Policy Brief





Alcohol Consumption as Related to Childhood Home and Socio-Economic Factors

Kristina Köhler, Taavi Lai

This Policy brief provides an overview of the prevalence of alcohol consumption and risk using according to the Estonian Health Interview Survey 2006. Furthermore, it looks at the connections between alcohol consumption at childhood home and subsequent socio-economic factors (income and education). Moreover, the review discusses links between alcohol consumption or risk using and drinkers' self-perceived health and their use of healthcare services.

Introduction

Alcohol consumption plays a prominent role in premature mortality in all Central and Eastern European countries, especially in the areas of the former Soviet Union. According to the World Health Organization (WHO), alcohol consumption is directly associated with over 60 diseases and injuries (McKee et al. 2000). Alcohol consumption is a risk factor for heart diseases, injuries, liver cirrhosis as well as various neoplasms and mental health disorders. Consequently, ca 10% of deaths in the European Union and over 15% in Estonia are related to alcohol use (World Health Organization 2010). The differences in life expectancy of men in Western and Eastern Europe (20–64 years) are 25% due to differences in alcohol consumption (World Health Organization 2010).

Alcohol has a negative impact on both the drinkers and those surrounding them; e.g. injuries and violence are more frequent in the surrounding environment (World Health Organization 1999). Due to heavy drinking, the drinkers and people close to them are prone to experience social problems, which manifest in deterioration of social and economic welfare and the quality of life (World Health Organization 2000). The tangible cost of alcohol consumption was 125 billion euros, i.e. 1.3% of the gross domestic product in the European Union in 2003 (World Health Organization 2010). The cost of alcohol-related problems (unemployment, loss in productivity) was 66 billion euros, and 59 billion euros were spent in relation to premature mortality caused by alcohol use (*ibid.*).

According to the surveys carried out in other countries there are strong connections between alcohol consumption in adults and subsequent alcohol consumption in their offspring (Chassin *et al.* 1991), which is also strongly related to the socio-economic status. It has been found that people with higher socio-economic status are more aware of factors impacting on their health, and therefore make more health-conscious choices. In contrast, alcohol consumers/risk users are less likely to achieve higher level of education and increased income than those who consume alcohol to lesser degree (Haapanen-Niemi *et al.* 1999).

The content of this policy brief is based on the data of the Estonian Health Interview Survey 2006 carried out by the National Institute for Health Development. The survey interviews were conducted with a randomised sample of Estonian citizens aged 15–84 years from October 2006 to October 2007. The interviews contained such topics as evaluation of one's health, incidence of chronic illnesses and mental health problems, use of healthcare services and pharmaceuticals, and health behaviour (Oja *et al.* 2008).

Alcohol consumer is defined in this brief as a person who has drunk at least once in their life more than one dose of alcohol at one consumption time. Alcohol risk users, however, are defined as people who have consumed five or more doses of alcohol at one consumption time, whereas one dose of alcohol equals 10 g of absolute (i.e. pure) alcohol, which is contained in one shot of vodka (4 cl) or one glass of wine (100 ml).

There is ca 18 g of absolute alcohol, i.e. 1.8 doses of alcohol in ordinary Estonian beer (0.5 l bottle, alcohol content 4.5% by volume). Moderate alcohol drinkers are defined as people who have consumed alcohol at least once in their lives but have not risk used it.

As the consumption of alcohol facilitates the onset of various diseases, alcohol consumption impacts on the need for healthcare services and use thereof. Thus, the studies have demonstrated that alcohol increases the risk of injuries and the likelihood of hospitalisation due to coronary heart disease as the consumed doses grow (Van Oers et al. 1999). In addition to the increased risk of hospitalisation, alcohol consumers tend to have longer hospitalisation periods: e.g. those consuming more than one alcohol dose per day have 21% more hospital days than those consuming less alcohol. Furthermore, the treatment of heavy drinkers is often more expensive than the average cost thereof, for in addition to longer care period, the incidence of more serious disease states, e.g. injuries, has also increased (Lai et al. 2010).

This policy brief gives an overview of alcohol consumption, alcohol risk using and differences in consumption thereof by gender and age in Estonia. Alcohol consumption at childhood home, it's changes over time, and links with alcohol consumption in later life are also observed. Furthermore, the brief describes the connections between alcohol consumption and several socio-economic indicators, as well as the impact of alcohol consumption on health, health behaviour and use of healthcare services.

1. Prevalence of Alcohol Consumption and Alcohol Risk Using in Estonia

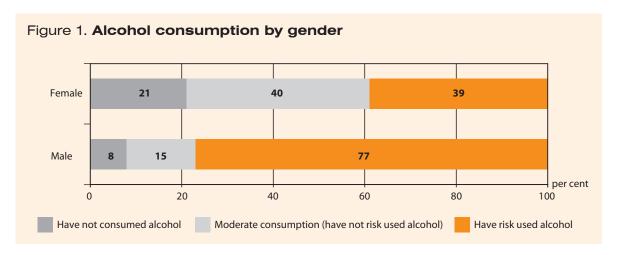
The first chapter gives an overview of the prevalence of alcohol consumption and risk using by gender and age in Estonia. Special attention is given to the starting age of alcohol risk using by generations, because the early start of risk using has a great effect on subsequent illnesses and risk of alcohol addiction.

