a glass, less than 200 grams”, “A glass or about 200 grams”, “Half a bottle, about 350 grams”, “Half a litre”, “A bottle (750 grams)”, and “A litre or more”; c) spirits: “Less than 100 grams”, “About 100 grams”, “About 200 grams”, “About 300 grams”, “Half a litre (1 bottle)”, and “More than half a litre”. Based on this information, usual weekly intake of alcohol was estimated; respondents who reported consuming beer, wine or spirits less frequently than once every two to three weeks were assumed to have a mean weekly intake of zero grams of alcohol for these types of drinks respectively. The reported usual amounts of alcohol consumed were converted from millilitres/litres into grams of pure alcohol per week assuming 40 grams of alcohol in one litre of beer, 80 grams of alcohol in a 750 grams bottle of wine, and 160 grams of alcohol in a bottle of 500 ml of vodka or spirits. Those saying they drink more than two litres of beer, a litre of wine or more, and more than half a litre of vodka or spirits were assumed to drink respectively 2.5 litres of beer, one litre of wine, and 600 grams of spirits. Mean intakes of beer, wine and spirits were estimated and the proportion of total intake represented by these types of drinks was calculated. Questions on the reasons why some respondents do not drink alcohol and on general beliefs related to alcohol intake were also included in the questionnaire.

### Statistical analyses

Data from each country were merged and analysed using STATA version 6 (Stata Corporation). Variations in the frequency of alcohol consumption by country, gender, age, and type of alcoholic drink were examined. The association between intake frequency and age was estimated using chi-squared tests and tests of linear trend for the log odds. Mean weekly intakes of alcohol and beliefs were examined stratifying by country and gender.

## **Results**

Tables 1 and 2 provide information on between-country variations in the frequency of alcohol consumption and in the estimated weekly alcohol intake by gender and type of alcoholic drinks. Table 1 shows that the proportion of abstainers varied between 11% (Russia) and 34% (Kyrgyzstan) in males and between 26% (Russia) and 71% (Georgia) in females. Women were about two to four times as likely as males to never drink alcohol. Conversely, males were 2.4 and 6.9 times as likely as females to consume alcohol at least once a week. The proportion of frequent drinkers (four to seven times a week) was lowest in Kyrgyzstan (2.6% in males and 0.5% in females) and highest in Moldova (23.7% in males and 5.3% in females). Large between-country variations existed in the types of alcoholic drinks most frequently drunk (Table 1). In Moldova and Georgia, wine was preferred by both males and females. Males from Armenia, Kazakhstan and Kyrgyzstan tended to choose spirits more frequently, while beer and spirits were both commonly consumed in men from Belarus, Russia and Ukraine. Among women, beer was preferred in Belarus, Russia and Ukraine, while spirits were consumed slightly more frequently than beer in Kazakhstan and Kyrgyzstan. Armenian women chose wine and spirits more frequently than beer. These between-country preferences in the types of drinks most commonly drunk in each country are also seen when looking at the proportions of total alcohol intake coming from beer, wine and spirits (Table 2).

When consumption frequencies were compared among countries (Table 1), we could see that beer was most frequently consumed in Belarus and Russia, with about 40% of males and 11% of females reporting drinking beer at least once a week. About one in 14 (7%) Belarusian and Russian males were drinking beer at least four times a week. In contrast, beer consumption was relatively low in Kyrgyzstan and Armenia. Wine consumption was particularly frequent in Moldova: 48.8% of males and 21.2% of females reported consuming wine at least once a week, and 20.3% of males and 5.0% of females were frequent wine drinkers. Drinking wine was also relatively frequent in Georgian males and Belarusian females (26.5% and 7.5%

respectively consuming wine at least weekly). Among males, the consumption of vodka and other spirits tended to be most frequent in Ukraine, Belarus and Russia, where more than 3 out of 10 respondents were drinking spirits at least once a week. A point to note is the relatively high proportion of Armenian males (8.7%) drinking spirits at least four times a week, compared with 5.7% in Ukraine, 3.3% in Belarus and 3.8% in Russia. Among females, there was less inter-country variation in the frequency of strong spirit consumption, and the proportion of women drinking spirits frequently was low in all countries (0.2-0.6%). However, drinking spirits at least once a week was slightly more common among women in Kazakhstan (4.8%), Belarus (4.7%), Russia (4.4%), and Ukraine (4.1%) than in the other countries. Mean weekly alcohol intakes from beer, wine and spirits (Table 2) are very similar to those described above. Indeed, beer is consumed in larger quantities, on average, in Belarusian and Russian males and females, but also in Ukrainian women. Moldovan respondents had the highest mean intake of wine. The consumption of spirits by males was highest in Ukraine, Belarus, Russia and Armenia. Among women, mean intakes of spirits were particularly high in Russia, but they were also relatively high in Kazakhstan, Belarus, and Ukraine. Overall mean alcohol intakes ranged from 31 to 105 grams per person per week in men and from 4 to 18 grams per person per week in women; the highest intakes were observed in Belarus, Moldova and Russia in both males and females, and the lowest intakes were found in Kyrgyz men and Armenian women.

