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Injury deaths in Estonia and Sweden: a comparative study

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Introduction

Injury is a serious public health problem in most countries. The aim of the study was to disclose the magnitude of the injury problem in Estonia, using Swedish indices as a comparative example.

Methods

The injury death rates in Estonia and Sweden were compared over the past five years - from 1990 to 1994. The death rates were analysed by main causes, age and sex.

Results

Table 1: Age-standardised injury death rates in Estonia (E) and Sweden (S) (per 100 000 European standard population)

| Year/Country | Total | | Men | | Women | |
|--------------|-------|------|-------|------|-------|------|
| | E | S | E | S | E | S |
| 1990 | 130.5 | 49.1 | 218.6 | 69.2 | 54.5 | 30.2 |
| 1991 | 140.3 | 47.9 | 235.6 | 67.8 | 57.8 | 29.2 |
| 1992 | 151.1 | 44.2 | 256.2 | 62.1 | 59.7 | 27.3 |
| 1993 | 180.8 | 43.1 | 308.5 | 61.0 | 69.9 | 26.4 |
| 1994 | 229.2 | 44.7 | 379.7 | 61.0 | 100.3 | 29.6 |

Injury was the third leading cause of death among Estonians up until 1993. In 1994, injury took the second place among all causes of death. The largest numbers of injury deaths in Estonia were caused by suicide, violence, motor-vehicle accidents, alcohol intoxication, and drowning. In 1994, the total rate of suicide deaths was about 2,7 times, the fatal motor-vehicle accident rate - about 5 times, the homicide rate - 24 times, and the fatal alcohol intoxication rate - about 36 times higher in Estonia than in Sweden.

Conclusion

The injury rate in Estonia is high and follows a rising trend. The Swedish indices are comparatively low and show a decrease. It is crucial that the problem of injury prevention in Estonia is addressed now.

Posters, 12-14 December 1996

Socioeconomic status and alcohol consumption

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Introduction

In Germany, analyses concerning socioeconomic differences in risk factors have concentrated on cardiovascular risk factors such as smoking and obesity. Although it is widely accepted that health is strongly influenced by alcohol consumption, there are hardly any empirical studies on socioeconomic differences. Also, the results of the available studies are rather contradictory. The objective of the present study is to contribute to a classification of this association.

Methods

The empirical analyses are based on data from the *Second National Health Survey* which was conducted 1987/88 in West Germany and comprises a representative sample of about 5,300 persons with German nationality aged 25-69 years. The questionnaire includes quantitative assessments of the average daily consumption of beer, wine and spirits. Total alcohol consumption is calculated by adding the amount of alcohol consumed from these difference sources. SES is assessed by an index based on education occupation and income.

Results

In the logistic regression (including age) lower SES (comparison group: higher SES) is chosen as the "exposure" variable, and medium plus high alcohol consumption (comparison group: little or no alcohol consumption) as the "outcome" variable. The analyses show an Odds Ratio of 0.57 (95% Conf. Interval 0.42-0.77) for men and of 0.42 (95% Conf. Interval 0.32-0.54) for women, implying that medium and high alcohol consumption is less prevalent in lower as compared with higher SES groups. Further analyses show that this result is based on alcohol consumed by wine and spirits, whereas beer consumption is most prevalent in the lower SES group.

Conclusion

After stressing the methodological difficulties of these analyses, it is pointed out that most risk factors are more prevalent in the lower as compared with the higher SES group, and that total alcohol consumption could be an exception that has largely been ignored.

1999

1999 conference: The relationship between alcohol and cardiovascular disease in Eastern Europe: explaining the paradox

The relationship between alcohol and cardiovascular disease in Eastern Europe: explaining the paradox

Britton A, McKee M, **UK**

Background

Recent evidence from Eastern Europe of a positive association between alcohol and cardiovascular disease has challenged the prevailing view that drinking is cardio-protective. Consuming amounts of alcohol comparable to those consumed in France have been linked to detrimental cardiovascular effects. One possibility is that this could be related to the particular consequences of binge drinking, which is common in this region.

Methods

A systematic review of literature on the relationship between cardiovascular disease and heavy drinking and Regular(binge) drinking.

Results

All existing reviews of the relationship between alcohol and cardiovascular disease have examined the amount drunk per week or month and have not looked at the pattern of drinking. These have consistently shown that alcohol has a cardio-protective effect, even at high levels of consumption. In contrast, studies that have looked at pattern of drinking, either directly, or indirectly, using indicators such as frequency of hangovers or reports of the consequences of drunkenness, have consistently found an elevated risk of cardiovascular death, particularly sudden death. A separate review of the physiological basis for a difference between regular heavy drinking and heavy binge drinking demonstrates that the two types of drinking have quite different effects.

Conclusion

An association between binge drinking and cardiovascular death meets the standard criteria for causality. It is important that future studies of alcohol related harm examine the pattern of drinking as well as the amount drunk.

1999 conference: Effect of the core peer group on norms related to smoking cigarettes and drinking alcohol among young people in Frederiksborg county, Denmark

Effect of the core peer group on norms related to smoking cigarettes and drinking alcohol among young people in Frederiksborg county, Denmark

Nielsen NS, **Denmark**

Introduction

Recent studies of the health behaviour of young people have shown that the smoking of cigarettes and drinking of alcohol among young people are influenced by norms among their peers, and each individual person must take account of these norms to be accepted by other young people.

Purpose

The purpose was to analyse the pattern of smoking and drinking among young people study by reference to norms in the core peer group compared to individual characteristics.

Material and Methods

The analysis was based on data from a questionnaire survey of 6444 students from 331 classes in upper secondary education in Frederiksborg County. This database includes about 80% of the people about 15 to 19 years old in Frederiksborg County. The importance of each young person's attachment to various core social groups, including the school and the individual school class, and the significance of individual socio-demographic factors were analyzed in relation to the pattern of smoking and drinking. The importance of the various factors was analyzed using the multi-level technique.

Results

In some school classes 90% of the pupils smoke; in others 10% smoke. Similarly, in some classes 80% of the pupils drink alcohol at least every weekend versus 0% in other classes. Multilevel analysis also

shows that the pattern of drinking and smoking varies so widely between school classes that the differences cannot be explained solely by differences in sex ratio and age composition or other individual factors.

Conclusion

The most likely explanatory model is that the main determinant of the smoking and drinking pattern of young people is the social norms in their individual class at school. The results suggest that efforts to intervene effectively in reducing smoking and drinking among young people should be based on the core peer group as a whole, especially the class at school."

1999 conference: Prevalence of alcohol problems among elderly patients in an university hospital

Prevalence of alcohol problems among elderly patients in an university hospital

Ganry O, Joly JP, Queval MP, Beaudot JM, Dubreuil A

France

Introduction

To study the prevalence of alcohol abuse and the prevalence of alcohol-related discharge diagnosis in an elderly general hospital population.

Material and methods

A randomly selected day, all the elderly population aged 65 years and over, admitted in the University hospital of Amiens were approached and requested to take part in the study. They were interviewed with a structured questionnaire, regarding life style, with the CAGE questionnaire and about their daily alcohol consumption. Medical history of all patients were collected. In total, 612 patients fulfilled the criteria, but 205 patients (33,6%) had to be excluded owing to predefined exclusion criteria (dementia, aphasia, terminal illness ...) and 37 patients (6%) refused to participate.

Results

The data were derived from 370 patients. The median age was 79 years. 54% reported no alcohol consumption. 9% of patients were positive on the CAGE questionnaire. The prevalence of patients with a CAGE questionnaire positive was significantly higher among male patients (17%) than female patients (2,5%). The prevalence of patients with alcohol-related discharge diagnosis was 7%. The frequency of higher socioeconomic status or marital status of divorced increased significantly with alcohol consumption.

Conclusion

These findings indicate that a substantial proportion of elderly people admitted in a University hospital in France, consume alcohol in excess of recommended limits, or presented an alcohol-related discharge diagnosis. Alcohol use was associated with social characteristics like higher socioeconomic status or single marital status.

1999 conference: Natural recovery from alcohol dependents in northern Germany

Natural recovery from alcohol dependents in northern Germany

John U, Rumpf HJ, Hapke U, Bischof G, Meyer C

Germany

Introduction

Little is known about individuals remitting from alcohol problems without formal help, and almost no data are available with respect to gender differences in natural recovery.

Methods

229 individuals who met criteria for remission from alcohol dependence without utilization of formal help (outpatient or inpatient treatment; self help groups) were recruited by media based solicitation or derived from a representative general population sample. A comprehensive, standardized interview included the assessment of triggering factors and maintenance factors of remission.

Results

Natural recovery does exist. Female subjects showed significantly lower extents of social pressure to change drinking behavior prior to remission ($p < .0001$) and remission was less often triggered by partnership problems compared to men ($p < .01$). Females reported more often health concerns seeking help. Women reported less often that their partner significantly contributed to staying in remission ($p < .05$).

Conclusion

Data show that triggering factors and maintenance factors of natural recovery from alcohol dependence differ between men and women."

1999 conference: Health behaviour differences by educational level in Lithuanian adult population

Health behaviour differences by educational level in Lithuanian adult population

Dregval L, Klumbiene J, Petkeviciene J

Lithuania

Introduction

The aim of this study was to assess health behaviour indicators according to different educational level.

Methods

Health behaviour survey was carried out in Lithuania within the international project FINBALT HEALTH MONITOR in 1996. The questionnaire was sent by mail to 3000 Lithuanians aged 20-64, sampled randomly from the National Population Register. The number of filled-in and returned questionnaires was 2021 (response rate 68.9%). All respondents were divided into three groups according to their educational level: incomplete secondary, secondary or vocational and high education.

Results

Smoking habits varied by educational level. Prevalence of daily smoking was 68% among males and 17.4% among females in the group with incomplete secondary education and respectively 36.7% and 9.1% in the group with high education ($p < 0.05$). The males with incomplete secondary education used strong alcohol more often than others did. Every third male (33.9%) with incomplete secondary education and every fourth male (24.7%) with high education used to drink strong alcohol at least once a week. The consumption of strong alcohol among females did not depend on their educational level. Nutrition habits were related to the respondents' education. The highest proportion of persons using lard for cooking at home was in the group with the lowest education (39.8% of males and 28.9% of females). The majority of people with high education (64.6% of males and 83.4% of females) used oil for cooking. People with high education consumed vegetables more often than others did. At least three times a week vegetables were consumed by 58.9% of males and 75.8% of females with high education and respectively 30.4% and 47.7% with incomplete secondary education ($p < 0.05$).

Conclusions

Lifestyle of persons with high education was healthier. In developing of health promotion and disease prevention programs in Lithuania more attention must be paid to the people with lower educational level.

1999 conference: Trauma, posttraumatic stress disorder, and substance abuse in the community

Trauma, posttraumatic stress disorder, and substance abuse in the community

Hapke U, Rumpf HJ, Schumann A, Meyer C, Dilling H, John U

Germany

Introduction

Reasons for and consequences of Posttraumatic Stress Disorder (PTSD) have mainly been investigated in clinical samples. Data of these studies show that PTSD is a risk-factor for substance-related disorders. However, general population studies in this field are rare. The aim of our investigation was

to estimate the prevalence of traumas, the risk of PTSD following exposure to trauma and the risk of substance-related disorders among persons with PTSD in a population-based study.

Methods

A representative sample of 4075 persons in an area of northern Germany, aged 18 to 64 years, was personally interviewed. The interview contained a DSM-IV-adapted computerised version of the Composite International Diagnostic Interview (CIDI). Modules for substance-related disorders, mood, anxiety, somatoform and eating disorders were used. In addition, paper-pencil questionnaires were used for the assessment of alcohol and nicotine consumption, health behaviour, mental health, social resources and environmental factors.

Results

The difference of life-time prevalence in PTSD between women (2.2%) and men (0.6%) could be explained by gender differences in exposure to different kinds of traumas. While men have a higher risk for severe accidents (9.2%) compared to women (5.4%), women have a higher risk for rape (2.5%) and sexual abuse (2.6%) compared to men's risk of 0.1% and 0.3%. The conditional risk of PTSD differs markedly between these traumas (violation = 39.6%, sexual abuse = 30.0%, severe accidents = 4.3%). Women with PTSD had a substantially higher risk for alcohol-dependence (9%), alcohol-abuse (7%), and nicotine-dependence (41%) compared with women without PTSD, who show a prevalence of 1% for alcohol-dependence and abuse, respectively 17% for nicotine-dependence.

Conclusion

PTSD is a substantial risk factor for alcohol-dependence, alcohol-abuse and nicotine-dependence. It can be concluded that violence against women is a gender-specific risk factor for substance abuse in the general population.

1999 conference: Risk factors and health in the Baltic Republics

Risk factors and health in the Baltic Republics

Pomerleau J, McKee M, Robertson A, Vaask S, Pudule I, Grinberga D, Kadziauskiene K, Bartkeviciute R, Abaravicius A

UK

Background

The three Baltic Republics, Latvia, Lithuania, and Estonia, have much in common but also some important differences. Over the past 30 years the health of their population has followed a trajectory that has been parallel to each other and to that in Russia, although absolute levels of mortality have differed. Lithuania has performed better than Estonia, which in turn has done better than Latvia.

Methods

During summer 1997, cross-sectional surveys were conducted among representative national samples of adults in each country (Estonia: n=2108; Latvia: n=2308; Lithuania: n=2153). Interviews with participants included a 24-hour recall of dietary intake, a standardised questionnaire (covering demographic characteristics, eating habits and health behaviours), and height and weight measurements.

Results

There were marked inter-country differences. Complete dependence on home grown foods was twice as high in Lithuania (29%) as in Latvia (14%) or Estonia (13%). Three out of four Lithuanians consumed vegetables daily, but only 48% of Estonians and 60% of Latvians. One in eight Latvians reported adding salt at the table almost always before eating compared with approximately one in fifteen Estonians or Lithuanians. Fat intake was high in all three countries, but Lithuanians had a higher mean intake (44% of energy) than Latvians (42%) or Estonians (36%), and were more likely to use animal fat for cooking (29% vs 8% of Estonians and 9% of Latvians). Median intake of vegetables and fruits was higher in Estonia than in Latvia and Lithuania but was less than 300g/day anywhere. 13% of the respondents were obese and almost half (48%) were overweight. Between-country differences in obesity were particularly large in women: 18% of Lithuanian and 17% of Latvian women were obese compared with only 6% of Estonians. Estonians were more likely than others to be physically active during leisure time. Lithuanian men were least likely to be physically active during

leisure (64% were involved in sedentary activities only) but most likely to be active at work (17%). Women from Estonia were twice as likely as other women to smoke regularly. The proportion of heavy alcohol drinkers was higher in Estonia than in Latvia or Lithuania in men of all age groups (overall 9% vs 3%).

Conclusions

The surveys showed important variations in dietary patterns and lifestyle behaviours among the Baltic countries. The implications of these results for the patterns of health observed in the three countries will be discussed.

1999 conference: Drinking patterns and health outcomes: occasional versus regular drinking

Drinking patterns and health outcomes: occasional versus regular drinking

San Jose B, Van Oers JAM, Van den Mheen H, Garretsen HFL, Mackenbach JP

The Netherlands

Aim

To compare the health of drinkers with different drinking patterns. Special attention is paid to the comparison between drinkers with comparable average intakes and different drinking patterns. Setting General population survey conducted in Eindhoven, The Netherlands (N= 18.873). Measurements Chronic conditions, perceived general health, and health complaints were the outcome measures. Drinking categories were constructed by taking into account the frequency and the amount with which alcohol was reported to be consumed by the respondents.

Findings

Drinking 3-5 days per week 3/5 glasses per occasion and drinking 6-7 days/ 1-2 glasses were associated with lower likelihood for reporting health complaints and for perceiving one's health as less than good compared to those drinking 1-2 days 1-2 glasses (reference). Drinking 1-2 days 16 glasses was associated with being more likely to report chronic conditions, compared to the reference. In addition, respondents with comparable average alcohol intakes and different drinking patterns were also compared. Those drinking 1-2 days 16 glasses were significantly more likely to report >3 health complaints than their counterparts (drinking 6-7 days 1-2 glasses). Although no differences were observed for any of the other comparison groups, at high levels of consumption (18-35 units/week), occasional drinkers (3-5 days 16 glasses) seemed to have better health outcomes compared to their counterparts (6-7 days 3-5 glasses).

Conclusion

In addition to average alcohol intake, drinking pattern is also related to health.

1999 conference: Studies in health and determinants of health in the danish-swedish Øresund-region

Studies in health and determinants of health in the danish-swedish Øresund-region

Rasmussen NK, Hanson BS, Ostergren PO

Denmark

Introduction

In Denmark life-expectancy has been stagnating for the last several decades. In Sweden there is great concern that the same problem will emerge in Sweden. This concern is especially present in Scania (the southern part of Sweden closest to Denmark) which may be influenced by Danish health habits and lifestyle in the coming years because of the anticipated increasing integration and physical, social and cultural communication and exchange between the two countries as a result of the recent Swedish membership of the European union and the construction of the bridge between Malmö and Copenhagen.

Methods

In order to monitor and study the development on both sides of Øresund (the waters that separate the southern part of Sweden and the eastern part of Denmark) a CO-operative research program has been

established by DCMLU and National Institute of Public Health. Part of the CO-operation consists of monitoring and analysing the health situation on both sides and of coordination health surveys.

Results

In Denmark life-expectancy for males is 72 and for females 78. In Sweden life expectancy for males is 75 and for females 80. For both countries life expectancy were smaller in large urban areas and greater in rural areas. Similarly, age-standardised mortality rates for some of the more common causes of death were higher in the Danish subregions than in the Swedish subregions. Risk behaviours such as tobacco smoking and alcohol drinking were found to be more prevalent in the Danish region compared to the Swedish region.

Discussion

Many factors contribute to the differences concerning patterns of health and ill health between the Danish and Swedish regions. Cross-national research may benefit from regional comparisons whereas whole nations may be too heterogeneous for comparative studies. Regional health surveys are being planned both in Scania and Zealand. The questionnaires that are being used have been discussed and compared as part of the cooperative project allowing much better future understanding of the differences with regard to riskfactors, morbidity and mortality.

2000

2000 conference: Alcohol use among french nonathletic and athletic youth with varying level of sport activity

Alcohol use among french nonathletic and athletic youth with varying level of sport activity

Shelly M, Moreau D, Gendre C, Tubert-Bitter P

France

Objectives

To assess the relationship between the sport activity, its intensity level and the patterns of frequent alcohol use among young people.

Methods

In the framework of an exploratory study assessing lifestyles and health-risk behaviors in youth, 560 young people (14-30 years old) from the parisian area visiting the Youth Information and Documentation Center (CIDJ) in Paris between March 1998 and May 1999 were compared on athletic participation, its intensity level of activity and sex as these variables affected the patterns of alcohol use. Data were collected by means of an anonymous computerized self-questionnaire, Participants (F= 333; M = 227) were divided into three groups on the basis of their athletic involvement and its intensity level : noninvolved (F= 145; M = 65), moderately involved (F= 167; M = 129) and highly involved (F= 21; M = 33).

Results

While in males, the patterns of frequent alcohol use were very similar across intensity levels of sport (40%, 40.3% and 36%), we found an U shaped relationship statistically significant ($p < 0.039$) between nonathletic females (33.8%), athletic with moderate level (21 %) and with high level of activity (28%) : frequent alcohol use among females was negatively associated with moderate level of sport activity compared to no sport activity (OR= 0.52 [IC 95 % = 0.31 - 0.861]).