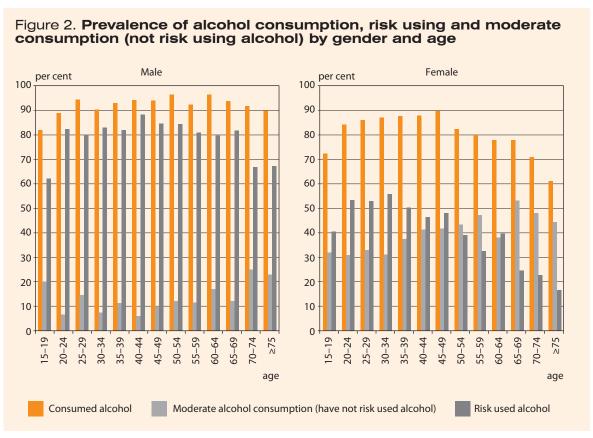
92% of male and 79% of female who participated in the Estonian Health Interview Survey 2006 have at least once in their lives

consumed alcohol. 77% of male and 39% of female have risk used alcohol at least once in their life. Thus, 84% of male and 49% of female who have consumed alcohol at least once in their life have also risk used it at least once (Figure 1).

82% of male aged 15–19 have consumed alcohol. The share of alcohol consumers in amongst male aged 19 and older is in the range of 89–97% in all age groups; whereas it is largest among male aged 60–64 (Figure 2).

Over one third of the men and almost half of the women having drunk alcohol have also risk used it.





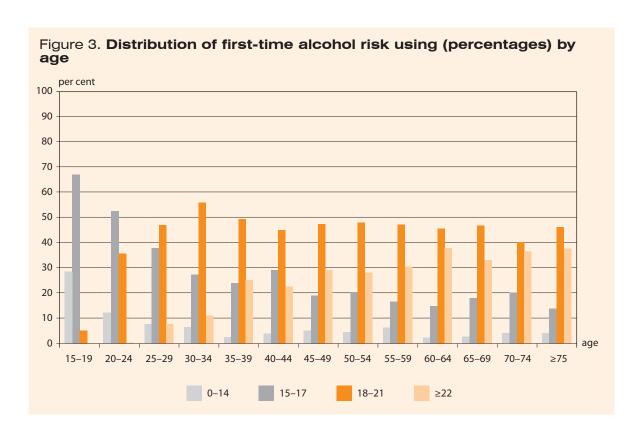
The share of moderate drinkers is considerably higher in female than in male.

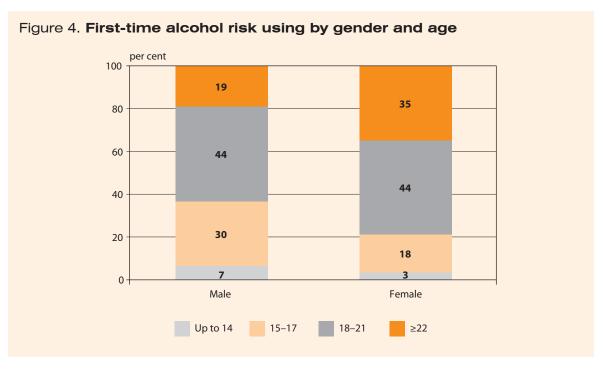
On average, men risk use alcohol for the first time 2.2 years younger than women. As to female, the share of alcohol consumers reaches the maximum (90%) among 45–49-year-olds and drops to 79% in the oldest age group after a moderate decline.

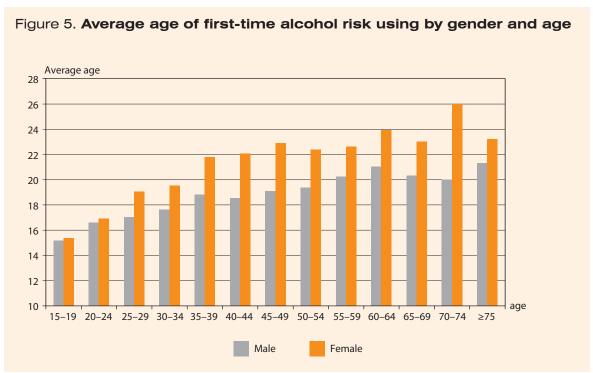
The prevalence of alcohol risk using is at its peak in female aged 30-34 and in male aged 40-44 with alcohol consumers constituting 56% and 88% respectively (Figure 2). Thereafter, the prevalence of alcohol risk using decreases, reaching the minimum in the oldest age groups (17% of female and 67% of male). Thus, gender differences are the greatest in alcohol risk using, where the most prominent difference emerges in amongst people aged 65-69, whereas the share of risk users is 57% greater in male than in female. By age groups, there are, on average, 15% less alcohol risk users than consumers in amongst male and there is a relevant increase in differences as the age progresses. For example, in amongst male aged 15-59, the share of alcohol risk users is 11% lower than that of consumers, and even 19% lower in older male. Among female, the differences between risk users and consumers are more considerable in all age groups (40% on average), growing also with age increase.