Figures 1-16 illustrate variations by age in beer, wine and strong spirit intake by country and gender. In each country, beer tended to be much more frequently consumed by younger male and female respondents than by their older counterparts, although large between-country variations existed in the proportion of respondents (in the different age groups) who reported never drinking beer. The proportion of males and females drinking beer at least weekly was particularly high in Russia and Belarus and to a lesser degree Ukraine, with an inverse

relationship being observed between frequency and age (p-value for trend  $<0.0001$ ). Approximately 11 to 13% of young males (18-29 years) and 2 to 4% of young females from these countries reported drinking beer at least four times a week. In Moldova, where wine is clearly the preferred type of drink, there was also a relatively high proportion of young males (9%) drinking beer at least four times a week, as well as an inverse relationship between age and the likelihood of drinking beer frequently (p-value for trend  $<0.0001$ ). In males, beer was particularly infrequently drunk by Kyrgyz respondents and this in all age groups. In females, beer intake was relatively much lower in respondents from Armenia and Kyrgyzstan, and this particularly in women aged 30 years and over.

Age variations in the frequency of wine and spirits drinking were less clear and less consistent among countries compared with beer drinking. However, for wine intake, one main finding emerged: the frequency of wine consumption was clearly highest in Moldova (in both males and females) and the likelihood of frequent consumption tended to increase with age in this country (p-value for trend  $<0.005$  in males and  $<0.0005$  in females).

With spirits there is a strong direct relationship between age and the likelihood of being a frequent spirits drinker among Armenian males (p-value for trend  $=0.0001$ ); respondents aged 60 years and over were 9.6 times as likely as those aged 18-29 years to consume spirits at least four times a week. A similar relationship was observed, but to a lesser degree, among Georgian males (p-value for trend  $<0.05$ ). In the other countries, spirits tended to be most frequently consumed by middle-aged men. In women, the proportion of respondents who reported never drinking spirits increased with age in Belarus, Georgia, and Ukraine (p-value for trend  $<0.001$ ). This association assumed a J-shape in Kazakhstan, Kyrgyzstan, Moldova and Russia, and a U-shape in Armenia. Frequent drinking of spirits was low in women from all age groups and was generally lower than 1% (except among women aged 40-49 years in Armenia and Russia where it reached 1.4% and 1.1% respectively) The highest proportions of

women drinking spirits once to three times a week were observed in women aged 30-39 years living in Belarus and Kazakhstan (8.2%).

Table 3 shows the proportion of respondents agreeing with various statements related to alcohol intake, stratified by the reported frequency of alcohol consumption. Large between-country differences existed in the level of agreement with each statement. However, in each country, males were more likely to agree to some extent with each statement. Overall, respondents were particularly likely to believe that alcohol is a good way to mark special occasions (81% of males, 69% of females) and that it helps to relax (64% of males, 43% of females) or to communicate (62% of males, 40% of females). The likelihood of agreeing with these statements tended to increase directly with the frequency of alcohol consumption. More frequent drinkers were also more likely to agree that alcohol helps them forget problems, that it stimulates their creativity, that they like the taste of alcohol, or that alcohol is advantageous for health. Approximately one in five males and one in eight women believed that alcohol is advantageous for health; the highest proportion was observed in Armenia (30% of males, 18% of females) and Russia (28% of males, 16% of females); the lowest was in Georgia (12% of males, 5% of females).

Reasons for not drinking alcohol among respondents who never consume alcohol are described in Table 4. The main reason for respondents not to drink was its bad effects on personal health (46% of males, 47% of females), with the highest proportions observed in Moldova and Kyrgyzstan. A high proportion of female abstainers also reported that they did not like the taste of alcohol (42%). The proportion of respondents saying that they did not want to become an alcoholic was particularly high in Kyrgyzstan compared with other countries.