Conclusion

In our study, gender-related differences were found in drinking behaviors among athletic and nonathletic youth : only among females, sport activity only if moderately practiced appears to be a protective factor for frequent alcohol use, while in males there is no relationship between sport activity and alcohol use. Acknowledgements this work was supported by French Youth and Sports Ministry and European Commission (DG VIF2).

2000 conference: Daily variations in deaths in Lithuania: the contribution of binge drinking

Daily variations in deaths in Lithuania: the contribution of binge drinking

Chenet L, Britton A

Lithuania

Introduction

During the early 1990's, the countries of the Former Soviet Union experienced a dramatic rise in mortality, especially from cardiovascular diseases. Although still poorly understood there is evidence, particularly from Russia, that this mortality crisis is partly linked to alcohol consumption. In this paper, we use data from Lithuania to explore the daily variations of deaths and the probable relationship with binge drinking.

Methods

Computerised death certificates for those aged 20 to 59 years were analysed according to the day of death, place of death, and cause of death for the years 1988 to 1997.

Results

There is a marked increase in deaths from accidents, violence, and alcohol poisoning at the weekend, suggesting a pattern of binge drinking in Lithuania, There is also a significant increase in ischaemic heart disease deaths on Saturdays, Sundays and Mondays. If the analysis is performed separately according to place of death, the day of the week effect is strengthened for cardiovascular deaths outside of hospital; consistent with the idea of a sudden cardiac death.

Conclusion

The increase in mortality from cardiovascular diseases observed at the weekend in Lithuania is similar to that observed in Moscow and other populations. The relationship with alcohol consumption is supported by the available physiological evidence. We propose that bingeing can be solely responsible for, or acts as a "catalyst", on pathophysiological events by increasing blood pressure, cardiac rhythm and coagulability. The increased ischaemic mortality observed throughout the weekend and on Monday in Lithuania may reflect the influence of alcohol consumption patterns in a population already subject to high psychosocial stress.

2000 conference: Health behaviour, social status and mortality. Does behaviour explain social inequality? A 12 years follow-up in the Danish National Cohort study(DANCOS)

Health behaviour, social status and mortality. Does behaviour explain social inequality? A 12 years follow-up in the Danish National Cohort study(DANCOS)

Juel K, Helweg-Larsen K, Rasmussen NK, Madsen M

Denmark

Introduction

Most studies of the relation between health behaviour, social status and mortality are from study populations selected on sex, region, age or occupation. In Denmark, it is now possible to perform these analyses in a prospective design on a national representative sample of both men and women (DANCOS).

Methods

The Danish health- and morbidity survey of 1986-1987 included 6693 persons; participation rate was 80%. By January 2000, 1136 deaths had occurred. Five variables concerning health behaviour: smoking habits, alcohol consumption, physical activity in leisure time, Body Mass Index (BMI) and intended dietary habits. Social status was measured by level of vocational education. The relation between baseline variables and mortality was analysed by Cox regression analysis.

Results

Smoking and alcohol consumption (men) had the strongest association with mortality. The association was almost unaffected by the adjustment for other behaviour variables or the omission of deaths in the first five years after baseline. Physical activity and BMI (women) showed a significant association with mortality, which was weakened a little by omission of deaths in the first five follow-up years. The weak association between intended dietary habits and mortality disappeared, when adjusting for other behaviour variables. The association between education and mortality was relatively weak. Men with a higher education had a lower mortality than other educational groups; women without education had a higher mortality than other educational groups. Less than half of mortality differences between persons without education and persons with a higher education could be attributed to differences in health behaviour.

Conclusions

The first results from DANCOS show, that smoking, large alcohol consumption (men), physical inactivity and BMI (women) are strongly associated to mortality. Gender differences in the social gradient in mortality was found. Social inequality in mortality was attributed to health behaviour, but was not fully explained.

2000 conference: What explains the improvement in life expectancy in Russia in the mid 1990's?

What explains the improvement in life expectancy in Russia in the mid 1990's?

Shkolnikov V, McKee m, Leon DA

Russia

Background

Between 1987 and 1994, Russia experienced a catastrophic decline in life expectancy. Since 1994, however, this has reversed, returning to the levels of the early 1980's. Although the decline in life expectancy has been examined previously, with evidence pointing strongly to the role of alcohol, much less is known about the subsequent improvement.

Methods

Changes in cause specific death rates at ages 15-74 were examined, comparing 1998 with 1994 (the year of lowest life expectancy) and 1991 (the year the Soviet Union broke up).

Results

Although overall life expectancy at birth in Russia has now returned to the level of the 1980s, this conceals differences in death rates at various ages and from different causes. Death rates among children have fallen steadily throughout the 1990s and those in the elderly have changed little. The fall in mortality since 1994 is primarily due to a reduction in deaths among the middle aged, which had increased until 1994. Deaths among those aged 15 to 30 which rose in the earlier period have remained high. Causes of death fall into three broad categories. Some, such as stomach cancer and road traffic accidents have declined throughout the 1990s. Some have increased, such as breast and prostate cancer and tuberculosis. The decline in mortality since 1994 is, however, largely due to a reduction in deaths from a group of causes that had increased between 1991 and 1994, although the decline was insufficient to offset the earlier rise. This group of causes is characterised by an association with alcohol consumption.

Conclusion

The changing life expectancy in Russia reflects a complex pattern of trends in different causes of death, some of which have their origins long in the past whereas others reflect contemporary circumstances. This study provides further support for the view that alcohol has played an important role in the fluctuations in life expectancy seen in the 1990s, although there remains a need for a much better understanding of the factors underlying this change.

2000 conference: Is intragenerational social mobility related to cardiovascular risk factors in men?

Is intragenerational social mobility related to cardiovascular risk factors in men?

Ribet C, Lang T, Bonenfant S, Goldberg M, Ducimetière P

France

Objectives

In France, higher levels of tobacco and alcohol consumption were observed among subjects with low socioeconomic status. These relations have rarely been related to social mobility (SM). Our objective was to analyse the relationships between intragenerational SM and cardiovascular risk factors (CV-RF).

Methods

Men from the cohort GAZEL, in a large French company, (EDF-GDF), were analysed. Occupational Categories (OC) (INSEE classification) used were 1) senior executives and professionals, 2) middle executives, 3) employees and workers. Firstly, SM was retrospectively measured by OC both at entry into EDF-GDF and in 1992. CV-RF level in 1992 of upwardly mobile subjects (at least one OC) and stable subjects (OC unchanged) were compared. Secondly, the predictive role of the CV-RF measured in 1992 on subsequent SM (from 1992 to 1999) was analysed. Then, the predictive role of SM measured over two time-periods (1 985-1992 and 1989-1992) on CV-RF incidence over time-period 1996-1999 was considered. OC which could not experience upward SM were excluded. Respectively, 10,383, 5031, and 6,500 were selected for analysis.

Results

Using the cross-sectional approach, socially stable subjects had a higher risk of CV-RF compared with upwardly mobile subjects: OR=1.84 for diabetes; 1.20 for hypercholesterolemia; 1.18 for sedentary lifestyle; 1.17 for smoking status and 1.28 for high alcohol consumption (- 48 grams/day). They had a higher level of body mass index (25.3 vs. 25.6 kg/m²). In a longitudinal approach, smokers and excessive drinkers had a higher risk of non-mobility compared with non-smokers (OR=1.27) and non- or occasional-drinkers (OR=1.74) respectively. Non- and ex-smokers socially stable between 1989 and

1992 (compared with upwardly mobiles over the same period), had a higher risk of being smokers three years later (OR=2.04). Socially stable subjects between 1985 and 1992 (compared with upwardly mobile over the same period) had a higher risk of incidence of both hypertension and excessive alcohol consumption (OR=1.23 and 1.47) in 1996-1999.

Conclusion

The higher tobacco and alcohol consumption observed among men who did not experience SM might thus be related to two phenomena. First, a selection related to tobacco and alcohol behaviours. Second, upward SM may be protective; these subjects might have a lesser risk of smoking and being excessive drinkers.

2000 conference: Socio-economic disparities in mortality in France

Socio-economic disparities in mortality in France

Jougla E, Péquignot F, Rican S, Salem G, Le Toullec A

France

Introduction

In spite of a marked decline in death rates among European countries, inequalities in health remain important and even tend to increase. As an illustration of methods and results, this study presents the available data on social inequalities in mortality observed in France.

Methods

Two main sources are used: longitudinal studies based on cohorts determined at time of census and cross sectional data obtained from death register analysis. To avoid biases due to imprecision in the occupational categories declaration, causes of death are studied according to broad grouping and for men in active age. Usual indicators as life expectancy and standardised death rates are used.

Results

There is an 8-year difference in life expectancy at 35 years between engineers and unskilled workers. The premature risks of death for males are markedly higher for all causes of death (except for AIDS) for the lower social categories. The highest differences concern alcohol related causes of death (death rates multiplied by ten for cirrhosis and cancer of the digestive tract). Since the eighties, the decrease in death rates is not so important for the workers. An increase in suicides and lung cancers for this population group has even been noticed. This has led to an increase in time of social disparities in death rates. Analysis of mortality by French region shows that the level of disparity is higher where the death rates are also high.

Conclusion

This study outlines the role of health practices as an important determinant of social disparities in mortality. This has been confirmed by the results of cross-national comparisons of socio-economic differences in mortality. For example, in France compared with other European countries, the particularly high level of social disparities in mortality is primarily explained by the social differences in terms of alcohol consumption.

2000 conference: Appeal to the hospitalisation of people in precariousness situation: an inquiry at the hospital of Dax (France)

Appeal to the hospitalisation of people in precariousness situation: an inquiry at the hospital of Dax (France)

Blanchard C, Menvielle

France

Introduction

This study was about the appeal to the hospitalisation in short stay department of people benefiting of the free medical assistance at the hospital of Dax. The objectives were to analyse the part of that population among the hospitalised population and to describe his social and sanitary characteristics.

Method

- Population concerned by the study:

- The indicator retained was economic: free medical assistance, subjected to conditions of resources' s2.

- Compendium of data: it was a retrospective study based upon all the hospitalisations in short stay during the first term of 1998. The data sources have been made by the administrative databases (invoicing) and medical databases (PMSI~) of the establishment. The items described were of two types: sociodemographic and sanitary description of the population.

Main results

During the period of reference, the hospitalisations of people in precariousness situation represented 10% of all hospitalisation. Male sex were over represented (57% versus 47% for the general population), the average age is of 37 years old (57 for the general population), the average length of the stay was of 6.8 days (5.5 for the general population) up to 11 days in average for the people having the AME~T. The rate of re-hospitalisation was height (16% versus 9% for the general population). The main pathologies were mental illness and pathologies due to alcohol (versus cardiovascular and digestive pathologies for the general population).

Conclusion

This work has been a help in the decision to put a PASS~a nd to elaborate a training program for the hospital employee (nursing, administrative, social) on the medico-social undertaking of people in precariousness situation.

2000 conference: Inequalities in health behaviour between medical & dental students from West and East Germany

Inequalities in health behaviour between medical & dental students from West and East Germany

Vitez L, Klewer J, Kugler J

Germany

Introduction

Even 10 years after reunion of West and East Germany, the economic situation in both parts of Germany is still different. Besides studies evaluating health and behavioural inequalities in the general population, not much is known about differences between medical and dental students, the future physicians / dentists, due to the origin. Therefore, this study focused on differences related to health and learning behaviour between medical and dental students from West and East Germany.

Methods

162 medical and dental students (3rd to 5th year) of the Dresden Medical School participated by anonymously working on questionnaires related to sociodemographical data, smoking / drinking habits, drug abuse, nutrition, sportive activities, vaccinations and time spent for medical studies. The response rate was 76-85 %. 41 of the students have grown up in West Germany, 121 of them in East Germany.

Results

In comparison to students from East Germany, students from West Germany drink significantly more alcohol and coffee, smoke more frequently, abuse more illegal drugs, eat regularly crisps, have increased sexual contacts and are insufficiently vaccinated. In contrast, students from East Germany attend significantly more regularly lectures and are more interested in good grades, consume more meat, fruits and soft drinks and are younger at time of the first sexual intercourse. No differences related to age, gender, sportive activities and subjective quality of life are found.

Conclusions

Even 10 years after the German reunion, differences in health behaviour related to the origin of the students are still present. Rated quality of life was similar in both samples. This indicates that unhealthy habits of the students from West Germany are likely due to the different socialisation processes in both parts of Germany, developed before the reunion. Reducing health inequalities in Europe seems to be difficult, if even within Germany distinct inequalities are present.

2000 conference: The role of nutrition in the etiology of colon cancer

The role of nutrition in the etiology of colon cancer

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Poland

Material and methods

Cases: 180 new cases of colon cancer hospitalised in the I Chair and Department of General Surgery and the Department of Gastroenterological Surgery CM UJ in Cracow between January 1997 and April 1999. Controls: 180 patients hospitalised in the same time from other diseases, matched with cases by sex and age (""+ -"" 5 years). The study was based on the quantitative standardized food questionnaire including information about life style (ex. smoking, drinking alcohol).

Results

Cases of the colon cancer consumed overall more calories (kcal/day) than controls (2195 vs. 1895) and more fats (85,7 g/day vs. 73,2 g/day), carbohydrates (243 g/day vs. 208 g/day) and proteins (78,4 g/day vs. 69,7g/day). Intake of vitamins (A, equivalent of retinol, E, BI, PP, C) and fiber (per 1000 kcal) was higher in controls. The consumption of pure alcohol (g/day) was significantly higher in the cases than in the control group (cases: 3.27, controls: 1.76, p=0.00).

Conclusions

The results of the study indicated that vitamins and fiber may have protective effect against colon cancer, however, high consumption of fat, carbohydrates, proteins and alcohol could increase the risk of colon cancer. This study is a part of project no 4 P05D 0251 1 ""Study on life style and environmental determinants of the course of illness and medical care"" supported financially by Polish Scientific Committee. Head of project Prof. Dr hab. Beata Tobiasz-Adamczy.

2001

Health impacts of increasing the EU-wide excise duty on alcohol: A dynamic projection

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Alcohol consumption in the European Union (EU) totaled 56 billion liters in 2007, with strong variations across countries. The 2004 Global Burden of Disease Study demonstrated the impact of alcohol consumption on health in the EU. There is clear evidence that increased alcohol prices/taxes reduce alcohol consumption and alcohol-related morbidity and mortality. Currently, a revision of the EU excise tax regime is under discussion. We present an application of DYNAMO-HIA - dynamic modeling tool - to quantify the resulting health impact on the EU population of an increase of alcohol excise taxes. Using alcohol consumption data for 11 member states, covering 80% of the EU-27 population, and the corresponding country-specific disease data (incidence, prevalence, and case-fatality rate of alcohol related disease), we dynamically project the population health for ten years into the future. By reporting several disease specific health outcomes (projected changes in prevalence of IHD, stroke, diabetes, and selected cancers) and summary measures of population health, the effectiveness of alcohol price increases is demonstrated. A special emphasis is given on how to translate policy changes into changes in risk factor behavior.

Quantification; EU-wide; alcohol; methodology

2001 conference: Health, morbidity, mortality and lifestyles in the Oresund region

Health, morbidity, mortality and lifestyles in the Oresund region

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Introduction

The aim is to monitor and analyse recent differences in mortality, morbidity and lifestyles between the populations in Denmark and Sweden in the Oresund region.

Methods

National and regional register data concerning life expectancy, age and diagnosis specific mortality and morbidity, pensioners below age 65 and sale of alcohol were assessed in Denmark and Sweden, and compared. Regional survey data from 1986/1987, 1994 and 1999/2000 concerning e.g. daily smoking and alcohol consumption among adults and among adolescents were collected and compared between the parts of the two countries closest to the Oresund.

Results

There are large differences in life expectancy between Sweden and Denmark. Swedish men and women live more than 3 years longer than Danish men and women. These differences in life expectancy are mainly explained by, lung cancer, other tumours, alcohol related diseases and other groups of diagnoses that also are related to lifestyles, e.g. tobacco smoking and alcohol consumption. The prevalence of daily smoking is almost twice as high in Denmark (40%) compared to Sweden (20%), and the per capita consumption of alcohol in the adult population is also twice as high. Data also suggest that these different lifestyle patterns are present even among adolescents.

Conclusions

Following the Swedish membership in the European Union and the opening of the Oresund Bridge, it is now an important question whether in the future the Danish lifestyle, morbidity and mortality will approach the corresponding levels in Sweden, or whether Sweden will develop in the direction of the levels found in Denmark.

2001 conference: Alcohol intake and drinking patterns in Russia, Czech Republic and Poland

Alcohol intake and drinking patterns in Russia, Czech Republic and Poland

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Introduction

It is commonly assumed that alcohol contributed to the high mortality in Central and Eastern Europe, and particularly in Russia, but there are few reliable data on drinking patterns in the region.

Methods

We examined random samples of men and women aged 45-64 in Novosibirsk, Russia (n=990), Karvina, Czech Republic (n=677) and Krakow, Poland (n=576). Alcohol consumption was assessed by a questionnaire that included the graduated frequency instrument (to examine drinking patterns). Problem drinking was estimated by the CAGE questionnaire.

Results

In Russia, men drank infrequently (56 drinking occasions per year on average) but with high average dose per occasion (83 g of ethanol); the prevalence of drinking >80 g of ethanol and intoxication at least once a month was 30% and 22%, respectively; and 35% of all men were classified as problem drinkers by the CAGE questionnaire. By contrast, Czech men drank more often (171 drinking occasions per year on average) but small quantities per occasion (mean dose 51 g of ethanol); the prevalence of drinking >80 g of ethanol and intoxication at least once a month was 17% and 5%, respectively, and 19% were classified as problem drinkers. Alcohol intake indices for Polish men were between the Czech and Russian, and prevalence of problem drinking in Poland was low (14%). Alcohol intake of women was low in all 3 countries.

Conclusions

There are marked differences in drinking patterns of men in these three Central and Eastern European countries. While the Czechs drink often and moderate amounts (the "French" pattern), Russian men drink less often but large quantities (binge drinking pattern). This may help explain the high rates of deaths from injuries and other alcohol-related causes in Russia. On the other hand, alcohol intake of women was low in all 3 countries.

2001 conference: A Cost-Benefit Analysis of the Use and Abuse of Alcohol in Belgium

A Cost-Benefit Analysis of the Use and Abuse of Alcohol in Belgium

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Introduction

The use and abuse of alcohol involves a wide variety of beneficial and adverse health and social consequences. The aim of this cost-benefit analysis is to systematically identify, measure and value every consequence of alcohol consumption. Furthermore, the different parties (the users and abusers, the non-users, government and private instances) bearing the economic and social costs and benefits are identified.

Methods

Starting from international guidelines for the estimation of the costs and benefits of substance abuse, huge amounts of data were collected. The methodology was adjusted to the Belgian situation and refined when particular data were not available. A cost-of-illness framework was adopted in order to estimate the impact of alcohol use on the welfare of society by examining the social costs and benefits relative to a counterfactual scenario in which there is no alcohol use. Estimates were conducted using several valuation methods, among which the human capital approach and the willingness-to-pay technique.

Results

The costs of alcohol use and abuse are 4 to 5 times higher than the benefits. The direct costs in the working environment and labour market turn out to be the biggest cost components. The number of injured and killed persons in traffic caused by alcohol and the related costs are alarmingly high. The indirect costs of productivity losses due to alcohol related morbidity and mortality are also important. The direct alcohol-related health care costs are one of the minor cost components: only 3% of the Total health care costs are caused by alcohol consumption. The benefits stem mainly from some beneficial health effects and collected taxes.

Conclusions

Being the first analysis of alcohol use in Belgium, this study provides important insights in the major substance related costs and benefits. Government should adopt new policies to reduce some of the observed adverse effects, such as the alcohol related morbidity and mortality, which contributes to the health care costs, traffic costs and indirect productivity losses.