The share of moderate consumers (i.e. alcohol consumers who have not risk used alcohol) is the largest among male aged 15–19 and those over 70, where the share of such drinkers is approximately 21%. The share of moderate consumers among male aged 20–69 ranges between 7 and 17%. In women the share of moderate consumers fluctuates between 30 and 48%.

According to Estonian Health Interview Survey 2006 approximately 13% of people over 75 have risk used alcohol before turning 14 and 28% of people aged 15-19 (Figure 3), i.e. alcohol risk using is nine times more frequent in the younger generation. The average age of first-time alcohol risk using was 19.8 years, i.e. 19.1 years in male and 21.3 years in female. Gender differences in age when the first alcohol risk using occurred, are due to the fact that among people aged 0-14 there are almost twice as many male that have risk used alcohol compared to female (Figure 4). In male, the share of first-time risk users is also higher than that of female at the age of 15-17, and only among people aged 18-21 is the share of first-time alcohol risk users comparable in both male and female.







The first-time alcohol risk using has been gradually shifting to a younger age, i.e. all successive generations have started risk using alcohol earlier than their mothers and fathers. Among male, the start of risk using has shifted earlier by 6.1 years: the average age of first-time risk users among male aged 15–19 is 15.2 years, whereas among male aged 75 and over, 21.3 years (Figure 5). Among female, first-time alcohol risk using has also

shifted earlier by 7.9 years. The beginning of alcohol risk using has shifted by an average of 0.46 years earlier per year. Furthermore, the differences between the age of male and female in first-time risk using have decreased. If among male aged 75 and over risk users were, on average, 1.9 years younger than those among female, then in amongst people aged 15–19 there were almost no differences in gender.

Alcohol risk using occurs for the first time at an increasingly younger age. In addition to health behaviour, the average age of first-time alcohol risk users also depends on the fact that, as time goes by, the people belonging in the 15-19-year-old age group at the time of the survey may see the addition of new risk users, therefore the average age of first-time risk using in the age group may rise. For example, a person, 15 years old at the time of the survey, may risk use alcohol for the first time at the age of 17, i.e. they had not done so during the survey. Moreover, in older age groups, those that started risk using alcohol the earliest have an increased risk of mortality, as a consequence of which the share of such people may be actually lower in the data due to their premature death. Nevertheless, other similar surveys confirm the shift of first-time risk using to an earlier age (Aasvee and Maser 2009).

According to the study of the Health Behaviour in School-aged Children, regular alcohol consumption has grown among pupils and first-time alcohol risk using has been shifting to an earlier age (*ibid*.). In the school year 2001/2002, 32% of boys aged 15 had been drunk at least once before turning 13, whereas in girls of the same age this indicator was 17%. In the following stage of the survey, school year 2005/2006, 35% of 15-year-old boys had been drunk at least once before the age of 13, and 21% of girls of the same age, which is considerably more than in other EU member states (*ibid*.).

In conclusion, the share of alcohol risk users in all female who consume alcohol is markedly lower than that in male. At the same time, the number of alcohol consumers and risk users grows in amongst the young with first-time alcohol risk using shifting to an increasingly younger age. This change has undergone faster among female, and by now, the age of first-time alcohol risk users in both male and female (girls and boys) has become almost the same.

2. Alcohol and Childhood Home

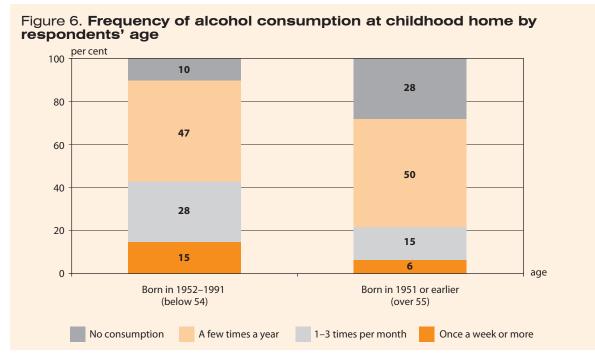
The share of families where alcohol is consumed at least once a week has almost doubled – on the account of families with no alcohol consumption.

The environment in which we grow, childhood home in particular, has a considerable impact on the development of our value judgements and behaviour. The second chapter of the policy brief gives an overview of alcohol consumption at the Estonian childhood homes and looks at the patterns of alcohol consumption in later life accordingly.