## **Discussion**

During the past decades, there has been a convergence in alcohol consumption patterns in western European countries both in terms of the quantities consumed and types of drink chosen.<sup>1,15</sup> Per capita alcohol consumption has generally decreased in the previously high consuming countries of southern Europe and increased in some northern countries thus leading to a change in the south/north ratio from 3.6 in 1950 to an estimated ratio of 1.4 in 2000. There is also a trend towards greater homogeneity in beer and wine drinking patterns in the European Union (EU) moving in the direction of a general beverage mix of around 50% beer, 35% wine and 15% spirits.<sup>16</sup> Wine is being slowly replaced by beer in southern EU countries while it is increasing in popularity in northern European countries where it was not traditionally been consumed. Spirits consumption has also changed with a general reduction in intake in both the north and south of the EU and with changes in the types of spirits consumed. These new trends in drinking habits have been influenced by several factors including increased internationalisation and cultural cross-fertilisation, growth of multinational and transnational corporate enterprises, general economic conditions, aging of the population, increased public concern over problems related to alcohol misuse and health and lifestyle more generally, and changing government regulations and fiscal policies. It is likely that some of these factors, in addition to Gorbachev's anti-alcohol campaign and its legacy, as well as recent social and economic changes, also influenced drinking patterns in the FSU but the lack of earlier country-specific information on the amounts and types of alcoholic drinks consumed (except for Russia) and the acknowledged limitations of aggregate statistics on alcohol intake in the region preclude time trend analyses.

The FSU is a very diverse region in terms of ethnicity, culture and traditions and it cannot be assumed that vodka is the favourite alcoholic beverage in all countries. This is highlighted by the differences observed in the choice of preferred alcoholic drinks consumed by the respondents in this study. In Moldova, as in its neighbour Romania,<sup>17</sup> wine is clearly the most

commonly consumed type of alcoholic drinks both in terms of frequency and average amounts drunk. To a lesser degree, wine is also a beverage of choice in the Transcaucasian republic of Georgia but not in Armenia where spirits are consumed frequently and in large quantities in males. In the Slavic republics of Russia, Ukraine and Belarus, which represent about 71% of the population of the FSU, alcohol is taken primarily as spirits, although the frequency of beer consumption is also relatively high. Finally, in the Central Asian republics of Kazakhstan and Kyrgyzstan (both with large Muslim communities, particularly in Kyrgyzstan), spirits also remain the most commonly used alcoholic beverage.

Although the LLH surveys do not allow for the assessment of time trends in the consumption of different alcoholic beverages in the FSU, a few differences in the frequency of beer, wine and spirits intakes among age groups support evidence from other sources suggesting that traditional habits might be changing in this region in parallel to changes seen in other parts of Europe. For example, beer appears to be more popular in younger respondents than in their older counterparts. This agrees with the evidence that beer sales are thriving in Russia mainly because younger consumers appreciate its lower alcohol content and find that drinking vodka is *passé*.<sup>18</sup> The beer industry is indeed blooming in Russia as well as in other new independent states (NIS).<sup>19,20,21</sup> During the late 1990s, beer production increased by 213% in Russia (1996-2001), 240% in Kazakhstan (1996-1998), 148% in Georgia (1996-1999), 138% in Ukraine (1996-2001), and 69% in Belarus (1996-2000). In Armenia, it increased by 1250% (from 37,000 hl in 1996 to 500,000 hl in 2001), a change that agrees with our observation that younger Armenian males choose beer more frequently than their older counterparts who are themselves more frequent drinkers of spirits than young Armenian males. These recent changes in the beer market in the region could have profound effects on the future drinking habits of the FSU.

Other generational differences are apparent in our data, particularly among young women. In the “spirit-consuming” countries Russia, Belarus and Ukraine, young women not only differ from their older counterpart in terms of beer consumption, but also with wine intake which they are more likely to consume at least weekly. On the contrary, young female, as well as male, respondents from the “wine-consuming” country Moldova appear to be abandoning the traditional wine and replacing it by beer.

Mean weekly alcohol intakes are an important source of information when comparing drinking habits among countries although they should not be over-interpreted as they are prone to reporting bias and need to be complemented by the proportion of abstainers in the population and by information on drinking pattern as the same mean consumption can have more detrimental effects in countries where heavy drinking is concentrated among fewer people.<sup>22</sup> Estimating alcohol intake is well known to be problematic and survey respondents often tend to underestimate or distort their consumption.<sup>23</sup> In countries where substantial drinking is common, we can assume that there may be less social stigma associated with reporting alcohol intake, at least in men. However, underreporting of intake could be higher in women. In this study, errors in the estimation of alcohol consumption could also have been influenced by the survey questionnaire as no question on the alcohol content of the different types of drinks consumed was included. In the questions estimating the frequency of alcohol consumption, there is also a gap between ‘Daily’ and ‘4-5 times a week’. There are also gaps in the measures of amounts consumed (e.g., for wine: ‘Half a litre’, ‘A bottle (750g)’, ‘A litre or more’). These could lead to an underestimation of intake if people whose consumption level falls in these gaps chose the lower categories. In addition, it has been suggested that questions on the average amount consumed usually underestimate intake.<sup>24</sup>

In this study, the highest consumption of alcohol was observed in Belarus, Moldova and Russia; it was also in these countries that the proportion of abstainers was lowest, i.e., about