2001 conference: Trends in mortality attributable to current alcohol consumption in East and West Germany

Trends in mortality attributable to current alcohol consumption in East and West Germany

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Introduction

There is emerging awareness of alcohol as a cause of the persisting health divide between east and west Germany. This study quantifies the burden of alcohol attributable to mortality in the two parts of Germany in the 1990s, taking account of both adverse and beneficial effects of alcohol.

Methods

Application of cause-specific alcohol attributable to fractions derived from published relative risks and data on the distribution of alcohol consumption in Germany in 1990/92 and 1998 to mortality data for the two regions in 1992 and 1997.

Results

Including the cardio protective effect of alcohol, there were about 1.4% more deaths among men aged 20+ in 1992 in Germany than would have been expected in a non-drinking population, while there were 0.1% fewer deaths among women. By 1997, this had increased to 1.8% excess male deaths and 0.1% excess female deaths. In 1997, alcohol 'caused' 9.0% of all deaths in east German men compared with 5.6% in the west (women east: 2.5%; women west: 2.2%). At the same time, alcohol 'prevented' 5.2% deaths in east German men compared with 4.3% in the west, while there were 2.9 and 2.0% fewer deaths in women. This resulted in a net excess of deaths due to alcohol, except east German women, where 0.3% deaths were estimated to have been averted by alcohol. Although by 1997 net deaths 'caused' by alcohol increased in the west and declined in the east, the burden of disease due to alcohol among men remained highest in the east whereas in women the order had reversed.

Conclusions

Mortality attributable to alcohol contributes considerably to overall mortality and to the east-west gap in Germany. This study points to the need for comprehensive policies on alcohol in Germany to close the persisting east-west health gap.

2001 conference: Stages of change in smoking and alcohol problem drinking _ results of the transitions in alcohol consumption and smoking study (TACOS)

Stages of change in smoking and alcohol problem drinking _ results of the transitions in alcohol consumption and smoking study (TACOS)

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Introduction

The rate of smokers and alcohol problem drinkers who utilize specialized help and the elements of the Transtheoretical Model of behaviour change (Prochaska & DiClemente) seem to be reactive to public health measures and seem to be promising indicators for the kind of population-based interventions needed.

Methods

A random sample of 4,075 18 to 64 year olds with a response rate of 70.2%, representative for a region in northern Germany, was investigated. Computer-aided personal interviews were done in the households of the respondents with the Composite International Diagnostic Interview developed by WHO. Stages of change in smoking and drinking behaviour were defined according to the Transtheoretical Model.

Results

Of the smokers who at least once had tried to give up smoking 76.4% did not want to change their smoking (pre-contemplation stage). Only 19.0% of current and 8.5% of former smokers said that they ever had used any kind of help to give up smoking. Of those detected as currently alcohol dependent 84.0% were not ready to change, and 70.9% never had any contact with specialized help for alcohol problems.

Conclusions

The data suggest that in Germany, a country with high rates of smoking and alcohol consumption and only few public health activities, the majority of the adults do not seem to be prepared to change these health-damaging behaviours, and rates of utilization of the specialized care are low. Given these circumstances, intensive public health measures, which are focussed at early stages of change, should be provided.

2002

2002 conference: Oral and Poster Dresden 2002

How often are patients receiving advice about alcohol and other lifestyle habits in primary care in Sweden?

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Background

Advice given by the general practitioner (GP) concerning lifestyle habits may be a cost-effective means to health promotion in primary care. However, it is unclear to what degree this has been put into routine practice.

Aim

The aim was to explore to what extent patients in primary care are expecting and receiving advice concerning alcohol, tobacco, exercise and diet, with special emphasis on sociodemographic factors and consequences for patient satisfaction.

Method

A postal questionnaire was sent to a representative sample (n=9750) of those patients who called on GPs during six weeks at 39 out of the 41 health centres in a county in Sweden. The response rate was 69% (n=6734). The questionnaire included sex, age, type of call, health status, satisfaction with the call and whether the patient expected and received advice concerning alcohol, tobacco, exercise and diet.

Results

There was an almost 4-fold variation between the most frequently (exercise 16,3%) and the least frequently (alcohol 4,7%) reported type. The frequency increased with age except for tobacco and alcohol. In all areas, the men received significantly more often advice than the women (OR=1,5–2,3). The patients received advice more often than they expected in all areas except alcohol. It was concerning alcohol that the patients reported the highest rate of unfulfilled advice expectation (38%) as well as the lowest rate of unexpected advice (1,7%). The first-mentioned group reported significantly lower satisfaction with the GP visit than those who expected and received alcohol advice.

Conclusions

The lifestyle intervention potentialities in primary care seem to be far from optimally developed. That is especially true of alcohol habits. It is notable that the extent to which women receive advice is less pronounced than for men, especially in lifestyle areas in which their habits are not generally supposed to be better than those of men.

Interrelationships between smoking and deviant alcohol consumption in medical care patients and the population

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Background

There is only little evidence about the particular factors of interrelations between smoking and alcohol risk drinking from studies using population and clinical samples although high synergy effects of both health risk behaviors are known for some diseases.

Aim

To analyze smoker rates among different groups of deviant alcohol drinking (DAD) in medical care patients and a population sample.

Methods

Three samples were drawn in northern Germany: (1) 1167 patients consecutively admitted to a municipal general hospital, (2) 696 patients who consecutively showed up in 12 general practices

which had been drawn at random, (3) randomized population sample of 4075 adults. In sum, there were 5938 individuals aged 18 to 64 years. Internationally standardized instruments (SCAN, CIDI) were used for the collection of the data about smoking behavior and DAD which includes risk drinking as well as alcohol abuse or dependence according to DSM, the American classification system for psychiatric diseases.

Results

The rate of DAD is highest among the daily cigarette smoking hospital patients (47.1 %), medium among the general practice patients (32.1 %) and lowest in the population (18.4 %). For the currently smoking general hospital patients the odds of being actually alcohol dependent is 11.7 compared to the population. In all three samples taken together there is a linear progression in the odds for having a DAD with the number of cigarettes smoked per day.

Conclusions

The data reveals that there are subgroups of comorbid tobacco and alcohol users with an ordinarily high risk of alcohol- as well as tobacco-attributable morbidity and mortality. The results show special needs of prevention which are not yet sufficiently met.

The influence of norms in small groups on heavy use of alcohol among Danes

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Background

In Denmark, total alcohol consumption per person 14 years of age and older has changed little during the last decades. Danes have since 1980 consumed 12 litres of pure alcohol per year on average. Compared to other countries, alcohol consumption among Danes – and especially among young Danes – is very high.

Aim

The aim of this study is to clarify the potential for alcohol prevention programmes in small social groups among youth.

Methods

Data derive from The Danish Health and Morbidity Interview survey 2000 among 16,690 adults and from a self-administered questionnaire survey from 1994–95 on health behaviour among 6,444 students from 331 classes in upper secondary schools. Heavy alcohol consumption is defined as persons who have exceeded the weekly limit of alcohol consumption recommended by the Danish National board of Health (14 standard drinks for women and 21 for men).

Results

From 1994 to 2000, the overall percentage of adult Danes who have exceeded the weekly limit has increased from 10.7% to 11.7%. Results from analyses among students show that there is a big difference in the proportion of heavy alcohol drinkers between individual classes. There are classes where non of the pupils are heavy drinkers, while in other classes approximately 60% of the pupils are heavy drinkers. This variation is not random ($p < 0,001$ multi-level analysis) and cannot be explained by individual factors or by differences in the composition of socio-demographic characteristics among the pupils in the individual classes (sex, age, socio-economic composition).

Conclusions

The analysis shows that life style is contagious between members in small groups in the same way that an infection disease is. The results also support the hypothesis that behavioural change works through group processes and norm development on a micro level. When planning alcohol prevention programmes it is therefore essential to include health educational practice which takes the significant influence of peers and behavioural norms in small groups into consideration.

Influence of public alcohol and tobacco use on General Practitioners' advice: an international comparative study

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Background

Efficacy of advice for substance use is proven in general practice. Studies show high variability of performance. Especially intercountry variability has rarely been taken into account.

Aim

To study the influence of public tobacco and alcohol use and health service characteristics on the general practitioners' involvement in counselling for tobacco and alcohol use.

Methods

A multilevel analysis was performed distinguishing general practice level (workload, assistance, gender and age) and country level (health service characteristics and substance use). Data for practice level were used from 3 survey studies: the task profile study (32 European countries; 1992); a collaborative action in 5 European countries (1996) and a WHO trial (14 countries world wide; 1997). Health services' characteristics were obtained from literature. From WHO and OECD databases consumption (mean litres of pure alcohol / person / year used; mean grams of tobacco consumed / person / year) and percent change were derived for 4-year periods. Dependent variable was self-estimated extent of asking about use.

Results

Variations in asking attributed to country level ranged up to 13% for tobacco and to 15% for alcohol. Only small effects (estimated coefficients 0,001–0,005) were encountered for practice level. Use and changes in use on tobacco consumption influenced practitioner's involvement significantly in one dataset, while use and change in alcohol use influenced asking on alcohol consumption in all surveys (–0,01 to –0,05). Moreover Scandinavian and English background influence practitioners positively and Eastern European country situation negatively.

Conclusions

Practice variables (workload, gender, age) only influence prevention very little when country differences are accounted for. Use and changes in alcohol use influence involvement of general practitioners in health promotion more.

2002 [Parallel Session 18 – Alcohol and Health](#)

Family roles and drinking behaviour among employed women and men

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Background

Multiple roles have in previous studies been associated with good health. However, only few studies have explored the association between multiple roles and drinking behaviour. Some studies have found that multiple roles are associated with smaller overall consumption of alcohol and with less heavy drinking. One potential explanation is that multiple roles are accompanied by a decrease in the physiological need of alcohol and by an increase in social monitoring and social control of drinking behaviour.

Aim

The aim of this study is to describe the association between family multiple roles and alcohol consumption and heavy drinking among employed women and men. An additional aim is to find out whether the family multiple roles are associated with drinking behaviour in a similar way among women and men.

Methods

The data derive from the Helsinki Health Study baseline surveys in 2000 and 2001. Employees from the City of Helsinki reaching 40, 45, 50, 55 and 60 years during the study year received a mailed questionnaire. The data include 1252 men and 4991 women (response rate 68%). Outcomes were the amount of consumed alcohol doses (= 12 g alcohol) per week and CAGE, an indicator of problem drinking. Statistical methods were analysis of variance and logistic regression models. A family variable was constructed and included the following categories; couple with children, couple without

children, divorced or widow/widower without children, lone parent, and never married without children. The analyses were adjusted for age and educational level.

Results

Mean consumption of alcohol doses per week was among men 9 doses and among women 4 doses. The lowest consumption among men was found among those living as couple with children and among alone fathers. Never married and men living as a couple with no children consumed about 2 doses more per week than the average and divorced men consumed about 4 doses more per week. A similar association was found for family roles and problems with alcohol as indicated by CAGE. The lowest consumption among women was found among those never married, women living as a couple with children and alone mothers. Divorced women consumed a half dose more per week than the average and women living as a couple without children had the highest consumption. Married women with children and never married women without children had less problem drinking as indicated by CAGE. Divorced women without children and women living as a couple without children had most problem drinking.

Conclusions

The presence of children seemed to decrease the alcohol consumption among both men and women. Living with a partner seemed to decrease the consumption among men but increase the consumption among women.

Psychosocial predictors of excess drinking from age 15 to 19: a Danish longitudinal study

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Background

Several studies have shown that boys drink more than girls, but this gender difference is poorly understood in the epidemiological alcohol research. Dispositional, social, and situational factors and precious alcohol drinking are found to be predictors of excess alcohol use among young people. However, the relative importance of these factors is underreported in multivariate analyses in longitudinal studies.

Aim

The aim of this paper is to analyse the relative importance of a range of psychosocial factors and alcohol consumption at age 15 as predictors of excess alcohol consumption among 19-year-old adolescents.

Methods

The study population was a random sample of 15-year-olds at baseline (n=843) in 1990 with a first follow-up (n=729) four years later. Excess alcohol intake was assessed by consumption last weekend, dichotomised at the thresholds recommended by the Danish National Board of Health for adults; 14 drinks a week for females and 21 for males.

Results

Predictors at age 15 for drinking more than the recommended limits at age 19 among girls were: weak parental relations, OR=2.19 (1.07–4.47), good self-assessed school performance, OR=3.92 (0.90–17.01), having a positive self-image, OR=2.06 (1.04–4.05), and regarding oneself as being grown-up, OR=2.05 (1.06–3.97). Among boys significant results were found for: strong parental relations, OR=2.27 (0.97–5.26), having a positive self-image, OR=2.37 (1.23–4.55), having a negative self-image, OR=2.69 (1.37–5.31), and experienced drunkenness several times at age 15, OR=2.92 (1.54–5.54). Alcohol consumption at age 19 were predicted by different variables for boys and girls, and some variables also showed associations in opposite directions.

Conclusions

Excess alcohol consumption in adolescence is a multifactorial phenomenon with very different predictors for boys and girls. Future analyses and interventions should be targeted separately for males and females.

Horizontal gender segregation in working life, alcohol consumption and mental health – what are the associations?

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Background

Earlier studies have shown higher alcohol consumption and poorer mental health among women working in male dominated occupations. One reason suggested was that women imitate the drinking habits of male co-workers.

Aim

The aim of this study was to analyse the association between gender segregation in occupations and high episodic drinking (HED), high alcohol consumption (HAC), alcohol dependence and/or abuse (ADA), drinking with work-mates, and psychiatric disorders.

Method

This study is part of the longitudinal, multipurpose study 'Women and Alcohol in Göteborg' (WAG), based on a stratified general population sample and a clinical sample. Structured baseline interviews were conducted with 406 women 1990; 615 women 1995; and 231 women from the clinical sample 1991. Occupational belonging was assessed according to Nordic Occupational Classification and subdivided according to the proportion of women in the occupation. Diagnoses of ADA and other psychiatric diagnoses were made according to DSM-III-R.

Results

Women who worked in female dominated occupations more seldom took a drink together with work-mates. Higher risks for HED, HAC or ADA among women working in male dominated occupations were not found. On the contrary, we found higher risk for ADA among women working in female dominated occupations, although not statistically significant. Analyses about the relationship between gender segregation in occupation and psychiatric diagnoses are on going.

Conclusion

Women working in male dominated occupations were at no higher risk for drinking with work-mates, HED, HAC or ADA. Although women in female dominated occupations more seldom drank with work-mates they had a tendency for higher risks for ADA. The association found between female dominated occupations and ADA could be an effect of socioeconomic factors, rather than gender segregation, since these occupations to a high degree consist of low-salary occupations in the service- and health sectors.

Use of the CAGE scale to screen for alcohol dependence, health interview survey, Belgium 2001

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Aim

The CAGE scale has been used as a screening instrument for problem drinkers in a population survey. The aim of this study was to analyse the occurrence of alcohol dependence in relation to indicators reflecting physical, mental and social health.

Methods

Data are derived from the Belgian Health Interview Survey 2001 and concerned individuals aged 15 or older (N=8,569). The CAGE scale is 4-item screening test designed to identify alcohol dependence. Two or more 'yes' responses constitute a positive screening test. The prevalence of psychological ill-being was measured using the GHQ12 (with 2+ as cut off); physical health was evaluated by a poor or a high perceived health and social support by the MOS (19 items). Multivariate analyses have been performed using logistic regression models, adjusting for gender, age and educational level.

Results

Six percent of the population aged 15 years or older had a CAGE positive score (8.8% in men and 3.2% in women). The gender difference remained significant after adjustment for age and educational level. No significant association was found between alcohol dependence and poor social support

(Odds Ratio (OR) 1.3; 95% CI: 0.9–1.8). There was a significant association between alcohol dependence and psychological ill-being (OR: 2.5; 95% CI: 2.1–3.2) and a poor perceived health (OR 1.9; 95% CI: 1.5–2.5): psychological ill-being and a poor perceived health were related with a higher prevalence of alcohol dependence. This relation was more pronounced among men with a high educational level.

Conclusion

The use of the CAGE scale as a screening instrument for alcohol dependence in a population survey seems to be useful. These analyses show the link between alcohol dependence and health problems. However, the prevalence of alcohol dependence could be underestimated because this topic can be sensitive for some individuals.

Heavy and binge drinking and mortality in Russia

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Background

The mortality crisis in Russia during the 1990s attracted considerable attention. It has been proposed that the dramatic changes in mortality were related to alcohol, particularly to heavy or binge drinking. Unfortunately, data on individuals in Russia and other countries of the former Soviet Union are sparse. We have modified the indirect demographic methodology (often called ‘Brass techniques’) to establish convenience population cohort with individual-level data on determinants of mortality in countries where reliable data are not available.

Aim

The aim of this study was to investigate predictors of mortality in Russia.

Methods

A national sample of the Russian population was interviewed in a cross-sectional survey. The participants were asked about characteristics of their eldest siblings, including their vital status and the year of birth and death (if died). The association between personal characteristics and mortality risk was estimated for the 682 male and 698 female siblings (of whom 122 and 81, respectively, died) with valid data.

Results

In both genders, mortality was strongly associated with low education and smoking. After adjustment for education and smoking, mortality was elevated in men and women who drank spirits at least once a month, and in men who were binge drinking (more than half a bottle of vodka per drinking session) at least once a week (adjusted RR 2.45, 95% CI: 1.22–4.94) and in women who were bingeing at least once month (RR 3.94, 95% CI: 1.07–14.5), compared to non-bingeing subjects. Similar associations with drinking were seen for cardiovascular deaths in men. Childhood social circumstances were not associated with mortality.

Conclusions

Drinking spirits, particularly in binges, and low education and smoking were associated with increased mortality risk in Russia. This method appears to be a time- and cost-effective alternative for the study of mortality determinants in literate and numerate populations.

2003

2003 conference: Workshop 25: The HAPIEE Study: a multi-centre study of determinants of cardiovascular diseases in Russia, Poland and the Czech Republic

The HAPIEE Study: a multi-centre study of determinants of cardiovascular diseases in Russia, Poland and the Czech Republic

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Background

High mortality in Russia and its fluctuations has been linked with alcohol but this hypothesis is inconsistent with low alcohol intake found in individual-based studies. The volume of drinking only partly explains differences in alcohol-related problems between populations; attention is turning to drinking patterns as potential explanation.

Aim

To examine, on empirical data, whether drinking patterns contribute to high rates of alcohol related problems in Russia.

Methods

We conducted a cross-sectional survey in Novosibirsk (Russia), Krakow (Poland) and Karvina-Havirov (Czech Republic); 1118 men and 1125 women randomly selected from population registers completed a questionnaire on problem drinking, negative social consequences of drinking, alcohol consumption and drinking patterns.

Results

Rates of problem drinking and its negative consequences were much higher in Russian men (35% and 18%, respectively) than in Czechs (19% and 10%) or Poles (14% and 8%). This contrasts with substantially lower mean annual intake of alcohol by Russian men (4.6 L) compared to Czechs (8.5 L), and with low mean drinking frequency in Russia (67 drinking sessions/year, compared to 179 among Czech men). However, Russians consumed the highest dose of alcohol/drinking session (means 71 g Russians, 46 g Czechs and 45 g Poles), and had the highest prevalence of binge drinking. In women, the levels of alcohol related problems and of drinking were low in all countries. Indicators of binge drinking explained a substantial part of differences in rates of alcohol-related problems drinking between the three countries.