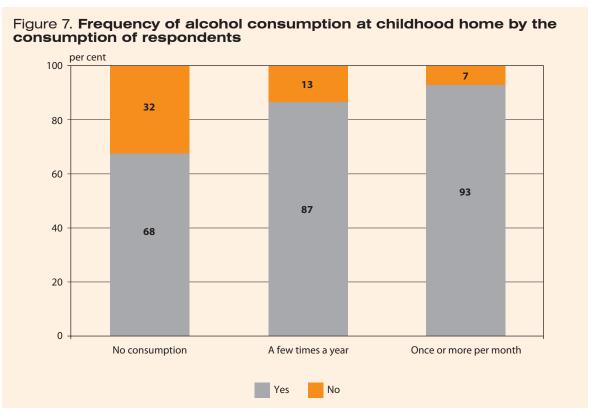
In 90% of the families of people born 1952–1991 (aged below 55), alcohol was consumed, whereas only 72% of the families of people born in 1951 or earlier (aged over 55) consumed alcohol (Figure 6). Thus, in comparison of these periods, the share of alcohol-consuming families has grown with the share of abstaining families decreased by ca three times. It is interesting to note that during that time, the share of families where alcohol is consumed at least once a week has almost doubled. Thus, among people born before

1952 (aged 55 or over), 6% of the families consumed alcohol at least once a week, whereas in the case of families of those born later, already 15% of the families. Comparison of the same birth generations shows also that in the period studied, the share of families where alcohol is not consumed has dropped from the original 28% to 10%. Special attention should be given to the fact that this decline has emerged mainly on the account of the increasing number of families where alcohol is consumed frequently. The share of families (ca 50%) consuming alcohol a few times in a year has remained stable.

According to previous studies, the children of parents addicted to alcohol are 5.1 times more likely to become addicted to alcohol or drugs compared to the children of non-addicted parents (Chassin *el al.* 1991). According to the Health Interview Survey 2006, 85% of alcohol users came from families where alcohol was consumed



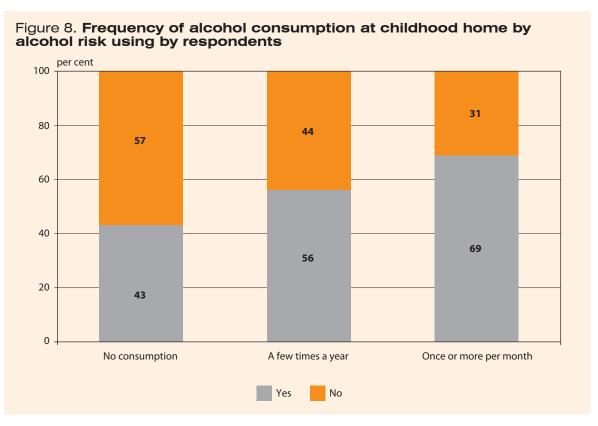
7% of people growing in alcoholconsuming families do not consume alcohol in their later life. whereas people coming from alcohol-free families, who do not consume alcohol in adulthood, constitute 32%.

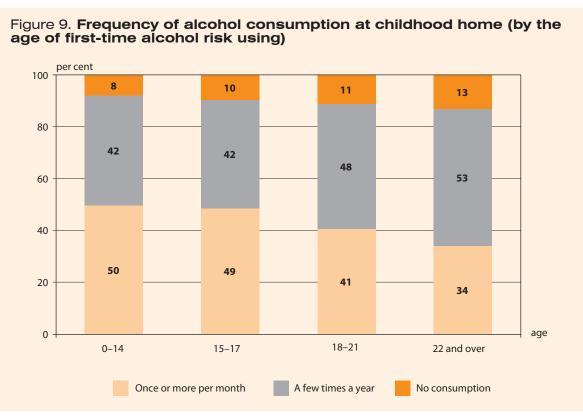


(Figure 7). 93% of children coming from families where alcohol had been consumed at least once a month also consumed alcohol in adulthood, and only 7% of them were nonconsumers. The situation was different with children from families where alcohol was not consumed, namely, 68% consumed and 32% did not consume alcohol in later life.

Furthermore, 89% of people that had risk used alcohol at least once came from alcohol-

drinking families. Whereas 69% of risk users came from families where alcohol had been consumed at least once a month; at the same time 57% of those who do not risk use alcohol, come from families where alcohol was not consumed at all (Figure 8). Alcohol consumption at childhood home also impacts on the age of first-time alcohol risk using: 50% of those that had risk used alcohol before turning 14 come from families where alcohol was consumed once a month or more





(Figure 9). However, 13% of those that had risk used alcohol for the first time when they were over 22 grew in families where alcohol was not consumed, and even 66% with the addition of those people who came from families where alcohol was consumed a few times a year.

Alcohol consumption and childhood home are closely related. The more frequent the alcohol consumption at childhood home is, the more likely are the children to become alcohol consumers in their later life. Furthermore, regular alcohol consumption at childhood home results in the earlier

onset of risk using alcohol together with an increased risk of alcohol risk using. At the same time, children from non-drinking families are more likely to become abstainers or start alcohol consumption at later age and in smaller amounts.