11-13% of males and 27-30% of females. The lowest intakes of alcohol were observed in Kyrgyzstan for males (31 grams/person.week) and in Armenia for females (8 grams/person.week), countries that also had a high proportion of males and females abstainers. In Russia, the proportion of male and female respondents who said they never drink alcohol was 11% and 27% respectively; however no distinction was made in the questionnaire between lifelong abstainers and ex-drinkers. The proportions observed tend to differ from results from previous surveys conducted in the mid-1990s which reported that approximately eight to nine percent of Russian men and between 35 and 51% of Russian women do not drink alcohol.<sup>6,25</sup> These could represent real changes between 1994 and 2001, but the trend in males would contradict the observed reduction in the proportion of male abstainers observed between 1985 and 1995 in adults aged 25-64 years in Novosibirsk, a large industrial centre of western Siberia. Conversely, the Russia Longitudinal Monitoring Study (RLMS) suggested a very high proportion of male abstainers (29%) in 2001, the same year as the LLH surveys;<sup>26</sup> however, underreporting of alcohol consumption in the RLMS has been suggested.<sup>27</sup> In women, the reduction in the proportion of abstainers during the last 1990s would be consistent with the current pattern seen for smoking which is characterised by a rapid increase in the traditionally low prevalence of smoking, particularly in young women.<sup>28,29,30,31,32</sup> Once more, however, the RLMS suggested a much higher rate of 54% of abstention in women in 2001 which seems too conservative.<sup>26,27</sup> Other surveys conducted in western Europe generally showed a lower prevalence of abstention in women compared with our findings. In the UK for example, only 11% of women aged 16 years and over in 1996 reported never drinking alcohol.<sup>33</sup> In Finland, Germany, Ireland and Iceland, the proportion of female abstainers ranges from approximately 14% to 16%.<sup>34</sup> In Sweden, there is a somewhat higher proportion of women who abstain from drinking alcohol (25%) compared with women from other Nordic countries, possibly due in part to the history of a strong temperance

movement in that country.<sup>35</sup> However, recent trends suggest that this is changing and that young women are developing more hazardous drinking patterns.<sup>36</sup> Higher proportions of abstainers are observed in southern European wine drinking countries such as Spain (51%) and Portugal (49%), where wine is an integral part of the diet and drinking alcohol to intoxication is regarded as socially unacceptable. In parallel, we also observed the highest rates of abstention in women in countries where wine was most frequently consumed, i.e., Moldova (61%) and Georgia (71%). In men, the proportion of abstainers observed in Armenia, Georgia, Kazakhstan, Kyrgyzstan and Ukraine tended to be higher than what is seen in western Europe (range from 7% in the UK to 13% in Sweden). It is possible that this result was in part due to selection bias in this project since individuals who drink most heavily are less likely to participate in surveys (but this should also have influenced other surveys of alcohol consumption) and since individuals unable to participate because of heavy alcoholic intoxication were excluded from the LLH surveys. However, otherwise the respondents were generally representative of the survey population as the surveys' response rates were generally high and the distribution of the samples by sex, age, area of residence and nationality compared favourably with the distributions found in the general population. In addition, response rates for questions related to alcohol consumption were high (e.g., 99.95% for overall frequency of consumption; >99.8% for the frequency of beer, wine and spirits consumption).

The main motives cited by individuals for drinking alcohol are generally to cope with stress, be sociable, increase social confidence, and enjoy oneself.<sup>37,38,39</sup> In this study respondents commonly stated that alcohol helps to relax and to forget problems, particularly among men and those who drink more frequently. The beliefs that alcohol can enhance confidence (help to communicate) and that it is important for enjoyment (good way to mark social occasions) was also widespread among drinkers. One important finding is the fact that about one in four respondents who drink alcohol at least occasionally (one in five in Belarus, Russia and Ukraine)

believe that alcohol is advantageous for health. This suggests that public awareness of the possible risk of alcohol to one's health is not widespread in the region, or that people are in a state of denial.<sup>40</sup> Indeed, few alcohol prevention programmes are yet in place and there is little evidence that alcohol, as a threat to health, is a serious policy concern in the region.<sup>41</sup> This weakness, along with the acknowledged health and economic burden due to alcohol in this region,<sup>42,43</sup> the continuing access to cheap legal and illegal home-made alcoholic beverages,<sup>44</sup> and evidence suggesting an increasing trend in the proportion of young Russians drinking frequently and being drunk<sup>45</sup> strongly suggest that alcohol consumption should be a priority on the public health agenda in the region. Policies aiming at preventing and reducing alcohol-related harm must take account of the context of increasing globalisation in alcohol drinking patterns, beliefs and attitudes in Europe.

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