Conclusions

These empirical data confirm high levels of alcohol-related problems in Russia despite low volume of drinking. Binge drinking patterns partly explains this paradoxical finding. Overall alcohol consumption does not suffice as explanation of alcohol-related problems at the population level.

2004

2004 conference: Poster Lifestyle and health

Counselling of hospital patients with an over consumption of alcohol

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Background

Studies have shown prevalence rates of 20–40% of excessive alcohol consumption in hospital settings, and the increasing consumption of alcohol indicates the relevance of alcohol prevention in a hospital framework.

Aim

The purpose of this study is to study the self-reported qualifications and alcohol-related clinical practice among hospital nurses as well as associations between practice and 1) self-rated qualifications for counselling on alcohol, and 2) attitudes toward care for patients with an over consumption of alcohol.

Methods

A survey based on self-administered questionnaires was undertaken in 2002 at a Danish University Hospital in the Copenhagen area. Descriptive statistics, chi-square test and multiple logistic regression analyses were used. Main outcome measures were self-reported alcohol-related counselling, self-rated qualifications for counselling patients with an over consumption of alcohol, attitudes toward prioritisation of counselling on alcohol and other lifestyle issues, and attitudes toward caring for patients with an over consumption of alcohol.

Results

Significantly more psychiatric nurses have good self-rated qualifications for counselling patients, compared to medical and surgical nurses (36% vs. 22 and 9% respectively, $p \sim 0.0001$). Almost half of the surgical nurses (46%, $n=134$) and a third of the medical nurses (29%, $n=39$) do not feel qualified for counselling patients on reduction of use of alcohol. Self-rated qualifications for counselling, ward, and attitudes toward care significantly influence the self-reported clinical care of patients with an over consumption of alcohol. Perceived self-efficacy is positively associated with frequent counselling and positive attitudes toward prevention in hospital patients. Counselling on alcohol is less prioritised in medical and surgical wards compared to psychiatric wards.

Conclusions

To promote nurse involvement in alcohol prevention it is necessary to increase the capacity for intervention via skill-based training on assessment of alcohol problems and intervention techniques. All nurses, but especially surgical nurses, need update on alcohol-related counselling.

2004 Poster Cardiovascular Health

Alcohol consumption and risk of cardiovascular disease among middle-aged urban population in Lithuania

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Background

Alcohol consumption is one of possible causal factors in the mortality among middle-aged population.

Aim

To evaluate the time trends in alcohol consumption habits and prognostic impact of alcohol consumption on cardiovascular morbidity and mortality among Kaunas (Lithuania) population aged 35–64.

Methods

The WHO MONICA study was carried out in Kaunas (Lithuania) in 1983–2002 among four random samples of urban population aged 35–64 (overall 3292 men and 3548 women – response rate 65.1%). Alcohol consumption habits were assessed by standard epidemiological questionnaire. The age-

standardized rates were calculated by the direct method and using Europe population as a standard. The estimates of relative risk and 95% confidence intervals were based on the multivariate Cox proportional hazards model.

Results

Over the 20-year period, the prevalence of regular alcohol consumption significantly increased among both men and women. At the same time in the study population mean level of consumed alcohol and the proportion of drinkers consuming alcohol several times a week or every day increased. Relative risk (RR) of Total mortality has been directly related to the amount of consumed alcohol. The risk of total mortality, cardiovascular mortality, and acute myocardial infarction morbidity among never-drinkers (RR=1.35, 1.56, and 2.15, respectively), and the risk of Total mortality, mortality from coronary heart disease and risk of 'hard' coronary heart disease among ex-drinkers (RR=1.76, 1.78, and 1.71, respectively) was determined significantly higher as compared with reference group: drinkers once a month (RR=1.0).

Conclusions

The determined negative trends in the alcohol consumption habits indicate the need of further implementation of primary prevention measures and health education in the population.

[2004 conference: A systematic review of studies on sickness absence and disability pension: Workshop of the EUPHA Section on Social Security and Health](#)

Towards evidence based knowledge on sickness absence, psychiatric disorders and alcohol problems – a systematic literature review

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Background and aim

The aim of this presentation is to report the results of a review of evidence based knowledge on sickness absence, psychiatric disorders and alcohol problems.

Methods

A systematic literature review was performed on studies published in international, peer reviewed journals. Literature search was done in Medline, PsycINFO and SSCI. The relevance and quality of the studies was assessed by two independent researchers. An evaluation of evidence was made according to international standards. Quality was assessed regarding study design, drop out, bias, analysis and precision. Four evidence levels were established: strong, moderate, limited, and without evidence. Studies on absenteeism where sickness absence could not be identified as a separate unit were excluded.

Results

Abstracts on sickness absence, psychiatric disorders and alcohol problems were identified (n=580). Of these 97 studies were assessed as relevant, only 28 were assessed as being of sufficient scientific quality. No evidence was found for increased sickness absence in general among individuals with psychiatric disorder due to contradictory findings in different studies. Sickness absence with a psychiatric diagnosis on the certification was more common among women. No difference was found for sick-leave days. Studies covered work related factors, socioeconomic factors outside work and psychosocial factors in childhood. No evidence was found due to few studies on each factor. Studies on alcohol consumption were common but only nine had sufficient quality. Four studies showed an association between alcohol diagnoses/problems and increased risk for sickness absence irrespective of certification diagnoses. Due to few studies and limited quality no evidence was reached. No association was found on high alcohol consumption and increased risk for sickness absence.

Conclusion

Selection bias, no or limited reports on drop out, and ill defined sickness absence measures were common methodological limitations. A closer co-operation between sickness absence, psychiatric and alcohol researchers could enhance quality in studies within this area.

Alcohol consumption among Lithuanian schoolchildren

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Background

Alcohol consumption is a major health problem among adult, as well as among children and adolescent populations in Lithuania. Therefore, the analysis of it is essential in developing health promotion and health education programs.

Aim

To estimate prevalence and trends of alcohol consumption among Lithuanian schoolchildren in 1994–2002.

Methods

The analysis was performed using data from the surveys conducted in 1994, 1998 and 2002 according to the methods of World Health Organization Cross-National Study on Health Behaviour in School-Aged Children (HBSC). Using stratified random sampling the representative samples of schoolchildren aged 11, 13 and 15 from the 5 biggest cities and 15 districts and municipalities in Lithuania were drawn from the national list of schools and surveyed.

Results

The analysis demonstrated that percentage of schoolchildren, who reported that they have been drunk at least once in their life notably increased since 1994 till 2002. In 1994 33% boys and 21% girls, and in 1998 39% boys and 27% girls were drunk at least once. According to 2002 survey, 51% of 11–15-years-old boys and 40% of girls reported that they have been drunk. Frequency of regular alcohol consumption among schoolchildren was also increasing during the study period. 12.5% of boys and 6.5% of girls ($p < 0,001$) consumed alcohol once a week or more frequently in 2002. Regular alcohol consumption increased with an increase of age: 2.6% of 11 year olds, 7.0% of 13 year olds, and 18.8% of 15 year olds consumed alcohol regularly in 2002.

Conclusions

Alcohol consumption is increasing among Lithuanian schoolchildren. A combination of measures should be employed in efforts to deal with this problem, including educational strategies, changes to the social environment, and legislation.

2005

Demographic and behavioural factors in relation to CHD, cancer, and other causes mortality, in an 18-year follow-up of a cohort of men and women

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Background

Comparisons between the strengths of relationships between behavioural and social risk factors and alternative causes of deaths are best made within a single study. This cohort includes men and women, and separately relates risk factors to mortality from CHD, cancer, and all other causes.

Methods

A random sample of the population of the United Kingdom, 4385 men and women aged 40–75, interviewed in 1984–1985 for the Health and Lifestyle Survey, was monitored until 2003. Analysis by age-adjusted multinomial logistic regression is reported of the 1254 deaths among participants free of CHD and cancer at interview. Results are presented for demographic and behavioural risk factors, including education, social class, area deprivation, smoking, dietary fat, exercise, obesity, alcohol consumption, and hypertension.

Results

The distribution of mortality is compared over time and owing to the different causes. Among demographic factors, level of education was relevant to men for CHD and cancer ($P = 0.003$, $P = 0.001$) whereas social class was relevant to women ($P = 0.008$, $P = 0.001$). Area deprivation, rather than social class or education, related to other causes of death in men and women. Strong relationships ($P < 0.001$; OR 2.0–3.0) between smoking and death were found for all three causes. Saturated fat intake related to cancer death in women ($P = 0.037$). Hypertension was a significant factor for CHD ($P = 0.001$) and other causes ($P = 0.039$) in men. Usual alcohol consumption related to CHD death in men ($P = 0.011$) and women (0.042).

Conclusions

These results clarify the distribution of mortality and the relative sizes of relationships of risk factors to CHD, cancer, and other mortal causes in men and women. The generality of the harmful effect of smoking, the peculiar differences in the forms in which deprivation bears on different diseases for men and women and

the very specific role of dietary fat, all justify further research and policy development.

2005 - Denmark

Adolescent alcohol use and peer relations: findings from an ethnographic study of 13–16-year-olds in a Danish rural community

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Background

Compared with adolescents in most other European countries, Danish adolescents experience a large number of problems related to alcohol use. Much research has focused on the negative influences of peer groups (e.g. peer pressure), but in this presentation we will explore an aspect of peer group influence that so far has received little attention in the literature on adolescent alcohol use, that is, peer protection. Hence, we aim at identifying strategies that are employed by adolescent peer groups as a means of avoiding harmful consequences of alcohol use.

Methods

In 2004 two 2-month periods of ethnographic fieldwork were conducted in a Danish rural community of ~2000 inhabitants. 93 primary school students in the 13–16 age group participated in the study. A total of 38 semi-structured group interviews were conducted and participant observation was carried out in the local school and at private and public parties. The findings reported in this presentation have been checked for consistency with those of a parallel fieldwork conducted in a Danish suburban community.

Results

The adolescents utilized the following strategies of peer protection:

- (i) Drinking in the company of well-known and trusted peers.
- (ii) Agreeing on certain rules for specific drinking occasions.
- (iii) Monitoring one another (especially novices) throughout the drinking occasion.
- (iv) Contacting adults in cases of excessive drunkenness.
- (v) Looking out for perceived troublemakers.

Peer protection was a widespread practice among the adolescents. However, it did not preclude occurrences of peer pressure.

Conclusions

Peer protection may help prevent problems related to adolescent alcohol use. This has implications for health promoting interventions, which could benefit from nurturing the resources of adolescent peer groups. Further research is needed in order to explore the ambiguous relationship between peer pressure and peer protection.

2005 Slovakia

Are changes in health-related behaviours in adolescents related to gender and socio-economic status? A longitudinal study

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Background

Tobacco smoking, extensive alcohol consumption and lack of physical exercise are some of the key aspects of lifestyle influencing the risk of major diseases of affluent societies. These health-related behaviours (HRBs) are mostly established during late childhood and adolescence. Gender differences in these HRB have been well described. Lower socio-economic status (SES) is generally associated with higher rates of smoking and alcohol consumption and lower level of physical activity. The aim of this was to explore whether changes in HRB in a cohort of young adults between their 15th and 19th years of life, are related to gender and socio-economic status.

Methods

The sample consisted of 2616 (52.4% males) first-grade students of 31 secondary schools located in Kosice, Slovakia. The participants' mean age at baseline was 14.9 years compared with 18.8 at the time of repeated measurement in 2002 (response rate 45.5%). Six indicators of the adolescents' SES were used: current educational level and occupational status of the adolescents, educational level, and occupational status of father and mother. Four HRB areas were analysed: smoking, alcohol use, soft drug use, and lack of physical exercise. For analysis, logistic regression models were used.

Results

Significant gender differences in changes in alcohol consumption, experience with soft drugs, and insufficient physical activity were found. No gender differences were found in changes in smoking behaviour between the two measurements. No significant SES gradients in amount of change in all four examined HRB indicators were found among males. Females with higher SES reported greater increase in alcohol consumption and soft drug use compared to females with lower SES. Lower SES in females was related to higher levels of insufficient physical activity.

Conclusions

Changes in HRB patterns in the period between late adolescence and early adulthood are related to gender and SES.

Adolescent alcohol use and peer relations: results from the baseline of a national cohort study among Danish Grade 7 students

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Background

Danish adolescents have a higher alcohol intake than most other European youths. This may reflect true differences in drinking behaviour, or differences in definitions of alcohol debut and being drunk. Further, little is known about the influence of peer relations and social network on drinking debut in this age group.

Methods

All Grade 7 students in Danish schools were invited to participate in an Internet based questionnaire survey once a year for 3 years. Data are registered by personal identification numbers, which enable tracking their answers over the course of the study and through further survey and register based follow-up studies. This presentation includes data collected in the fall of 2004 among 4819 Grade 7 students. The cohort study has since been expanded and 20000 answers are expected in future surveys and follow-ups.

Results

Among the 4819 respondents of the 2004 survey, 13.1% (16.0% boys and 10.4% girls) report that they have on at least one occasion felt an effect from drinking alcohol. Among girls who did not get on well with their classmates, 19.4% had tried drinking alcohol to the extent that they felt an effect, whereas this was the case for 7.3% of girls who got on well with their classmates ($P < 0.000$). The same association was seen among the boys (21.2 and 13.0%) ($P = 0.017$). Among girls and boys who had experienced problems with their friends during the last year, 16.9 and 21.5%, respectively, had felt an effect from alcohol whereas this was the case for 4.5% of girls and 11.3% of boys who had not experienced problems with their friends ($P < 0.000$ for both genders).

Conclusions

This large cross-sectional study suggests that there is a strong association between peer relations and adolescent alcohol experiences.

Drinking habits and knowledge about drinking in Japan

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Background

It is an important challenge to educate people on healthy drinking habits in order to prevent lifestyle related diseases in Japan. This study examined the drinking habits and knowledge about drinking among Japanese physicians.

Methods

4000 Japanese physicians aged 20 years and over were asked to complete a self-administered questionnaire survey in the autumn of 2003. Drinking habits were represented in the questionnaire by the frequency of alcohol consumption and categorized into 6 classes: <1 day/month, 1–3 days/month, 1–2 days/week, 3 days/week, 4–5 days/week, and every day. People who reported alcohol consumption at least once per week were asked further details on the usual amount and type of alcohol consumed. The amount of all drinks was calculated in Gou units (1 Gou = 180 ml) of Japanese wine, which is approximately equivalent to: 500 ml of beer, 90 ml of Shochu, 180 ml of wine, and 60 ml of whisky. Knowledge of healthy drinking habits was tested on the understanding that 1 Gou of Japanese wine per day is a healthy limit, as recommended by the 21st Health Plan of Japan.

Results

A total of 2649 physicians provided valid responses and were analysed in our study (45.9% male and 54.1% female). The percentage of males considered to have a drinking habit was 78.4%, in particular 56% of 50–70-year-olds were drinking almost everyday. In comparison only 39% of all females consumed alcohol, the majority of who (55%) consumed <1 Gou/day and 36.7% consumed between 1 and 2 Gou/day. Knowledge of healthy drinking habits was greater in men than in women (56.4% versus 48.6%) and significantly greater for the drinking group compared to the non-drinking group, even after adjusting for sex (61.3% versus 40.4%, $P < 0.001$).

Conclusions

This study found a greater knowledge about drinking among drinkers in the general Japanese population compared to the non-drinker.

Health behaviour inequalities in the Maltese population based on findings from a national health interview survey (2002)

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Background

This study sought to verify if health behaviour patterns in Malta exhibit social class inequalities with a view to better targeting of future health promotion strategies. A secondary aim was to explore whether health behaviour patterns in Malta are similar to those in Southern European countries.

Methods

A national health interview survey was conducted using face to face interviews in private homes with persons aged over 16 years. Dependent variables were transformed into binary outcome measures and logistic regression models were constructed. Odds ratios adjusted for age, marital, and employment status were compiled for men and women and the effects of education and occupation on health behaviour were analysed.

Results

A total of 4268 complete responses were collected (response rate of 77.5%). Men with least education were more likely to be smokers (OR = 3.46; 95% CI 2.24–5.36 $P < 0.001$). They were also less likely to consume alcohol regularly (OR = 0.41; 95% CI 0.21–0.58; $P < 0.001$) and less likely to carry out leisure physical activity (OR = 0.38; 95% CI 0.23–0.60; $P < 0.001$). Women with least education were more likely to be smokers (OR = 1.98; 95% CI 1.15–3.41; $P < 0.01$) but less likely to consume alcohol regularly (OR = 0.42; 95% CI 0.29–0.63; $P < 0.001$) and far less likely to carry out leisure physical activity (OR = 0.18; 95% CI 0.10–0.32; $P < 0.001$). Whilst similar trends were observed using occupational class, educational status emerged as a more consistent and powerful predictor of health behaviour inequalities in the Maltese population. Patterns of health behaviour were found to be similar to a city in Spain.

Conclusions

This study confirmed the existence of differential distribution of unhealthy patterns of behaviour in the Maltese population. These patterns are the forerunners of health inequalities. Health inequalities have failed to feature on the Maltese health policy agenda to date. Future health policies and health promotion strategies should be targeted to meet the needs of the lower social classes.

Could the high level of cirrhosis in Central and Eastern Europe be due partly to the quality of alcohol consumed? An exploratory investigation

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Background

The burden of alcohol-related diseases differs widely among countries. Since the 1980s, a band of countries in Central and Eastern Europe have experienced a steep increase in deaths from chronic liver diseases and cirrhosis. A possible risk factor is the consumption of illegally produced home-made spirits in these countries containing varying amounts of aliphatic alcohols which may be hepatotoxic. However, little is known about the composition of such beverages. Therefore, the aim of our study was to compare the concentration of short-chain aliphatic alcohols in spirits from illegal and legal sources in Hungary.

Methods

Samples taken from commercial retailers ($n = 31$) and illegal sources ($n = 34$) were collected, and their aliphatic patterns and alcohol concentrations were determined by gas chromatographic/mass spectrometric analysis.

Results

The concentrations of methanol, isobutanol, 1-propanol, 1-butanol, 2-butanol, and isoamyl alcohol were significantly higher in home-made spirits than those of from commercial sources.

Conclusions

The results suggest that the consumption of home-made spirits is an additional risk factor for the development of alcohol-induced cirrhosis and may have contributed to a high level of liver cirrhosis mortality in Central and Eastern Europe. Restrictions on supply and sale of alcohol from illicit sources are urgently needed to reduce significantly the mortality from chronic liver disease.

Behavioural determinants of motorway accidents in Italy (2001–2005)

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Background

Traffic accidents have a relevant importance both in developed and developing countries. Most of them are related to the behaviour of the driver. The aim of this study is to describe the epidemiology of road accidents that occurred on motorways in Italy in the years 2001–2005.

Methods

Research has been performed using the police database for the period March 2001–April 2005. Linear regression models have been created in order to study the relationships between traffic accidents, mortality, injured people rates, fines for not using safety belts or helmets, and the use of alcohol and drug addiction on motorways.

Results

During the period considered (2001–2005), a significant decrease in motorway accident rates occurred and, as a direct consequence, a substantial decrease in mortality rates. In all regression models an inverse association exists between morbidity and mortality rates and the number of fines for incorrect behaviour on motorways, especially for not using safety belts and for the use of alcohol ($P < 0.001$).

Conclusions

The use of the police database is highly reliable since traffic on motorways is under the control of the police only. Our study shows that in the period considered, higher control activity on motorways is related to a decrease in accident, morbidity, and mortality rates.

Alcohol consumption in Croatian western region, findings from the Croatian adult health survey

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Background

Alcohol consumption in the adult population in Croatia has increased in general since the political change and war in the period 1991–1995. Systematic research of adult population—the burden of the problem associated with socio-demographic factors—had not been carried out before by the Croatian Adult Health Survey in 2003. This study is exploring alcohol consumption and their socio-demographic patterning in the adult population of the west region Croatian specific for its Mediterranean tradition.