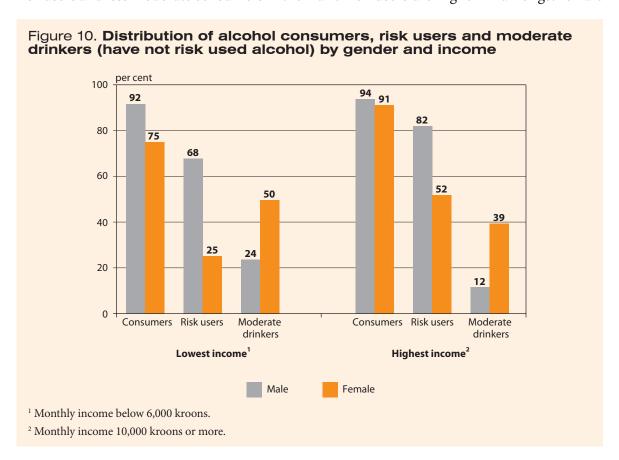
3. Socio-Economic Status and Alcohol Consumption

Alcohol drinking habits and socio-economic status are related. On the one hand, higher status provides greater awareness of health risks from alcohol consumption and opportunities to use the knowledge. On the other hand, alcohol consumption in a person or at their childhood home may be the very cause of their lower socio-economic standing and lower level of education (Van Oers *et al.* 1999). The third part of this policy brief addresses socio-economic status in connection with alcohol consumption using income and level of education as indicators of the said status.

According to the Health Interview Survey 2006, there are more alcohol drinkers and risk users and less moderate consumers in the

population group with higher income than in the group with lower income. Among people with a monthly income of over 10,000 kroons (639 euros), alcohol consumers constituted 93%, risk users 74% and moderate drinkers 19%, at the same time in the group with a monthly income below 6,000 kroons (384 euros) the shares thereof were 82%, 42% and 39% respectively. One of the reasons for this is that higher income gives greater capacity to purchase alcoholic beverages, i.e. these are usually more available in financial terms. Among male earning higher income, the share of those having at least once consumed alcohol is approximately 94%, whereas that of the risk users is 82% (Figure 10). Similarly, the shares of alcohol consumers and risk users are higher in amongst female

There are more alcohol consumers and risk users among people earning higher income than in amongst people with lower income.



Among people with higher level of education alcohol consumption and risk using is more prevalent than among people with lower level of education.

People with higher income risk used alcohol in the last 4 weeks more seldom than people with lower income.

with larger income than for female with lower income. It is interesting to note that differences in gender between the shares of consumers and risk users are smaller in the group with higher income. In low-income group, however, the share of female having at least once risk used alcohol was about 41% lower than that of male. At the same time, the share of moderate drinkers is considerably higher in both higher and lower income groups of female than in those of male, 28% and 26% respectively. The patterns described characterise all age groups.

Alcohol consumption in the last four weeks preceding the survey was more frequent among people with higher income (drinking alcohol on 5.1 days on average) than among those with lower income (on 3.8 days on average). It deserves attention that the share of people who risk used alcohol a few times per year was similar in higher and lower income groups, 48% and 41% respectively. In addition to more frequent consumption in the higher income group, it cannot, however, be said whether the quantities consumed are also larger; because the data of the said survey (2006) do not enable to calculate the quantities of absolute alcohol consumed.

Among people with higher level of education (at least professional higher education) 93% have consumed alcohol at least once and 78%, have risk used alcohol, whereas in the group with elementary education, the indicators thereof were 86% and 68% respectively. Differences in gender between alcohol consumption and risk using are more marked in amongst people with lower level of education compared to those with higher level thereof. For example, the prevalence of alcohol consumption and risk using in female with lower level of education is 18% and 45% lower than in male (Figure 11). At the same time, the share of moderate drinkers among male with lower level of education is higher (i.e. the share of risk users is lower) than among male with higher level of education. The share of risk users among female with lower level of education is lower than among female with higher level of education.

The average frequency of alcohol consumption in the four weeks prior to the survey was higher among people with lower level of education: alcohol was consumed on 7 days on average compared to 5.2 days among people with higher level of education. This is partly due to the fact that as many as

Figure 11. Distribution of alcohol consumers, risk users and moderate drinkers (have not risk used alcohol) by gender and level of education per cent 100 93 86 83 80 68 61 41 40 37 23 20 15 Moderate Consumers Risk users Consumers Risk users Moderate drinkers Lower education Higher education² Male Female ¹ Lower education – up to primary (elementary) education. ² Higher education – at least professional higher education.

57% of alcohol consumers with higher level of education consume alcohol only a few times a year (the indicator among people with lower level of education is 32%).

Preferences for alcoholic beverages change in terms of level of income and education: people with higher income mostly consume light alcohol (wine and beer), whereas people with lower income prefer strong alcoholic drinks. For example, beer was consumed by 66% of people from the higher income group and 39% of people from the lower income group. The share of people consuming strong alcohol every day constituted 2% in the lower income group and 0% in the higher income group. Similarly, people with higher level of education favour lighter alcoholic beverages and people with lower level of education opt for stronger alcoholic drinks. Exception to this is beer that was consumed by 49% of people with higher education and 45% of

people with lower level of education. In the highly educated group, the alcoholic beverage of preference is wine (60% of the members of this group drink wine), whereas among people with lower level of education stronger alcoholic beverages are favoured (71% of the cases).

In conclusion, as the level of income and education grows, alcohol consumption and risk using is more widely prevalent. However, this apparent pervasiveness is to a considerable extent due to a greater share of people consuming alcohol only a few times per year in the groups with higher level of income and education. Furthermore, the members of the said groups prefer light alcoholic beverages in particular. Nevertheless, it is not known in which group alcohol is consumed the most, because the data of the used survey do not enable to establish that.

People with higher income mostly consume light alcoholic beverages, such as beer and wine.

People with lower level of education consume mostly strong alcohol.

4. Alcohol and Use of Medical Services

Alcohol using is associated with the onset of over 60 illnesses (McKee et al. 2000), which in turn impact on self-perceived health and the use of medical services. According to the Health Interview Survey 2006, the share of people considering their health good in the 12 months preceding the survey was higher in people who had risk used alcohol (52%) than among those who had not risk used alcoholic beverages (35%) (Figure 12). Furthermore, alcohol risk users deemed their health better (7%) than those who did not risk use alcohol (22%). Considering the frequency of alcohol consumption in the 12 months prior to the survey, the picture is in agreement with expectations: only 26% of the people with higher incidence of risk using alcohol considered their health at least good, whereas similar self-perceived health status characterised 54% of the people with lower frequency of risk using. Similarly, among the most frequent alcohol risk users, the share of those who perceived their health either bad or very bad was the greatest (26%), which exceeded the same indicator among

infrequent (a few times a year) risk users by five times, with the breaking point being the tendency to consume alcohol three or more times per week, when self-perceived health began to deteriorate quickly.

After the onset of health problems the people's first contact in the healthcare system is usually their family doctor that refers them to a medical specialist or hospital care, if necessary. The second main primary contact in healthcare is emergency medical care (first-aid situations). Furthermore, it is possible to turn directly to the emergency department in hospitals, and in the case of certain specialities, also to a specialist doctor without a referral from a family doctor.

According to the Health Interview Survey 2006, the share of those who visited their family doctor or were hospitalised grew along with the increasing frequency of alcohol risk using. Only 10% of those who risk used alcohol a few times per year had been hospitalised in the period prior to the survey, but of those

The more frequent the alcohol risk using is, the worse self-perceived health is.

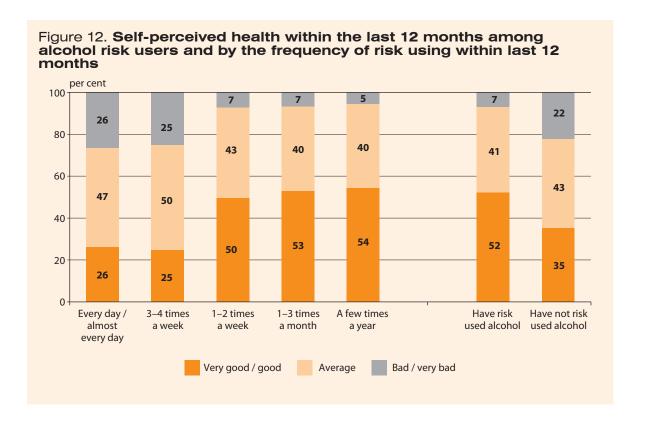


Table 1. Frequency of alcohol risk using within the last 12 months and visits to a family doctor, medical specialist, use of emergency medical care, or hospitalisation

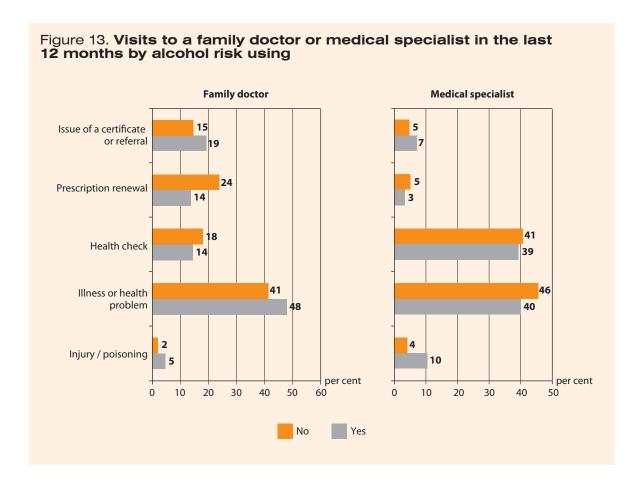
In the last 12 months, have you visited / turned to / been to a							
	family doctor	medical specialist	first-aid station	hospital			
Frequency of alcohol risk using in the last 12 months (per cent)							
Every day / almost every day	91	36	5	24			
3-4 times per week	92	54	9	16			
1-2 times per week	86	52	12	13			
1-3 times a month	88	54	8	10			
A few times per year	86	63	6	10			

46% of alcohol risk users and 12% of alcohol consumers have received help from the emergency medical services.

that risk used alcohol over four times per week, 24% had been hospitalised (Table 1). As the incidence of risk using grew, the share of hospitalised individuals also increased. At the same time, such growth was not seen in those that contacted the first-aid station. This is probably due to the fact that frequent risk users are more likely to be hospitalised when they contact their family doctor. Moreover, frequent alcohol risk users may play a greater role in contacting emergency department independently when hospitalised. However, by looking at the trends among male, it appears that in the 12 months prior to the survey, 46 % of alcohol risk users and 12%

of non-risk users used emergency medical services.