Methods

Data were obtained from the Croatian Adult Health Survey 2003—a cross-sectional study with representative, stratified sample. In the west Croatian region, in total, 885 women (66.9%) and 438 (33.1%) men 18–91 years old were interviewed representing the population of 445 435 inhabitants. Data were pondered for gender.

Results

In the west Croatian region 153 587 (34.5%) inhabitants had not consumed alcoholic beverages in the past 1 year and 287 527 (64.5%) had. Alcohol consumption among women was more common forest, farm, and fish workers ($P \leq 0.001$, 95% CI = 4.35–4.38). Women do not involve in binge drinking (>6 drinks in a row) every day. The biggest frequency of binge drinking among women is less than once in a month. Age of female binge drinkers is 25, 43, 44, and 46 years old. Among men, respondents with position in occupation as a small manager and head clerk with subordinating, military and police personnel involve in binge drinking every day ($P \leq 0.001$, 95% CI = 2.71–2.74). These men were between 40 and 51 years old. Marital and working status, smoking status, education, occupation, and socioeconomic status were also observed to be associated with use of alcohol.

Conclusions

A wide range of socio-demographic characteristics influence drinking patterns in the specific population. These findings may be valuable for the choice of the health promotion projects and subpopulations that are more in danger.

UK

Is public health policy on alcohol evidence-based: an analysis of 14 developed countries

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Background

Concerns about the harms from the misuse of alcohol are increasing. We conducted a review of public health policy documents on alcohol from 14 developed countries and complemented this with a review of the scientific literature on interventions to tackle alcohol problems.

Methods

Alcohol policy documents were obtained by searching government websites and by writing to Ministries of Health. The research evidence on the effectiveness of interventions to prevent alcohol-related harm was obtained from recent reviews by six authoritative groups. Effective interventions identified from the scientific literature were matched to interventions described in policy documents.

Results

Public health policies propose interventions on fiscal, legislative, and drink driving policy; the promotion of alcohol and the drinking environment; education; and management of problem drinkers. Citation of the scientific evidence varies substantially in alcohol policy documents. Some countries provide a review of the scientific literature within the policy document, e.g. USA and New Zealand, others review the literature in companion documents, e.g. Australia and UK, while others do not provide reviews of the evidence in the documents. Most of the evidence cited is from primary studies and government reports. Few countries cite systematic reviews. The majority of the citations provide data on the prevalence of alcohol-related problems, determinants of the problem, and the nature of harms associated with alcohol misuse. Few references are given for proposed policy interventions. However, some policy interventions can be mapped onto the scientific evidence even when the research studies are not explicitly mentioned.

Conclusions

Most initiatives proposed in policy are based on evidence of need rather than on evidence of effectiveness. There is considerable scope for the increased use of evidence on proposed interventions.

Latvia

Traffic safety-related behaviour of adult population in Latvia

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Background

Road traffic injuries are a major public health problem around the world. The geographical analysis shows marked differences in mortality rate of traffic accidents in Latvia and old European Union countries. Death due to transport accidents is the main reason of death till the age of 45 and main reason of YPLL in

Latvia. Understanding of the traffic safety-related behaviour is a very important issue in accident prevention.

Methods

The FINBALT health monitoring is a collaborative system for monitoring health-related behaviour in Estonia, Finland, Latvia, and Lithuania. In Latvia, surveys were conducted during 1998, 2000, and 2002. The survey uses a mailed questionnaire. A total of 3000 adults aged 15–64 are randomly selected from the State population register. The survey instrument contains questions regarding attitudes to traffic safety. Data were analysed using χ^2 test and Spearman correlation (SPSS package ver.7.5).

Results

Despite existing low in Latvia average only 62% of men and 66% of women nearly always use a seat belt in front seat of the car. From 1998 till 2002 the usage of seat belts in front seat have been decreased for both sex, but statistically significant for males from 67.0 to 54.4% ($P < 0.001$). Positive correlation was found between use of seat belt in front seat and level of education and age. A seat belt in front seat use 57.5% of men and 55.9% of women with primary education and 66.7% men and 71.8% women with higher education ($P < 0.001$). Only 5% of respondents use seat belt when sitting in the back seat of a car, no significant differences were found among sex, age, and level of education. Large proportion of respondents knows person who had driven car when being drunken during last year. Drinking and driving has been increased significantly for both sex from year 1998–2002. Younger respondents reported more frequently about drunk drivers as older ($r = -0.26$; $P < 0.001$). For all that one-third of victims in traffic accidents are pedestrians only 3.2 % of adults in Latvia use reflectors when moving about in the dark. The situation has not changed during all three surveys.

Conclusions

The risk-taking culture is one of the common features of Latvian inhabitants. Males are more neglected and ignorant towards safety regulation as females. Men of older age group follow safety regulation more precisely as younger men. No differences were found among age groups of women. Level of education influenced attitudes towards safety. Identifying specific factors that motivate seat belt use is very important effort to improve safety. Safety measures as seat belt usage, antialcohol policy, and wear of reflector in dark have to be a priority in an action plan of traffic injury prevention in Latvia. A person's attitude is very important element. It should be taken into account in analyses of each accident.

2006

Alcohol and premature mortality in Russia: the Izhevsk Family case-control study of men aged 25–54 years, 2003–2005

UK

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Background

Analysis of cause-specific mortality data supplemented by cross-sectional survey data and indirect alcohol consumption estimates suggest that alcohol-consumption patterns partly explain fluctuations in the very high mortality among working-age men in Russia over the past two decades. We report results of the First large-scale individual-level study to examine the contribution of alcohol in this context.

Methods

Interviews were conducted with proxy informants living in the same household as 1750 (case) men who died in Izhevsk (a typical medium-sized Russian city in the Urals) and proxy informants of 1750 live (control) men aged 25–54 years.

Results

Drinking vodka and other beverage spirits several times a week or more led to a moderate increase in all-cause mortality. Mortality was most strongly associated with the consumption of surrogate alcohols (manufactured alcohol-containing nonbeverage substances such as eau de cologne, often over 90% ethanol by volume). Among controls, 7% had drunk surrogates in the past year. The mortality odds ratio (MOR) for ever versus never drinking surrogates was 6.12 (95% CI 4.88–7.66) adjusted for smoking, educational level, and alcoholic beverage consumption. Death from some specific causes showed considerably larger effects: the adjusted MOR for all causes classified as alcohol-related was 20.5 (95% CI 14.5–28.8). Surrogate drinking frequency showed a strong dose-response effect: adjusted all-cause MOR for drinking surrogates at least 5 days a week versus not drinking surrogates was 11.5 (95% CI 8.05–16.6). The population attributable risk percentage for all-cause mortality associated with surrogates was 34%. This is likely to underestimate the total population burden due to hazardous drinking.

Conclusions

Surrogate drinking is likely to be a marker of a history of heavy and hazardous drinking of any form of alcohol. However, our results suggest that the consumption of surrogate alcohols may be particularly dangerous and account for much of the male excess mortality at working ages in Russia.

Alcohol poisoning in Russia and the countries in the European part of the former Soviet Union, 1970–2002

Sweden

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Background

Alcohol may have played an important role in the large rise in mortality that occurred in many post-communist countries in the 1990s. The aim of this study was to determine whether its effects stretched

across a longer period by examining alcohol poisoning mortality in Russia and the countries in the European part of the former Soviet Union in 1970–2002.

Methods

Four time points were chosen spanning the late Soviet and post-Soviet periods. Data relating to alcohol poisoning deaths were collected at each point for the countries in the region—Belarus, Estonia, Latvia, Lithuania, Moldova, Russia, and Ukraine. Age-standardized death rates from alcohol poisonings were calculated for the total population and separately for men and women.

Results

Even in 1970 the alcohol poisoning rates in the countries in this region were exceptionally high in comparative terms. Rates continued to rise in the late Soviet period in all the countries, only falling in the period following Gorbachev's anti-alcohol campaign. Mortality from alcohol poisoning became much more common amongst women during this time. In post-Soviet society mortality from alcohol poisoning is occurring on an unprecedented scale although there is now some divergence in trends between the Slavic and Baltic countries, which had mirrored each other in the Soviet period. Reasons for this phenomenon include not only the level of alcohol consumption but also the drinking culture and patterns of drinking and, especially in the post-Soviet period, consumption of illicitly produced, and surrogate alcohols.

Conclusions

Acute alcohol poisoning has now reached unprecedented rates in parts of the ex-USSR with especially worrying trends among women. Effective action by the governments concerned is now essential.

Profiles of tobacco, alcohol, and cannabis use by university students; associations with indicators of health and academic performance

The Netherlands

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Background

Unhealthy behaviour, such as tobacco, alcohol, or cannabis use is known to be prevalent among university students. This is the first study to examine associations between unhealthy behaviour and perceived health status and academic performance in university students. The aim of this study was to investigate associations between tobacco, alcohol, and cannabis use and indicators of health and academic performance. In addition, we examined the different profiles for students with and without problem perception.

Methods

8258 university students were invited to complete a questionnaire on the Internet, consisting of questions about use of tobacco, alcohol, and cannabis; general health; fatigue; psychological health; support; and study delay. All analyses were corrected for demographic characteristics. Separate profiles were calculated for alcohol, tobacco, and cannabis use. Non-users were compared with users and users with problem perception were compared with users without problem perception.

Results

The response to the questionnaire was 44%. Tobacco smoking was associated with worse health status (OR $\frac{1}{4}$ 1.20, 95% CI $\frac{1}{4}$ 1.06–1.36) and more study delay (OR $\frac{1}{4}$ 1.34, 95% CI $\frac{1}{4}$ 1.13–1.57). Smoking with problem perception was associated with better health status (OR $\frac{1}{4}$ 2.07, 95% CI 1.28–3.33) than smoking without problem perception. Drinking alcohol was associated with not wishing social support (OR $\frac{1}{4}$ 0.57, 95% CI $\frac{1}{4}$ 0.45–0.73). Drinking with problem perception was associated with better health status (OR $\frac{1}{4}$ 1.85, 95% CI $\frac{1}{4}$ 1.33–2.62) and less study delay (OR $\frac{1}{4}$ 0.66, 95% CI $\frac{1}{4}$ 0.52–0.84) compared to drinking without problem perception. Using cannabis was associated with worse health status (OR $\frac{1}{4}$ 0.68, CI 0.51–0.91) and study delay (OR $\frac{1}{4}$ 1.31, CI $\frac{1}{4}$ 1.07–1.59). Using with problem perception was associated with not having any professional help (OR $\frac{1}{4}$ 7.15, CI $\frac{1}{4}$ 1.72–29.68) compared to users without problem perception.

Conclusions

Using tobacco, alcohol, and cannabis is associated with worse outcomes in university students. Problem perception regarding tobacco, alcohol, and cannabis use is associated with better outcomes than absence of problem perception.

[2006 conference: Parallel session A3: Inequalities 1](#)

The relationship of social capital to binge drinking in the Danish general population

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Background

Research on the effect of social capital on alcohol and substance misuse has noticeably increased in the past 5 years. However, the concept remains elusive. A four category typology of social capital recently proposed by Lindstroem was employed to investigate its relationship to binge drinking in the Danish general population. Denmark is a country with one of the highest rates of binge drinking in Europe and better modelling of this behaviour is helpful for targeting prevention and intervention efforts.

Methods

Data come from a national survey of the Danish general population conducted via telephone interviews with random digit dialling in 2003. The final sample size was 2030 cases representing a response rate of 50%. A separate question on binge drinking as well as several social variables were included in the questionnaire, enabling the construction of the four category social capital typology. Basic prevalences were calculated for the relevant variables and logistic regression was used to control for covariates in examining the relationship of social capital to binge drinking.

Results

Preliminary results indicate that 38% of men and 18% of women reported binge drinking at least once in the last 30 days. Age was negatively associated with binge drinking for both sexes. No other sociodemographic or social factors were significant in predicting men's binge drinking except for high social support. Among women being employed and high social support were positively related, and having children was negatively related to binge drinking. No categories of social capital predicted men's binge drinking, but that of high social participation and low trust (miniaturization of community) was negatively associated with women's binge drinking (OR = 0.6, CI 0.37–0.98).

Conclusions

Other than age (with a negative correlation) no sociodemographic or social variables predict Danish men's drinking. Social factors had more influence on women's binge drinking. Social capital showed little relationship to Danish binge drinking, but the results appear to be similar to previous research. These findings could be due to the widespread character of binge drinking in Denmark as well as the country's high level of social and economic egalitarianism. Although we believe our component measures of social capital to be robust, better specification of the concept's definition could improve measurement.

[2006 conference: Parallel session B1: determinants of morbidity](#)

Head and neck cancer risk in an Italian population is associated with tobacco, alcohol, and fruit and vegetables consumption but not with genetic polymorphisms of metabolic genes

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Objective

Squamous cell carcinoma of the head and neck (SCCHN) is affected by alcohol consumption, tobacco smoke, and low intake of fruit and vegetables. Since putative risk-modifiers for alcohol and tobacco consumption, metabolic genes polymorphisms were investigated in this study as susceptibility candidates for SCCHN in an Italian population.

Methods

A total of 210 cases and 245 age- and gender-matched controls were genotyped for CYP1A1, CYP2E1, mEH, GSTM1, GSTT1, and NAT2 polymorphisms. Haplotype analysis was performed for EPHX3 and EPHX 4, and CYP2E1 RsaI and CYP2E1 DraI polymorphisms. Data on lifestyle habits were collected. The relationship between SCCHN and putative risk factors was measured using the deconfounded odds ratios (ORs) and their 95% CI derived from logistic regression analysis. A measurement of the biological interaction among two putative risk factors was estimated by the attributable proportion (AP) due to interaction and its 95% CI.

Results

SCCHN risk was associated with >30 g/day alcohol consumption (OR ¼ 13.62, 95% CI 5.23–35.49), >25 pack-years of tobacco smoke (OR ¼ 8.15, 95% CI 4.55–14.58), low intake (<7 portions/week) of fruit and vegetables (OR ¼ 2.40, 95% CI 1.52–3.79). No differences were observed for the genotypes or haplotypes distributions among cases and controls, and no biological interaction emerged from gene–gene and gene–environment interaction analyses. An AP of 0.54 (95% CI 0.26–0.81) appeared for alcohol drinkers with a low intake of fruit and vegetables, and an AP of 0.52 (95% CI 0.28–0.77) appeared for smokers with low fruit and vegetables consumption.

Conclusions

Our study supports the protective role of fruit and vegetables intake in the prevention of SCCHN in an Italian population, particularly in smokers and alcohol drinkers. The lack of biological interaction between these polymorphisms and the environmental exposures evidences that chronic consumption of tobacco and alcohol probably overwhelms enzyme defences, irrespective of genotype.

2006 conference: Parallel session D6: utilization of medicines

Development of the Swiss National Alcohol Programme 2007–2011

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3Swiss Alcohol Board, Switzerland

Issue

Different projects exist to tackle alcohol problems but to date in Switzerland no nationwide alcohol strategy has been elaborated. Complicating, nine different offices are engaged in federal alcohol policy, with different interests, which range from sales promotion of Swiss wine, prevention programmes, alcohol taxation to regulation of advertising. Most of the competences lie within the cantons what results in 26 different alcohol prevention programmes. Because of the large numbers of actors, the Federal Council assigned the Swiss Federal Office of Public Health (SFOPH) with the formulation of a national alcohol strategy; it should evaluate and coordinate existing efforts, show possible call for action and identify adequate strategies.

Description

Final aim is a national alcohol programme agreed upon by all of the important stakeholders. Although consensus exist that problematic alcohol consumption is a public health issue, no consensus for how to tackle this problem or a definition for problematic use exist. The national programme is developed in five stages as follows: situation analysis, formulation of a vision and of objectives, strategy design, formulation of measures, and design of implementation. The project is directed by the SFOPH, the Swiss Federal Commission for Alcohol Issues and the Swiss Alcohol Board. Other stakeholders are invited to discuss the new strategy and to propose actions.

Lessons

Until now an agreement on common vision and on main objectives of a national alcohol programme was reached. Concerning strategy different views exist especially between the actors from the industry, which want to mainly promote protection of youth through primary prevention, and the public health specialists, which see a necessity to promote prevention towards a change of the context as well as prevention that aims towards a change of behaviour.

Conclusions

The collective development of a vision, its objectives, and the strategy is important for the political acceptance and impact of the alcohol programme. An extensive consensus can only be reached if the most important actors are participating actively in the formulation of the programme.

2006 conference: Parallel session D5: child and adolescent lifestyle programmes

An effective school-based prevention programme for tobacco, alcohol, and drugs: the EU-Dap cluster randomized trial

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Background

The EU-DAP study is a cluster RCT investigating the effectiveness of a school-based curriculum in preventing substance use among adolescents, conducted in seven European countries. The curriculum, based on a comprehensive social influence approach, was administered during 2004–2005 school year.

Methods

One hundred and forty-three schools (7th, 8th, and 9 grades) were randomized into three intervention (basic curriculum, basic plus peer involvement, and basic plus parent involvement) and one control group arm. All in all, 7079 students were enrolled. A pre-test survey was conducted before programme implementation, and the post-test survey 3 months after the end of it. Multilevel Analysis was used to investigate the effectiveness of the programme in preventing and reducing drug use between pre- and post-test. Prevalence of use at the country level and individual baseline use were included in the model to take into account of baseline differences among the centres and the arms.

Results

The programme appear to be effective in reducing the prevalence of use in the past 30 days for all the analysed variables. The estimated ORs of use is 0.88 (0.71–1.08) for sporadic smoking (at least once in the past 30 days), 0.72 (0.58–0.90) for sporadic drunkenness, 0.77 (0.60–1.00) for sporadic use of cannabis, 0.89 (0.69–1.15) for sporadic use of any drug. The OR is 0.86 (0.67–1.10) for regular smoking (>6 times), 0.70 (0.52–0.94) for daily smoking (>20 cigarettes), 0.69 (0.49–0.99) for regular drunkenness (>3 times), and 0.76 (0.53–1.09) for regular use of cannabis (>3 times).

Conclusions

The EU-Dap project is the first large European evaluation of a comprehensive drug prevention programme among adolescents. It reduces 25–30% of the daily use of cigarettes, sporadic and regular drunkenness, and sporadic use of cannabis.

Alcohol-related negative consequences among 15 to 16-year-old adolescents in Finland

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Background

The use of alcohol along with its harms affects adolescents widely. Adolescent drinking is known to relate to several health and social problems. Numerous studies have examined alcohol-related negative consequences within university and college populations. Less is known of self-reported consequences of drinking among under-aged youth. This study aims to increase knowledge of alcohol-related negative consequences that under-aged youth are experiencing in Finland.

Methods

A school-based survey as part of the European School Project on Alcohol and Other Drugs (ESPAD) was conducted in Finland in 2003. The sample consisted of 3321 Finnish adolescents, aged 15–16, and is nationally representative. Response rate was 92%. Self-reported negative consequences of drinking were analysed.

Results

Majority (88%) of the 15-to 16-year-old adolescent had drunk alcoholic beverages in their lifetime. Moreover, 58% had been drunk on at least three occasions. The most reported alcohol-related consequence in girls was damage to property and for boys getting into quarrel or argument. Self-reported consequences of drinking were strongly related to frequent alcohol use as well as to drunkenness. In total, 80% of adolescents had drunk alcohol within the past 12 months. Moreover, 64% reported having been drunk on at least one occasion and 10% reported recurring drunkenness. The most reported alcohol-related consequence in girls was damage to property and for boys getting into scuffle. Self-reported alcohol-related consequences were strongly related to recurring drunkenness. In addition, living in non-intact family, early onset of drinking, parents not knowing where child spends Friday night, parental reaction to child being drunk, siblings' drinking behaviour, spending money, self-rated satisfaction with oneself, and self-rated health were all significantly related to the negative consequences of drinking.