Compared to other patients, the use of health-care system by alcohol risk users is more frequently caused by injuries and poisonings, whereas among moderate drinkers the more prevalent causes include, e.g. health check and prescription renewals (Figure 13). In fact, 5% of alcohol risk users use the services of their family doctor and 10% those of a medical specialist due to an injury or poisoning (intoxication), whereas the same indicators among moderate consumers are 2% and 4% respectively. The main reasons for



contacting family doctors are fairly similar in both groups, but here too, health problems are more relevant among risk users than health checks, compared to those that drink alcohol moderately.

Paying heed to the aforesaid, it is evident that with the growing frequency of alcohol risk

using, health and self-perceived health also deteriorate. This in turn results in the increased use of healthcare services, especially hospital care. Alcohol risk users are more frequent visitors of their family doctors, often with recurring health problems or injuries and seldom due to some simpler matter or for a regular health check.

Summary

According to the Estonian Health Interview Survey 2006, 85% of Estonians aged 15-84 have consumed alcohol at least once in their life, whereas 59% of them have risk used alcohol. In male, the share of both alcohol consumers and risk users is greater than among female -92% and 77% respectively. 69% of all alcoholconsumed people have also risk used it: 84% of the male and 49% of the female. The analysis of first-time alcohol risk using by the generations reveals that the average age of first-time risk using has fallen from 21.3 years to 15.2 years (comparing those aged 75 and over with those aged 15-19). In the same space of time, the share of alcohol consumers and risk users has been on a steady increase in the population, whereas the share of families where alcohol is not consumed at all has decreased by almost three times.

57% of those who did not consume alcohol at the time of the survey came from families where alcohol was not consumed. At the same time, people coming from families where alcohol was consumed once a month or more constituted 36% of alcohol consumers and 42% of the alcohol risk users. Half of the people who had first-time risk used alcohol prior to turning 14 also come from such families.

The share of people that have at least once in their life consumed alcohol or risk used it is highest in groups with higher level of income and education. At the same time they have often risk used alcohol only a few times per year, whereas alcohol risk using is much more frequent among people with lower income and lower level of education. Furthermore, people with higher income and higher level of education prefer light alcoholic beverages, whereas those with lower level of income and education favour strong alcohol. Unfortunately, the data of the used survey enable neither to measure the quantities of alcohol consumed nor establish whether these quantities are higher among people with higher or lower level of income and education.

Alcohol use is associated with more than 60 illnesses, which is also reflected by deteriora-

tion of self-perceived health as the frequency of alcohol risk using increases. According to the survey, a critical limit is three or more instances of alcohol risk using per week, after which moderate deterioration turns into rapid worsening. Decline in health and self-perceived health is also evident in the increased use of the services provided by family doctors and hospitals, along with more frequent alcohol risk using. Furthermore, the use of medical services is no longer caused by such ordinary reasons as health checks and renewal of prescriptions, but more and more with health problems, injuries or poisoning.

All in all, when planning preventive measures of alcohol risk using, it is important to consider that parents' drinking habits have a significant impact on the development of these practices in children. Attention should also be given to the fact that regardless of favouring light alcoholic drinks by people with higher level of income and education, the general frequency of alcohol consumption in those groups is high, and health problems caused by risk using alcohol may be as extensive as in other population groups.

It is certainly worthwhile to facilitate regular health checks and raising the awareness thereof in order to discover health problems related to alcohol risk using as early as possible and thereby reduce the need for hospitalisation as a result of risk using. The studies have shown that publicity about the harmful effects of alcohol and provision of information and education thereof play an important part in raising the general awareness about alcohol consumption, but do not bring about lasting changes in behaviour (World Health Organization 2010). Thus, in order to change people's behaviour and reduce the damaging effects of alcohol, it is necessary to use classical measures of intervention, such as increasing alcohol excise, limiting alcohol advertising and selling of alcohol to certain hours and places. The implementation of these measures should be continued and expanded (Lai et al. 2007; World Health Organization 2009).

Literature

Aasvee, K., Maser, M. (2009). Ülevaade Eesti 2001/2002. ja 2005/2006. õppeaastal toimunud kooliõpilaste tervisekäitumise uuringutest (HBSC uuring) teiste riikide taustal. *Eesti Arst*, 88, 390–401.

[Overview of health behaviour in school-aged children (HBSC study)].

Chassin, L., Rogosch, F., Barrera, M. (1991). Substance use and symptomatology among adolescent children of alcoholics. *Journal of Abnormal Psychology*, 100, 449–463.

Haapanen-Niemi, N., Miilunpalo, S., Vuori, M., Pasanen, M., Oja, P. (1999). The impact of smoking, alcohol consumption, and physical activity on use of hospital services. *American Journal of Public Health*, 89, 691–698.