Conclusions

The findings suggest that many alcohol-related negative consequences are common in under-aged youths. In addition, frequent drunkenness was clearly associated with those self-reported consequences. Acknowledging these self-reported experiences is essential for the present and future of adolescent lives and for the public health in general.

2006 conference: posters adolescent health

Analysis of adolescents' strength of reasons for smoking and alcohol drinking

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Background

Higher smoking frequency increases the tendency to use smoking as a coping strategy. The aim of this study is to analyse the strength of reasons for smoking together with alcohol drinking.

Methods

The sample consisted of 883 students (373 boys and 510 girls, mean age 15.8 years), of whom 38.4% reported active smoking. Data on frequency of alcohol drinking (>1 glass of beer, wine) during the last 4 weeks (never, 1–2 times, ≥ 3 times); frequency of being drunk during the last 4 weeks (never, 1–2 times, ≥ 3 times); smoking motivation (Spielberger's motivation questionnaire) were collected in spring 2003. General Linear Model procedures and Scheffe post hoc tests were used to explore differences in strength of the explored reasons for active smoking by frequency of alcohol drinking, and frequency of being drunk.

Results

Adolescents with higher the frequency of alcohol drinking and the frequency of being drunk rated negative affect control (anger and anxiety) as the most important reason for active smoking. Significantly lower strength of the explored reasons for active smoking (anxiety, anger, restful/relaxing, intellectual stimulation/curiosity, automatic/habitual) were confirmed among adolescents-abstainers in comparison with adolescents who drank alcohol ≥ 3 times during the last 4 weeks, with the exception of social attractiveness/sensory stimulation as a smoking reason. Significant lower strength of the explored reasons for smoking was found among adolescents without events of being drunk in comparison with adolescents with the highest frequency of being drunk.

Conclusions

The higher the alcohol drinking frequency and the frequency of being drunk, the higher was the rating of the strength of the reasons for active smoking. Effective secondary prevention must therefore focus not only on smoking, but also on alcohol drinking.

Smoking, alcohol, and substance use among First year students in eight universities, Turkey, 2005

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Background

'Young people' who are between the ages of 10 and 24 years are in a transition period from childhood to adulthood. They are curious about trying new things and generally have shown risky behaviour. This period is also the beginning of some addictions like smoking, alcohol, and substance use. The objective of the study is to determine the distribution of the three risky behaviours and associated factors in the first year students of eight universities in Turkey.

Methods

The sample size of this cross-sectional study was 3080, which was selected proportional to size according to the faculties. The data was gathered via a structured, pre-tested, and self-administered questionnaire under observation. A total of 3101 students were reached at the end of the study. χ^2 -test was performed to determine the associated factors.

Results

Of the students, 50.8% was male; the mean age was 19.9 years. 22.2% were current smokers, 41.8% never; 22.5% were current users of alcohol, 52.4% never; and 95.8% were never substance users while 0.2% were current users. Sex, having smoker/ alcohol/substance-user friend(s), having a date, being an alcohol/substance user for smoking, being a smoker/substance user for alcohol-use and smoker/alcohol user for substance-use using were found to be the common related factors ($P \leq 0.000$) for the three risky behaviours. Besides, place of residence until the age of 14; educational-level, age and working status of parents, economical status of the family, sufficiency of the money spent for himself/herself, type of lycee' graduated, and family type were the other related factors.

Conclusions

It is easier not to begin than to quit the addicted substances. For this reason, beginning from the pre-school period, efforts in a way of brain-washing should be spent to protect the Young from these hazardous addictions.

Effects of demographic, social, and clinical factors on re-admission risk for alcoholic patients at the Ticino Cantonal Psychiatric Clinic

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Background

In the light of the importance of alcohol-related pathology and the risk of this developing into a chronic condition, this study investigates the influence of treatment programme and of various demographic, social, and clinical factors on subsequent re-admissions.

Methods

We carried out a five-year longitudinal study (1995–2000) involving all patients admitted to the Cantonal Psychiatric Clinic (CPC) in Mendrisio for alcoholism during 1995 (N ¼ 150, 100 males and 50 females).

Results

A multivariate analysis to evaluate the risk of re-admission during the follow-up period revealed higher rates of risk in the case of women (_9 times), former long-stay CPC patients (>3 times), those with limited family support (_2 times), and those with associated psychopathology (_2 times). Neither age nor educational background was significant.

Conclusions

Clinical seriousness of the psychological profile of the alcoholic patient was most likely the primary factor in determining the patient's chances of access to family support. Noteworthy is the markedly worse prognosis for women, attributable to the fact that women admitted to psychiatric care for alcoholism in all probability arouse more negative reactions among friends and family.

Focus on children in families with alcohol problems, Copenhagen, Denmark—preliminary experiences from a project

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Issue

At least 60000 children in Denmark have parents who had been hospitalized for alcohol related injuries. The children had excessive rates of death, hospitalizations for psychiatric diseases, child abuse, substance abuse, and social atrocities. Previously the children were often neglected in alcohol treatment institutions. The Alcohol Unit, Hvidovre Hospital, comprising five public out-patient clinics within the Copenhagen Hospital Corporation, entered a nationwide intervention project, co-ordinated by the Danish National Board of Health.

Aims

Focus on: the needs, and support of the children and families in the Alcohol Unit; cooperation among the social, the pedagogical sector, and the Alcohol Unit with regard to early intervention and referrals for treatment of parents with alcohol problems; qualification of employees of the social, health and pedagogical sector and the Alcohol Unit.

Description

From 2004–2008 three professionals in the Alcohol Unit work on the project including: Offering to professionals in the three sectors 3-day courses on: alcohol, children, interventions, and action guides. Give lessons at meetings or workshops. Offering of guidance by professionals and participation in talks with parents about alcohol problems and how they influence children. Offer advice on action guides and alcohol policies to institutions. Weekly five professionals provide family therapy to the children's groups in the Alcohol Unit.

Lessons

In the Alcohol Unit there is now much more focus on problems related to the family and children. All patients are asked about children at first consultancy. Courses and advices have been evaluated positively. Effects on children and family will be evaluated systematically. The project has been time-consuming for the Alcohol Unit and co-operating sectors, and was met with both support and scepticism, and the project has propagated slower than expected.

Conclusions

This form of organization may be useful also for children of parents with psychiatric and other severe diseases, and could probably also be used in other countries.

Substance use in university and college students in Antwerp, Belgium: a survey

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Background

Surveys on substance use in higher education students are rather exceptional, especially in Europe. In spring 2005, a survey was held among students in Antwerp, mainly to provide a reliable basis for alcohol and drug prevention strategies.

Methods

A structured questionnaire, including validated assessment instruments was spread through intranet with questions about personal characteristics, prevalence, and frequency of (problematic) use of different substances, motives, and consequences of substance use, general health, participation in leisure activities, knowledge of drug prevention networks, counselling and treatment, and drug issues in the study curriculum. 5530 students (25.9%) returned a correctly completed questionnaire. To get representative results, a random, stratified sample of n /4 1501, based on gender, age, and college was drawn out of all respondents.

Results

Between 10.3 and 11.1% (males) and between 1.8 and 6.2% (females) show health risks because of alcohol use. Over 70% of all students engaged in binge drinking in the past year; 17% even weekly. Binge drinking (at least six glasses on one occasion) shows a strong relationship with problematic alcohol and poly drug use. The lower the starting age, the higher is the risk of being a problem user. 47.4% Ever-used cannabis; 22.1% are last year users. Most of the cannabis users limit or stop their use during examination periods. Here again, the younger they start, the higher the risk of being a problem user. Amphetamines, ecstasy, and cocaine were used exceptionally (between 2.3 and 3.3% last year use).

Conclusions

Problematic substance use in Antwerp students is limited and particularly relate to alcohol. However, some small groups are to be followed more closely: daily cannabis users; frequent users of amphetamines and cocaine, daily users of sedatives or tranquillizers and poly drug users. Based on the survey results, a drug policy plan for the Antwerp students is being prepared.

2007

Alcohol use and illicit drug exposure over time among Swedish medical students and comparisons with other student communities

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Background

Alcohol and substance abuse in student populations are considered as high. Medical students' life-style may have an impact on their future professional behaviour as well as on their own health.

Methods

Self-report data on alcohol (AUDIT) and drug use in student samples were used. Firstly, evaluations of three cohorts of medical students of years 1, 3 and 6 at Karolinska Institutet (N= 342, response rates 73–90%). Secondly, a comparison of the sample above and Argentinean medical students (response rate 77%). Thirdly, a comparative study of 500 medical students and 500 business students in Stockholm, response rate 77%.

Results

Of Swedish medical students, 23% had hazardous use and 28% reported monthly binge-drinking. Harmful use and monthly binge-drinking was more common among men, who also had higher AUDIT means ($P < 0.01$) than women. Levels decreased in the first post graduate year. No associations were found between alcohol use and distress or personality. Non-use of alcohol was more common while monthly binge drinking was less among Argentinean students. Swedish medical students drank less alcohol than Swedish business students. 18% of the women and 47% of the men in the Swedish medical student sample had used illicit drugs ever, significantly more common than among the Argentinean students. Among interns, 5% reported use of illicit drugs during the preceding 12 months, without gender difference.

Conclusions

Swedish medical students drank more alcohol than Argentinean medical students, but less than Swedish business students. A slight decrease in alcohol intake occurred after graduation, which may indicate a 'normalisation' of consumption. No associations were found between alcohol habits and mental distress. Women had lower intake in all samples. A half part of Swedish male medical students had used illicit drugs, more common than in Argentinean medical students. Prevalence of recent or regular drug use was low.

Normative beliefs, misperceptions and heavy episodic alcohol consumption in a UK student sample

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Background

Recent research in American college system has demonstrated that student alcohol consumption is partly a result of overestimated perceptions of alcohol use in peers. Correcting these misperceptions and thus reducing alcohol consumption has become the basis for an effective alcohol intervention in the US college system, however such effects have not been studied in UK university students.

Method

An email containing a link to a survey website was distributed to current undergraduate students at a UK university. The survey contained items on individual's personal behaviour and their perception of the level of that behaviour in groups of increasing social distance.

Results

Completed 500 surveys were returned. It was established that there was a significant positive linear trend over the individual's own behaviour and the perceived behaviour in others at increasing social

distance for each measure: frequency of drinking ($F(1499) = 169.97, P < 0.001$), quantity per occasion ($F(1499) = 195.297, P < 0.001$) and frequency of drunkenness ($F(1499) = 93.747, P < 0.001$). Post hoc Tukey analysis ($P < 0.05$) confirmed the significant differences between the actual normative behaviour and perceived norm of other students for each of the three outcome measures. There were significant correlations between personal behaviour and the degree of misperception for each behaviour: frequency of consumption ($r = 0.295, P < 0.001$), quantity per session ($r = 0.611, P < 0.001$) and frequency of drunkenness ($r = 0.247, P < 0.001$).

Conclusion

The findings of the study indicate that the normative belief/ alcohol consumption processes which have been found on US college campuses also operate in UK university settings. This raises the possibility of applying social norms interventions from the USA to the UK universities and potentially elsewhere in the world. Although the current study focussed on alcohol it is feasible that this approach could be used in relation to other types of drug use.

2007 Parallel Session 5.6 Alcohol and Drugs

Alcohol consumption and attitudes towards restriction policies in European university students: Results from a cross-national students' health study (CNSHS)

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Background

As compared to the US research on alcohol consumption in European university students have been sparse and assessment tools often not comparable between countries. The first aim of the present study was to study predictors of alcohol consumption and problem drinking in university students from different European countries. A first step to limit alcohol intake among students might be to restrict access to alcohol. Thus, a second aim of this research was therefore to study students' attitudes towards alcohol restriction policies on campus.

Methods

Data were collected in universities from seven different countries (Bulgaria, Denmark, Germany, Lithuania, Poland, Spain, Turkey). A sample of 5,826 first year students completed a self-administered questionnaire during their lectures. The questionnaire included sociodemographic variables, drinking frequency and the CAGE screening test for problem drinking.

Results

In multivariate analysis male gender, daily smoking and study site in a country other than Turkey were consistent and strong predictors for drinking alcohol more than once a week and for problem drinking as measured by CAGE. In addition to these risk factors, satisfaction with income, feeling that good grades are important and living with a partner were protective factors for drinking alcohol more than once a week, but not associated with problem drinking. Experiencing depressive mood was significantly associated with problem drinking. While the majority of students from Poland (87%), Bulgaria (78%) and Turkey (69%) agreed that the selling of alcohol should be restricted at campus, only 40% of students from Spain and Germany and 22% of students from Denmark agreed to this statement.

Conclusions

Certain groups of students have been shown to be vulnerable for problem drinking, which calls for preventive action. Policy changes to restrict or ban selling of alcohol on campus is likely to meet strong resistance, especially among students in Denmark, Spain and Germany.

Do consequences of a given pattern of drinking vary by socioeconomic status? A mortality and hospitalization follow-up for alcohol-related causes of the Finnish drinking habits surveys

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Background

Socioeconomic differences in alcohol-related mortality and hospitalizations, as based on register data, are larger than socioeconomic differences in various types of harmful drinking as based on survey data. Our aim was to use a follow-up study to examine whether differential drinking patterns between socioeconomic groups explain the observed differences in alcohol-related mortality and hospitalizations, or whether similar drinking patterns predict higher mortality among lower socioeconomic groups.

Methods

The study population included Finns who participated in cross-sectional surveys on drinking habits in 1969, 1976 or 1984 when aged 25–69 (N= 6406). They were followed up for alcohol-related mortality and hospitalizations (N= 180) for 16 years. Drinking patterns were measured by total consumption, frequency of subjective intoxication and of drinking different amounts of alcohol at a time and by volume of consumption that was drunk in heavy drinking occasions and non-heavy drinking occasions.

Results

Compared to non-manual workers, manual workers had a 1.9-fold hazard of alcohol-related death or hospitalization. Adjustment for drinking patterns explained only a small fraction of the excess hazard among manual workers. Additionally, in each category of total consumption and in each level of the volume drunk in heavy drinking occasions, the risk of alcohol-related death and hospitalization was higher for manual than for non-manual workers.

Conclusions

Consequences of similar drinking patterns are more severe for those with lower SES. Future studies are needed to explain why higher SES groups manage to escape the consequences of drinking that others have to face.

Self-experienced harms and benefits of alcohol use among 12 to 16-year-old adolescents in Finland

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Background

Although adolescent alcohol use is often considered a part of normal maturation process, it is mostly known to be related to diverse short- and long-term harms. Structured questions are widely used when investigating harms and benefits of alcohol use among both adult and older adolescent populations. However, remarkably little is known about the harms and benefits that under-aged youth themselves experience and how they express this experience in words. Using open-ended questions, this study aims to assess the nature of self-experienced harms and benefits related to under-aged alcohol use in Finland.

Methods

Cross-sectional survey data from adolescent health and lifestyle survey (AHLS) conducted in Finland in 2001 was utilized. Nationally representative samples comprised a total of 5542 Finnish adolescents, aged 12, 14 and 16, with the response rate of 73%. Self-experienced harms and benefits of alcohol drinking were elicited with open-ended questions.

Results

Our initial results show that under-aged adolescents in Finland experience a remarkable variety of alcohol-related harms and benefits. Physical reactions, such as hangover (38%) and vomiting (31%) were the most often reported harms, while e.g. problems with family (3%) and with friends (2%) were rare. Having fun (58%) was the most often reported benefit of alcohol drinking, followed by benefits described as ‘escape from everyday stresses and worries’ and ‘stress relief’ (26%). Among the 12-year-olds, alcohol related harms and benefits were rarely reported.

Conclusions

Our findings suggest that, in particular, self-reported harms related to alcohol use are substantially different from those in other studies based on structured questions. Information on self-experienced harms should therefore be considered valuable for effective alcohol education and alcohol-related policies aimed at reducing under-aged alcohol use and related harms.

Sexual behaviour and alcohol intoxication among male military conscripts in Finland, 1998–2005

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Background

Although the relationship of alcohol and sexual behaviour is complex, several studies have demonstrated an association of alcohol intoxication with risky sexual behaviour and sexually transmitted diseases. Numerous studies on alcohol and health have been conducted in Finland since the decrease in alcohol taxes in 2004, followed by a rapid increase in alcohol consumption and related deaths. The association of alcohol with sexual risk behaviour has not been studied in large scale, which is the focus of this study.

Methods

Approximately 80% of men participate in mandatory military service in Finland. This representative survey sample included 10 446 sexually active conscripts aged 18–25 in 1998–2005, with yearly response rate of 95%. Multiple regression analysis was used to study the associations.

Results

The proportion of those who reported using alcohol at least once a week did not change considerably overtime. When data from 1998–2005 was merged, 52% reported having used alcohol at least once a week. The frequent alcohol use was most common among those with older age and lower education. The analysis, controlling for background variables, revealed that alcohol intoxication had a dose–response type relationship with number of lifetime partners and condom use. Those who reported using alcohol more than once a week vs. non use, were more likely to have had four or more lifetime partners and less likely to have used a condom in the past sex contact (OR: 7.3, 95%CI: 4.63–11.55 and OR: 0.63, 95%CI: 0.44–0.96). The more frequent alcohol use was also strongly associated with high risky behaviour (>2 partners past year and non-condom use in the last sex contact) with OR: 9.5, 95%CI 3.43–26.35.

Conclusions

The results show an association between frequency of alcohol intoxication and risky sexual behaviour, with non- and moderate drinkers at lower risk than frequent drinkers. The findings suggest multidisciplinary, targeted prevention approaches.

‘Unplugged’, an effective school-based prevention programme for tobacco, alcohol and drugs: 1 year follow-up results from the EU-Dap cluster randomized trial

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Background

The empirical evidence of effectiveness of school-based programmes against substance abuse is rather weak and most high quality evaluation studies have been conducted in North America. The EU-Dap study is a multicenter cluster randomized trial funded by the European Commission in 2002 and designed to conduct a rigorous evaluation of an innovative school-based curriculum for the prevention of substance use in European junior high schools.

Methods

The 'Unplugged' programme, based on a comprehensive social influence approach and consisting of 12 one-hour sessions delivered by class teachers, was implemented in seven European countries during the 2004–2005 school year. One hundred and forty-three schools (7th, 8th and 9th grade) were randomized into three intervention arms (basic curriculum, basic plus peer involvement and basic plus parent involvement) and a usual curriculum control arm. A pre-test survey was conducted before the implementation of the programme (n = 7079), while two post-test surveys were conducted afterwards, the first 3 months after the end of the programme (n = 6370) and the second at 1 year follow-up (n = 5541). Multilevel analysis was used to investigate the effectiveness of the programme in preventing and reducing drug use at the post-test and at 1 year follow-up.

Results

At the post-test, the programme was effective in reducing the prevalence of use in the last 30 days for all the analysed variables. The prevalence odds ratios of use were 0.70 (0.52–0.94) for daily smoking (>20 cigarettes in the last 30 days), 0.72 (0.58–0.90) for sporadic drunkenness (at least once in the last 30 days), 0.69 (0.48–0.99) for regular drunkenness (>3 times) and 0.77 (0.60–1.00) for sporadic use of cannabis (at least once). At 1 year follow-up, the effectiveness on cigarettes use was not statistically significant anymore, while the effect on drunkenness episodes was maintained, with a prevalence odds ratio of 0.80 (0.67–0.97) for sporadic drunkenness and of 0.62 (0.47–0.81) for regular drunkenness. The effect on cannabis use was slightly significant, with a POR of 0.74 (0.53–1.01) for regular use (>3 times in the last 30 days).

Conclusions

The EU-Dap project is the first large European evaluation of a comprehensive drug prevention programme for adolescents. At the post-test, it reduces of 25–30% the daily use of cigarettes, sporadic and regular drunkenness and sporadic use of cannabis. At 1 year follow-up, it reduces of 20% sporadic drunkenness episodes and of 40% the regular ones and it is likely to reduce of 25% regular use of cannabis. The programme can therefore be recommended as an effective tool to prevent drug use among adolescents.

2007 Poster Session Alcohol in public health policy

Community based intervention 'Alcohol moderation adolescents in the "Achterhoek", the Netherlands' (2005–2007)

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Background

The alcohol consumption of adolescents in the Netherlands is alarming, especially in the region 'Achterhoek'. Already 75% of the 15-year olds drink alcohol. Besides that, there is a growing concern

about the risks of alcohol consumption at young age. Therefore, a community-based intervention program was developed by a project group. Health education, regulation and enforcement are integrated and implemented in multiple settings. The strength of the program is the collaboration between the eight municipalities, local addiction service, police, Public Prosecution Service, Netherlands Institute for Health Promotion, and community health service. The goal is to promote alcohol moderation among adolescents (10–19 years), in order to reduce the harmful effects. The behaviour of parents with regard to alcohol is essential to change the drinking behaviour of adolescents. Therefore, part of the intervention is targeted on adults. This paper will focus on the effect evaluation among parents.

Methods

A pre- and post-test design with two independent crosssectional surveys was used for the effect evaluation. A baseline study among 250 parents of adolescents has been conducted in March 2006. The follow-up study will take place in June 2007, results known in September. Telephone interviews were used to gather information on social norm, agenda setting, awareness and knowledge. Between April 2006 and June 2007, parents in the Achterhoek were exposed to a campaign and several educational activities took place. A process evaluation facilitates the interpretation of the results.

Results

It is expected that the regional campaign and activities, will make more parents aware about the worrisome situation of high and frequent alcohol consumption of adolescents. Besides that, a growing awareness among parents about the importance of parental behaviour in relation to alcohol consumption of their child is expected to be increased. Results from the baseline study showed that, half of the parents experienced difficulties in changing the drinking behaviour of their child. After 1 year of community intervention activities more parents might agree that setting the good example (54% in 2006) and rules (50% in 2006) are powerful pedagogic strategies.

Conclusions

Considering the actual growing social debate in the Achterhoek, some changes in parents are expected. For a fundamental change, continuation of the intervention over many more years is necessary.

Use and abuse of alcohol among university students from eastern Croatia

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Background

Alcoholism is a growing medical and public health issue both in adults and in the younger generation. Social transition and war in Croatia have increased unemployment and rates of substance abuse. A decrease in prevention programs place adolescents at an increased risk for that abuse. University students represent one of the especially vulnerable groups concerning use and abuse of alcohol, but till now there has been no data on the extent of that phenomenon among Croatian university students. The aim of this study is to determine the prevalence of alcohol problems and to explore the connection between gender, study year, number of financial sources during study, type of current residence and the level of alcohol problems among university students from eastern Croatia.

Methods

In June 2006, cross-sectional survey with self-administered questionnaire containing items on gender, study year, type of financing during the study, type of current residence and the Alcohol Use Disorders Identification Test (AUDIT) was conducted among university students at the University J. J. Strossmayer in Osijek, eastern Croatia. A total of 831 university students, mean age 22.0_{-1.7} years, 419 (50.4%) males and 412 (49.6%) females, 381 (45.8%) from second (mean age 20.8_{-1.2} years) and 450 (54.2%) from forth year (mean age 23.1_{-1.1} years) formed a representative crossfaculty sample of the Osijek University. AUDIT total scores of 8 or more were used as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence.

Results

Among all study participants, there were 76/831 (9.1%) of them who do not drink alcohol at all and 755/831 (90.9%) who do. Among last, there were 331/755 (43.8%) of them with AUDIT total scores of 8 or more; 229/419 (54.7%) males and 102/412 (24.8%) females. According to study year, there were 160/381 (42.0%) second year students and 170/450 (37.8%) fourth year students with AUDIT total scores of 8 or more. Among students who have only one financial source during their study there were 157/408 (38.5%), among those who have two sources of money there were 146/364 (40.1%), while among those with three financial sources during study there were 27/59 (45.8%) students with AUDIT total scores of 8 or more. By exploring the connection between the type of current residence and AUDIT total scores it was established that among participants who lived with their parents during study there were 123/350 (35.1%), among those who lived alone in rented flat there were 138/309 (44.7%) and among those who lived in the students dormitory there were 69/172 (40.1%) students with AUDIT total score of 8 or more.

Conclusions

Results of the present study indicate alcohol to be serious problem among university students from eastern Croatia because almost 40% (330/831) of the study population had AUDIT Total score of 8 or more. The hazardous and harmful alcohol use, as well as possible alcohol dependence among Croatian university students is related to their individual features as well as to the influence of parents or primary family, dominant friends and social circumstances. Excessive prevention programs that include all above-mentioned influences are needed.

Changes in alcohol consumption in Denmark after the 2003 tax reduction on spirits

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Background

On 1 October 2003, the Danish government lowered the excise tax on spirits by 45%, thus reducing the total price by 25%. It is well known that alcohol prices can affect drinking levels. The aim of this study is to examine changes in alcohol consumption and drinking patterns in Denmark between 2003 and 2006.

Methods

Cross-sectional and panel data from Denmark and Northern Sweden (as control site) from 2003 to 2006 were analysed. Samples were collected by telephone interviews using random digit dialling. Sample sizes for panel data ranged from 855 to 1978 and from 883 to 2347 for cross-sectional samples. Mean alcohol consumption reported in centilitres of pure alcohol and frequency of binge drinking were examined. Panel data were analysed by using GEE-models. Cross-sectional data were analysed in regression models with a covariate for survey year.

Results

Panel data for Denmark revealed that alcohol consumption did not increase as expected but instead decreased, with consumption among younger Danish women decreasing more strongly than ageing older women. Danish men's drinking remained essentially unchanged. Similar trends were found in the cross-sectional data. Alcohol consumption in the control site of Northern Sweden also tended to decrease in the panel data and remained stable in the cross-sectional samples.

Conclusions

With telephone survey methods, this study found no evidence to support earlier research stating that decreased prices and increased availability leads to higher alcohol consumption. It is likely that this mode of data collection did not capture segments of the population that might have engaged in higher spirits consumption. However, other explanations could be the attainment of 'saturation' in current Danish drinking as well as the fact that spirits consumption constitutes <15% of Total alcohol consumption in Denmark.

A study on effectiveness of local alcohol policy (PAKKA)

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Background

In recent reviews of effectiveness of alcohol policy, interventions to reduce harms related to drinking, the recommended strategy for local communities is to combine community mobilization with environmental strategies focused on the supply of alcoholic beverages. PAKKA-project in two local regions uses a mixed strategy attempting to change the local social, economic and physical environment related to risky and underage drinking. Municipal actors, police, alcohol license authorities, citizens and alcohol selling businesses have been activated to take part in the preventive action. The project goals are: (1) to decrease heavy drinking occasions and related acute problems, (2) to decrease underage-drinking and (3) to develop a model for sustainable prevention method for local and regional level.

Methods

The evaluation study uses quasi-experimental research design in measuring the effectiveness of community-based prevention. Two intervention regions and two regions with matching characteristics were chosen as comparison sites. Baseline data were collected in 2004, first outcome data in 2006 and final post-intervention data will be carried out in 2008. Data contains statistics and registers on alcohol related harms, results of decoy-purchases in shops and restaurants, questionnaire-data, focus-group interviews, mediaanalyses, process documentation and qualitative in-depth case-descriptions.

Results

Decoy purchases to test how often drunken customers were served in bars, showed in the intervention region significant reduction in comparison to the control area. Decoy purchases to measure if alcohol was sold to under-age customers in shops showed improvement in the intervention area, but improvement took place also in the comparison region. Questionnaire data shows self-reported results in line with the decoy-purchase observations. Media analyses shows that public discussion has changed along the lines of the project goals. Survey results do not show many significant changes in public opinions. Focus-group study among local key-actors reveals attempts to make local alcohol policy sustainable, and high-lights its strengths and difficulties.

Conclusions

PAKKA project has developed a sustainable method for local alcohol policy, created public discussion on alcohol issues, developed responsible beverage service and sales in shops and restaurants and developed working methods to engage youngster and parents. Half-way evaluation research shows some intervention effects. Further analyses as planned is needed to assess the total impact of the project.

Drinking non-beverage (surrogate) alcohol: a qualitative study in Novosibirsk, Russia

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Background

Alcohol is one of the prime risk factors for disability-adjusted life years lost in Russia, and alcohol-attributable mortality among men in Russia is the highest in Europe. Recent data suggest that the high alcohol-related mortality in Russia is at least partly attributable to drinking of alcohol surrogates, i.e. substances which are not intended for human consumption. Understanding why people choose to drink such substances and how alcohol policies might influence this is essential to address this worrisome trend in drinking behaviour.

Methods

Qualitative semi-structured interviews (n = 45) were conducted in the Russian city of Novosibirsk in 2006. Participants were sampled from an ongoing cohort study (the HAPIEE project) and from clients admitted to health services with drinking problems. The participants' history of alcohol consumption and its particular links to surrogate consumption was explored. Questions included surrogate and alcohol consumption during three periods: the antialcohol campaign (1985–1989), during the demonopolization of alcohol market in 1992, and currently. Interviews were tape-recorded and transcribed verbatim. The data were analysed using the framework approach.

Results

Three women and 22 men reported ever drinking surrogates and 13 drank surrogates in the last year. Diluted industrial spirit bought from private houses and apartments was the most cited non-beverage alcohol. Other reported substances included medicines containing high volume of ethanol, cleaning substances and aftershave. The first experiences of surrogates drinking were reported during the anti-alcohol campaign, when the sale of legal alcohol was limited. According to study participants, the availability of industrial spirits then increased rapidly during the demonopolization of the alcohol market. The increase of prices of legal alcohol after recent policy changes, together with high accessibility of illegal industrial spirit, were the major reasons given for drinking surrogates in the current period.

Conclusions

Preliminary results suggest that, over the last 20 years, the consumption of surrogate alcohol in Russia was related to the availability of legitimate alcohol, to government policies and to prices of legal and illegal alcohol. Changing policy on legitimate alcohol may lead to increase in consumption of alcohol surrogates.

Time-trends in the alcohol consumption habits and alcohol-related mortality among Lithuanian urban population

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Background

Alcohol use is a well-established risk factor for all traffic fatalities, suicides and cancer death of some specific sites. The aim of the study was to determine the time-trends in the alcohol consumption and alcohol-related mortality among urban population in Lithuania.

Methods

The data from the surveys carried out within the WHO MONICA study in urban population (Kaunas) were used. Four randomly selected samples of men and women aged 35–64 years were screened in 1982–1983, 1986–1987, 1992–1993, and in 2001–2002. During these surveys, 2450, 1762, 1238 and 1032 persons, respectively, were screened. Alcohol consumption habits were determined via interviews adjusted to a large-scale population studies, using a standard questionnaire. All deaths occurred in the Kaunas population aged 35–64 years have been registered from 1983 to 2002 in the framework of Kaunas mortality register. Four groups of death cases were analysed: (1) deaths from all external causes (ICD-9 E800-999 or ICD-10 V01-Y98); (2) deaths from transport-related injuries and accidents (E800-E848 or V01-V99); (3) suicides (E950-959 or X60-X84); and (4) deaths from alcohol-related diseases (303, 571 or F10, K70).

Results

Over the 20-year period, the prevalence of regular alcohol consumption significantly increased among both men and women. At the same time, in the study population, mean level of consumed alcohol and the proportion of drinkers consuming alcohol several times a week or every day increased. During 1983–2002, the mortality rates from external causes and suicides were increasing significantly among men (by 2.1%/year, P = 0.039 and by 3.4%/year, P = 0.0002, respectively), and have not changed among women. During 1993–2002, the mortality rates from alcohol-related diseases decreased significantly among both men and women (by -15.4%/year, P = 0.016 and by -19.3%/year, P = 0.0005).

Conclusions

The negative trends in the alcohol consumption habits and alcohol-related mortality among urban Lithuanian population aged 35–64 years during the past 20 years were determined.

The influence of binge drinking on sickness absence among female and male employees in the city of Helsinki

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Background

Sickness absence is influenced by several different factors. We aimed to examine the impact of binge drinking on sickness absence and to analyse whether this impact could be explained by socioeconomic position, physical and mental strain at work and health status.

Methods

The baseline questionnaire surveys were collected among 40, 45, 50, 55 and 60-years-old employees of the City of Helsinki in 2000, 2001 and 2002. The questionnaire data were prospectively (2000–2004) linked to sickness absence data derived from the employer's (City of Helsinki) registers. This study included 5219 female and 1425 male employees. The outcome measures were short (self-certified, 1–3 days) and long (medically confirmed, 4+ days) spells of sickness absence.

Results

Binge drinking was associated with short sickness absence spells among women (RR 1.70, 95% confidence interval 1.36–2.13) and men (1.62, CI 1.19–2.19) and with long sickness absence spells among women (1.55, CI 1.16–2.08). Adjusting for occupational social class and working conditions had no effect on the associations. Adjusting for several diseases (such as angina pectoris, diabetes and hypertension) attenuated the associations only minimally. Adjusting for mental health attenuated the associations somewhat more. However, the associations remained statistically significant.

Conclusions

Binge drinking increased the risk of sickness absence independently of socioeconomic position and working conditions. Mental health problems explained part of the excess sickness absence among binge drinkers.

Recent trends in alcohol consumption and related harms in Finland

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Background

Swedish experience has resulted in doubts of whether development of alcohol-related harms still follows per capita consumption in the Nordic countries. We examine trends in per capita consumption and different types of harms to study the situation in Finland. The effects of changes that occurred in alcohol policy in 2004, i.e. a reduction of alcohol excise duty rates of 33% on the average and the abolishment of travellers' tax free alcohol allowances from other EU countries, and of the resulting remarkable increase in alcohol consumption are of special interest.

Methods

The study is a descriptive study of trends in consumption and related harms. Data are statistics on alcohol consumption and alcohol-related harm associated with the maintenance of public order and safety, alcohol-related deaths and hospitalizations and treatment for alcohol problems in the period 1990–2004.

Results

In the last 15 years, alcohol consumption in Finland First decreased during the economic recession of the early 1990s, and then increased almost constantly. Some harm series roughly followed these consumption trends, and for some others the connection with alcohol consumption became obvious when the effect of some third factor was taken into account. Harm rates also increased in 2004, when alcohol consumption increased by 10%.

Conclusions

In Finland, changes in per capita alcohol consumption are still today followed by changes in alcohol-related harm rates. Public health issues should have more weight in negotiations of alcohol policy in Finland.

Drinking patterns and acute coronary syndrome: a population-based case-control study in Tirana, Albania

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Background

Our aim was to assess the association of drinking patterns with acute coronary syndrome (ACS) in Albania, a transitional country in Southeast Europe.

Methods

A population-based case-control study was conducted in Tirana in 2003–2006. 467 non-fatal consecutive ACS patients were recruited (370 men aged 59.1_8.7 years and 97 women 63.3_7.1 years, 88% response). The control group comprised 469 men (53.1_10.4 years) and 268 women (54.0_10.9 years) (69% response). Information on drinking patterns (duration of drinking sessions, and frequency of hangovers and drunkenness) was obtained by a structured questionnaire. Multivariable-adjusted logistic regression was used to assess the independent associations of drinking patterns with ACS.

Results

There were no associations in women. In men, in age-adjusted analysis, an excess ACS risk was evident in individuals who reported shorter durations (<30 min) of drinking sessions, a marker of binge drinking (OR = 1.9, 95% CI = 1.2–2.9) and in those who reported at least 2–3 annual episodes of drunkenness (OR = 2.0, 95% CI = 1.2–3.3) and/or hangovers (OR = 1.9, 95% CI = 1.2–3.1). Upon adjustment for covariates (sociodemographics, smoking, leisure-time exercise, self-reported diseases, body mass index and waist-hip ratio), the associations persisted (OR = 1.9, 95% CI = 1.1–3.4, OR = 1.9, 95% CI = 1.0–3.5, and OR = 1.8, 95% CI = 0.9–3.4, respectively). Restriction of models to first ACS events did not affect the magnitude of estimates in men.

Conclusions

Our findings support a harmful effect of binge drinking on coronary events. In Albania, similarities to the Russian drinking style and evidence for an increase in alcohol-related external causes of death (road accidents and homicides) point to an urgent need for targeted public health interventions.

Alcohol consumption and the risk of insulin resistance-population based study

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Background

The aim of the study was to assess the relationship between alcohol consumption and insulin resistance in adult Krakow’s inhabitants

Methods

6000 subjects at age 35–75 years, participants of the Polish Multicenter Study on Diabetes Epidemiology, were randomized and invited to the study. Finally, in 2838 participants, the standardized questionnaire examination of the life style especially alcohol consumption was performed. In all persons, anthropometric and blood pressure examination was performed. Fasting lipids, fasting and after glucose load glucose and insulin were determined. Glucose tolerance was determined in all study participants according WHO 1999 criteria. Insulin -resistance was defined as

the highest quartile of the distribution of the HOMA-IR index assessed for population with normal glucose tolerance (NGT).

Results

In examined group, 472 (29.2%) women and 150 (12.2%) men were abstainers. Alcohol consumption below 10 g/day declared 68.4% of women and 54.9% of men, between 10 and 30 g/day 2.0% of women and 24.7% of men, above 30 g/day 8.2% of men and 0.4% of women. In men with normal glucose tolerance, the lowest HOMA-IR was observed in the Group drinking daily above 30g of alcohol (2.05_1.3). In men with impaired glucose tolerance, the lowest HOMA-IR was observed in the group drinking daily below 10g of alcohol, the highest in the group of abstainers (2.81_2.04 vs 3.23_1.72, ns). For men drinking between 10 and 30 g of alcohol daily decreased the risk of insulin resistance at 40% (OR = 0.6; 95% CI: 0.37–0.96), drinking above 30 g daily decreased the risk at 49% (OR = 0.51; 95% CI: 0.27–0.96). We did not observe this relationship in the group of women.

Conclusions

Our results confirm positive impact of daily alcohol intake above 10 g for the risk of insulin resistance in the group of men.

2007 Parallel Session 4.7 Workshop Burden of injuries in Europe

Burden of injuries varies between eastern and western part of Europe

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Issue

Over the last decades, the health indicators have diverged and there has been apparent appreciable health gap due to fatal injuries between eastern and western part of Europe. The divergence goes deeper within the eastern part of European Union and is much more apparent between the Baltic States and the other central and eastern European EU new member states. The aim was to explain the reasons for such dramatic gap in mortality from fatal injuries in European countries.

Description

Trends in death rates from fatal injuries in European countries in the period 1985–2002 were analysed. Annual specific mortality rates were derived for 5-year age groups across the range 20–64 years. Alcohol exposure and relative risk information was combined to derive alcohol-attributable fractions for relevant causes if premature mortality.