Lai, T., Habicht, J., Reinap, M., Chisholm, D., Baltussen, R. (2007). Costs, health effects and cost-effectiveness of alcohol and tobacco control strategies in Estonia. *Health Policy*, 84 (1), 75–88.

Lai, T., Köhler, K., Rooväli, L. (2010). *Vigastused Eestis*. Sotsiaalministeeriumi toimetised. Teemaleht. Tallinn: Sotsiaalministeerium. [Injuries in Estonia].

McKee, M., Pomerleau, J., Robertson, A., Pudule, I., Grinberga, D., Kadziauskienė, K., Abaravicius, A., Vaask, S. (2000). Alcohol consumption in the Baltic Republics. *J Epidemiol Community Health*, 54, 361–366.

Oja, L., Matsi, A., Leinsalu, M. (2008). *Eesti terviseuuring 2006. Metodoloogiaülevaade*. Tallinn: Tervise Arengu Instituut. http://www2.tai.ee/ETeU/met_51.pdf (25.11.2010).

Van Oers, J. A. M., Boenders, I. M. B., Van der Goor, L. A. M., Garretsen, H. F. L. (1999). Alcohol consumption, alcohol-related problems, problem drinking, and socioeconomic status. *Alcohol & Alcoholism*, 34, 78–88.

World Health Organization. (2010). *European Health for All Database (HFA-DB)*. http://www.euro.who.int/hfadb (25.11.2010).

World Health Organization. (2010a). *European Status Report on Alcohol and Health 2010*. http://www.euro.who.int/__data/assets/pdf_file/0004/128065/e94533.pdf (25.11.2010).

World Health Organization. (2009). Evidence for the Effectiveness and Cost-Effectiveness of Interventions to Reduce Alcohol-Related Harm. Copenhagen: World Health Organization Regional Office for Europe.

World Health Organization. (1999). *Health 21: The Health for All Policy Framework for the WHO European Region*. Copenhagen: World Health Organization.

World Health Organization. (2000). *International Guide for Monitoring Alcohol Consumption and Related Harm*. Geneva: World Health Organization.

Series published earlier

Series published in 2010:

- 9/2010 Employment and Working Life in Estonia 2009–2010. Trends (available also in English).
- 8/2010 Migration Potential of Working-age Population in Estonia in 2010. Policy analysis (*available also in English*).
- 7/2010 Coping of Disabled Adults and Care Load Arising from Disability. Policy analysis (*available also in English*).
- 6/2010 Unemployed non-Estonians on the Labour Market of Estonia. Policy brief.
- 5/2010 Long-term Unemployed Persons on the Labour Market of Estonia. Policy brief.
- 4/2010 Young Unemployed Persons on the Labour Market of Estonia. Policy brief.
- 3/2010 Gender Equality and Inequality: Attitudes and Situation in Estonia in 2009. Policy analysis (*available also in English*).
- 2/2010 Issues Arising From the Occupational Health and Safety Act to Employers. Policy analysis.
- 1/2010 Gender Equality Monitoring 2009. Research report.

Series published in 2009:

- 5/2009 Injuries in Estonia. Policy brief (available also in English).
- 4/2009 Single-parent Families: Problems, Needs and Policy Measures. Policy analysis (*available also in English*).
- 3/2009 Employment and Working Life in Estonia 2008–2009. Trends (*available also in English*).
- 2/2009 Unconventional Work Arrangements in Estonian Enterprises. Policy analysis.
- 1/2009 Burden of Disease of Estonian Population. Policy brief (available also in English).

All series are available on the web page of the Ministry of Social Affairs of Estonia: www.sm.ee > Väljaanded (Publications) > Toimetised

Alcohol Consumption as Related to Childhood Home and Socio-Economic Factors

Glossary

- **Dose of alcohol** one dose equals 10 g of absolute alcohol, e.g. one shot (4 cl) of vodka.
- **Alcohol consumer** a person who has consumed over one dose of alcohol (i.e. over 10 g of alcohol, e.g. over 4 cl of vodka) at one consumption time in their life.
- Alcohol risk user a person who has consumed more than five doses of alcohol (i.e. over 50 g of absolute alcohol, i.e. over 20 cl of vodka) at one consumption time in their life. This has also been referred to as increased-risk alcohol consumption at one time (Oja et al. 2008).
- **Moderate alcohol consumer** a person who has consumed alcohol, but has not risk used it (see terms *alcohol consumer* and *alcohol risk user* above).

Policy Brief is a series of publications of the Ministry of Social Affairs which aims to give short overviews and descriptions of trends on a specific social, labour or health policy-related topic and thereby helps to develop a knowledge-based policy.

Additional information:
Health Information and Analysis Department
Ministry of Social Affairs of Estonia
Gonsiori 29, Tallinn 15027
info@sm.ee

Layout: AS Ecoprint ISSN-L 1736-6127 ISSN 1736-6127 (online) ISSN 1736-6119 (print) ISSN 1736-8707 (CD)

Copyright: Ministry of Social Affairs, 2011