Lessons

For the whole period of observation fatal injury mortality trends are the highest in the Baltic States, out of all EU countries. Second in rank are the remaining new EU member states from central and eastern Europe. The lowest rates are observed in the EU15. The course of fatal injury mortality trends in all considered group of countries was identical in men and women, although in women at a few fold lower level. In Central and Eastern part of European union (CEE) alcohol was responsible for 38% of all deaths from injuries in the male population aged 20–64. In the Baltic States this proportion was 48% and in the EU-15 at the level of 29%. In female population, this proportion was 29% in CEE countries, 42% in the Baltic States and 19% in EU15.

Conclusions

The unusual leaps of the sudden deaths due to injuries in the time of peace in eastern Europe is without precedence in modern history. The phenomenon concerns mostly the weakest, the lowest educated, those with no profession and the lonely people. Proximate cause leading to a very high level of injuries is alcohol.

2007 Poster Session Child and adolescent public health

Changes in alcohol consumption among Pitka" rantas's adolescents in North - West of Russia in 1995 and 2004

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Background

Alcohol consumption in Russia is one of the highest in Europe. Early initiation of alcohol consumption among children and adolescents leads to impaired health later in life. Restriction of access to alcohol for minors is an essential component of health politics. Study aims to assess the changes in alcohol consumption among youth in the Republic of Karelia in Russia from 1995 to 2004.

Methods

Surveys on CVD risk factors and health behaviours was conducted among population of 15 to 16-year-old pupils from all 10 secondary schools in Pitka`ranta district, Republic of Karelia in 1995 and 2004. Set of questions aimed to reveal prevalence of alcohol consumption, possibility of alcohol acquisition and type of beverage consumed.

Results

The results showed decrease in proportion of adolescents reporting that they never tried alcohol between the years of survey: among boys from 26% in 1995 to 13% in 2005 and among girls from 23% in 1995 to 12% in 2004. Proportion of girls reported getting drunk for first time in 7th grade or earlier increased from 7% in 1995 to 14% in 2005. Spirits were drinks mainly consumed in both years of survey. Proportion of drinkers purchasing alcohol themselves among boys was 33% in 1995 and 47% in 2005. Among girls, respective values were 15% in 1995 and 41% in 1995. Among boys, alcohol consumption for the first time happened with friends for 64% in 1995 and by 78% in 2004. Among girls, corresponding values were 48% in 1995 and 69% in 2004.

Conclusions

Prevalence of alcohol consumption and access to commercial sources of alcohol has increased among Pitka`ranta's adolescents, while age of getting drunk for the first time has decreased. Consider the harm that alcohol causes to children's health and possible complications of future abuse, urgent policy and public health interventions are needed.

The relationship between social competence, family cohesion, social resources and health-risky behaviour among adolescents by gender

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Background

Several studies have confirmed that youth having good or desirable outcomes with regard to risky behaviour are described as being resilient. The important question is whether intervention programmes should be focus on different resilience resources separately among boys and girls in the target age group. The present study explores the relationship between adolescents' social competence, family cohesion and social resources (as factors of resilience) and alcohol consumption, alcohol drunkenness by gender.

Methods

The sample consisted of 1061 adolescents (mean age 14.5 years, 47% males) from elementary schools in Kosice, Slovak Republic. Three subscales (social competence, family cohesion, social resources) of the Resilience Scale were used. Health-risky behaviour among adolescents was measured using questions about alcohol consumption and alcohol drunkenness in the last 4 weeks. Logistic regression was calculated separately according to gender.

Results

Higher levels of social competence were associated with higher probability of alcohol consumption among boys and girls. An inverse influence of family cohesion on alcohol consumption was found among boys and an inverse influence of family cohesion on alcohol drunkenness was found among girls. Finally, an inverse influence of social resources on alcohol consumption was found among girls.

Conclusions

Social competence is a risk factor for alcohol consumption in both genders. In designing intervention programmes it is important to be aware of this potential risk factor. The present findings support the protective effect of family cohesion on adolescents' health-risky behaviour. Gender differences in social resources should be explored concerning the protective/ risk potency of alcohol use. Our results support increased research into adolescent resiliency developing from interaction between psychological and social factors.

2007 Poster Session Health in all policies

Injuries among Finnish young men

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Issue

The aim of the presentation is to clarify the purposes and background of the Finnish public health program 'Health 2015' for the prevention of injuries among young men. One target of the programme is to diminish by third the mortality among 15–34-year-old men from the level of the end of 1990's by year 2015.

Description

The mortality of young men is triple of that of young women. In the risk group are especially those with a low attained educational level and those outside the job market. The mortality of young men grew significantly in the end of 1980's; it lowered in the beginning of 1990's, but started to grow again by the end of the decade. The mortality of Young men in Finland is higher than the average of the European Union (EU25). Road accidents, suicides, poisonings and violence are the most common injury deaths among Young men. Alcohol is a contributing factor to many injury deaths. Furthermore a significant number of young men die of drug or alcohol poisonings annually.

Lessons

It is important to collect data from different sources in order to get the whole picture about injuries among young men.

Conclusions

Social deprivation predicts victimization of injuries. The aim of the public health program is to reach these young people in danger of deprivation. A life style that is prone to injuries starts to form up very early in childhood. Therefore, it is important to start injury prevention early on in a person's life.

2007 Poster Session Health promotion

Parental role models and onset of smoking, and alcohol use by 11-year-old children

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Background

Parents are preferential and the most important models for behavioural development for the children. However, the role of parents as role models in the development of child's health-related behaviour has not been examined thoroughly. This paper aims to recognize better modelling of health risk behaviour in family and to examine its role in the initiation of smoking and alcohol use among children.

Methods

This research was carried out in Kaunas city, Lithuania, during the school year 2004–2005. The research populations were 369 fifth school year children and their 565 parents: 323 (57.2%) mothers and 242 (48.2%) fathers. Response rate was 80.7% for children, 96.1% and 90.6% for mothers and fathers, respectively.

Results

Boys more often than girls reported having tried smoking (23.0% and 6.6%, respectively; $P < 0.001$) and having tasted alcohol (40.1% and 31.16%, respectively; $P < 0.05$). More than two thirds (81.5%) of parents: 248 (77.0%) mothers and 207 (85.9%) fathers ($P < 0.05$) reported taking part in parties with alcohol at least once a month. About half of the investigated fathers (50.6%) and one-fifth of mothers (19.9%) ($P < 0.001$) were smokers. The statistical analysis proved relationship between mothers and their sons smoking: sons of smoking mothers in comparison with sons of non-smoking mothers had 2.5 times (95% CI 1.11–5.64) higher chance to try smoking. The frequency of the first experience of alcohol use was increasing according to the frequency of reported alcohol use by parents during the parties.

Conclusions

Frequent examples of smoking and alcohol use by parents can to some extent explain the development of alcohol and smoking addictions in children.

Alcohol use at the age of fifteen in Finland – does early initiation to alcohol use matter?

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Background

Extensive system of health monitoring indicates that Finland's population is healthier than ever. However, young people's health has been debated vividly. Important sources of concern have been young people's risky health behaviours and an early initiation to alcohol use.

Methods

The aim of this study was to analyse the association of early initiation to alcohol use (12 years or earlier) with the present pattern of drinking (being drunk at least 10 times during lifetime) among 15-year-old Finnish adolescents. The other variables of interest were students' reports on family structure, SES of the family, parental monitoring, parental attachment and young people's own educational orientation after compulsory education and gender. The nationally representative data consisted of 15-year-old adolescents (887 girls and 779 boys) who completed an anonymous, standardized questionnaire at school as part of the Health Behaviour in School-aged Children (HBSC) study at 2006. The overall goal of the WHO collaborative survey is to increase understanding of health, health behaviours, lifestyles, and their context, in young people. Cross-sectional data were analysed using multivariate logistic regressions.

Results

Factors associated significantly to heavy drinking at the age of fifteen were initiation to alcohol use by the age of 12 (OR 3.31, 95% CI = 2.20–4.96), perceived weak or moderate monitoring by mother (OR 1.66, CI = 1.06–2.59) and, orientation towards vocational education (OR 1.97, CI = 1.36–2.85) However, gender, SES of the family or family structure were not associated significantly to heavy drinking at the age of 15.

Conclusions

The research outcomes suggest that the early initiation to alcohol is a clear risk factor for heavy alcohol use later in adolescence although this was a cross-sectional study. The study findings emphasize the importance of understanding the national alcohol culture and children's initiation to it when supporting families and schools to promote health and well-being among children and young people.

Personality factors and their association with alcohol consumption and alcohol drunkenness

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Background

Among the predictors of substance use that have been reported by a variety of prospective studies, difficult temperament, aggressiveness and impulsivity have been repeatedly indicated. The aim of this study is to explore the effect of personality factors on university students' alcohol consumption and alcohol drunkenness.

Methods

The Eysenck Personality Questionnaire (EPQ) including the subscales measuring extraversion, neuroticism and psychoticism was used to study the effects of personality scales on alcohol consumption (no / more than one drink in the last four weeks), alcohol drunkenness (having been drunk never / one or more times in the last four weeks) among university students (n = 832, 42.7% boys, mean age 20.5 years). Logistic regression was calculated separately by gender.

Results

High levels of extraversion predicted significantly the probability of alcohol consumption and alcohol drunkenness among men and women; and psychoticism was a predictor of alcohol drunkenness only among women. Extraversion appeared to be, in a separate model and in adjusted models, the only single EPQ factor predicting alcohol consumption and alcohol drunkenness among men. Extraversion and psychoticism among women was explored in a separate model and in adjusted models. It was found that both factors predicted alcohol drunkenness. Extraversion was a predictor for alcohol consumption in a separate model and in adjusted models among women.

Conclusions

The results show the influence of personality traits included in the EPQ scale for extraversion (sociable, lively, active, assertive, sensation-seeking, carefree, dominant) on alcohol use among men and women. Psychoticism (aggressive, cold, egocentric, impersonal, impulsive, antisocial, creative) predicted alcohol drunkenness among women only. These results may be relevant for designing interventions among youth.

Young adolescents' social intelligence and social influence are important for their alcohol consumption.

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Background

Young adolescents' social intelligence and social influence reflection can be an important risk/protective factor for their alcohol consumption. The aim of this study was to explore the effect of social intelligence and social influence on Young adolescents' alcohol consumption by gender.

Methods

The Tromso Social Intelligence Scale consists of three subscales: social information processing (SP), social skills (SS) and social awareness (SA). Social Influence was measured by subscales of mother's, father's, best friend's, friends' and classmates' influence on young adolescents' cognitive and emotional aspects of life. One question was used to measure alcohol consumption during the last 4 weeks. The data file (1027 young adolescents, mean age 14.5, 53.5% girls) was split into separate groups for analysis based on gender and into two separate groups on the incidence of alcohol consumption (abstainers and consumers of alcohol). Logistic Binary Regression and Pearson correlation were calculated.

Results

Lower level of SP and higher level of SS influenced alcohol consumption among boys. Lower level of mother's influence increased the probability of boys' alcohol consumption. Higher level of best friends' influence increased the probability of girls' alcohol consumption. Among girls without alcohol drinking experience a negative correlation was found between SS and mother's, father's, best friend's, friends' and classmates' influence. Among boys without alcohol drinking experience a positive correlation was found between SA and friends' influence. Among boys with alcohol drinking experience a negative correlation was found between SA and friends' influence.

Conclusions

For prevention of alcohol consumption among boys, the development of social skills and cognitive facets of social intelligence is important. Girls seem to be less susceptible to the influence of others, and more socially independent.

Two different alcohol preventive strategies for working with purchase attempts in Sweden.

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Background

In Sweden alcoholic beverages can only be purchased at monopoly stores. The age limit is 20, with one exception. Medium-strength beer (2.8–3.5% alcohol by volume) can also be purchased in food stores, where the age limit is 18. The food stores themselves are responsible for not selling to minors and the check-out assistant can be reported to the police if they sell to minors. Minors could not be punished for purchasing alcohol. The voluntary organization UNF (The Swedish youth temperance movement) monitors this limit in the stores. UNF uses minors (age 13–17) for their purchase attempts. UNF has earlier used these data to confront food stores through media. Now they are comparing this strategy with a method of cooperation with the stores. The aim of this presentation is to compare the outcomes of these two strategies.

Methods

From the beginning of 2003 UNF has registered all purchase attempts in a number of cities in Sweden. The database consists of 1460 purchase attempts. A research team at Örebro University, which works with the evaluation of alcohol and drug prevention programmes implemented by NGOs has in a close collaboration with UNF analysed the program using different research methods.

Results

In 40.3% (95% CI = 38–43%) of all registered purchase attempts beer is sold to minors. In the eight cities that worked with a particular strategy during at least a whole year the success proportion was significant lower (33.6% compared to 49.8%; $P = 0.001$). In the stores where the confrontation method had been used there was a significant improvement from first to last purchase attempt in the same store. In the cooperation stores there were neither significant improvement nor impairment. There are also other essential factors worth considering when comparing the two strategies, for example the opinions of the check-out assistants and the youth about the particular strategies.

Conclusions

This result tells that up to now the confrontation method has been more successful than the cooperation method. Developing a preventive strategy takes time, maybe even more time to succeed with cooperation than confrontation. However, just to work with a structured strategy showed significant better results than working without one.

2007 Poster Session Health services

Congenital anomalies in Portugal 1997–1999: a spatial and temporal characterization

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Background

Congenital Anomalies (CA) are developmental errors, consisting of structural, biochemical or functional alterations identified at birth, later or previously (prenatal diagnosis). Every year, 2–3% of births all over the world are affected by one major CA. In 50–60% of CA the precise cause is not known (EUROCAT, 2002). The Portuguese national registry of CA receives notifications from medical specialists that identify CA in live births, fetal deaths or stillbirths and in the context of induced abortions due to a fetal malformation. Data on gestation period (including pre-natal diagnosis), personal and familiar history, description of anomalies, laboratory findings, socio-economic and geographic dimensions are also reported. The aim of this work is to study the spatial and temporal patterns of occurrences of CA and the associations of explanatory variables or factors that could influence CA rates.

Methods

Re-codifying of some original variables was made to use tests for independency (Chi-squared): Mother's age (5 years age bands); Terminus of conception (natural abortion, medical abortion due to CA, Live or still births); Mother's Tobacco, Alcohol and drug use (Yes, No); Mothers occupations according to the International Standard Classification of Occupations (ISCO 1998). Spatial discontinuities and patterns were studied using semivariograms (Goovaerts, 1997; Nunes and Soares, 2005). Temporal distribution of CA was studied using time series analysis with the Box and Jenkins model class.

Results

The ARIMA(3,1,0) is satisfactory to describe the variability of the series. For Foetal Deaths the plot of the time series shows a significant increase only with two peaks on January of 1998 and January of 1999. An ARIMA(4,1,0) model was the most satisfactory but cannot describe all variability of the series. Concerning the Stillbirths series, we cannot state any temporal relationship along the three years. Using other variables, we found other significant associations. Mothers Age with Terminus of conception Types presents some correlation (P-value = 0). It was not identified any relation between tobacco dependencies and Terminus of gestation types (P-value = 0.865). alcohol consumption and terminus of gestation has a borderline statistical significant association (P = 0.052). Consanguinity problems does not reveal any correlation with Age of the mother, mothers age (P-value = 0.188). Mothers occupations presents a clear relations with mothers age as well as with Terminus of gestation types (P-value = 0). Similar analyses could not be applied to mothers' race and mothers' drugs dependencies due to several bivariate classes without occurrences. Bivariate distribution analyses were made, to explain the identified correlations.

Conclusions

The portuguese CA registry covers 75% of all hospital births in a country were more than 99% of births are in hospital. Quality of notification is assured by medically confirmation of CA. Regional differences in notification completeness may exist. As already referred, Box and Jenkins models were used for time series analysis. However, this class was designed to model real-valued variables whereas possible result of a congenital anomaly is integer-valued variables. That way, a new class of time series models (called integer-valued time series models) must be performed. CA are considered to be multifactorial in nature, with environmental factors important in the genesis of many of the types of CA. Clustering of CA in space and time is thus important for identification of sources of exposure and primary prevention through Public Health measures. This is the firsts time-space clustering analysis of national registry data made in Portugal.

2008

2008 Poster Session Injury prevention and safety promotion

Drinking and injury in the light of emergency admissions: interview-based study in a Swiss Emergency Department

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Objective

This study describes the distribution of usual and prior to injury (i.e. acute) alcohol consumption among injured patients treated at a hospital emergency department (ED). Furthermore, it explores the contribution of usual and acute alcohol consumption to typical injury patterns.

Methods

A representative sample of 486 trauma patients were interviewed about their alcohol consumption and injury circumstances in the ED of the Lausanne University Hospital between September 2005 and July 2006. Four individual attributes (sex, age, educational achievement and occupational status) and six variables of injury circumstances (activity and place of occurrence, mechanism, nature of trauma, implication of other protagonists, day of the week and time of day) were simultaneously analysed by mean of cluster analysis. Drinking types were considered through a five categories typology derived from the combination of usual and acute alcohol consumption (i.e. no/low volume drinkers with no acute alcohol consumption, high volume drinkers with no acute consumption, risky single occasion drinkers with no acute consumption and low risk and high risk drinkers with acute alcohol consumption).

Results

Acute consumption varied across groups with different usual drinking patterns. Six typical injury patterns were identified, two of which were strongly associated with acute consumption: injuries related to interpersonal violence (acute consumption among high risk drinkers) and miscellaneous injuries (acute consumption among both usual low risk and high risk drinkers). An additional pattern that of sports injuries, was also characterized by an over-representation of risky single occasion drinkers reporting no acute consumption. The three remaining patterns showed an overrepresentation of no/low volume drinkers with no acute alcohol consumption (traffic related injuries, injuries among older people and work-related injuries).

Conclusions

Various drinking types are found among the injured. Acute alcohol consumption is associated with some—but not all—injury patterns presenting at an emergency ward.

2008 Parallel Session F3 Workshop Social and cultural resources for health - local level approaches

Socio-economic school district factors and their impact on alcohol drinking onset in Danish adolescents

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Background

Area-level socio-economic factors are significantly related to a population's health. That is, the social status and level of resources of a particular region, neighbourhood or community have an effect on the health and health behaviour of its inhabitants above and beyond that of the individual's socioeconomic status. This study investigates how school district level factors affect the individual health behaviour of Danish adolescents.

Methods

A sample of 12511 pupils in the 7th grade from 422 schools across Denmark was used from the 'Ungeshverdag' Study's data collection in the year 2005 for the outcome of variable drinking onset and the predictors gender, parental behaviour, peer behaviour, performance at school and satisfaction with school. Geographical neighbourhoods were constructed around schools based on school district borders. Aggregate level school district variables were created for education, employment status, household savings and housing situation using the Conzoom data from Geomatics.

Results

Mixed-effects logistic regression with random effects for school districts showed that the individual level predictors for drinking onset were male gender, socio-economic status of the family, a lower performance at school, peer group drinking and the drinking style of the father. Housing type was the only school district level variable significantly associated with drinking onset. In school districts with a higher percentage of single houses and farm houses adolescents were more likely to initiate alcohol consumption than in school districts with a higher percentage of apartment housing.

Conclusions

The impact of socio-economic variables on school district level seems to be smaller in the welfare state of Denmark than that known for other countries such as the UK or Canada. The effect of the housing factor on alcohol onset may indicate a difference between rural and urban areas and varying availability of cultural, leisure and free-time activities for adolescents.

2008 Poster Session Child and adolescent public health

Prevalence and trends of alcohol use among school-aged children in Lithuania, 1994–2006

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Background

Alcohol abuse is considered as one of the most important risk taking behaviours among youth in the global world. Aim of this study was to analyse features and trends of alcohol consumption among 11-, 13- and 15-year-old adolescents (students from schools) in Lithuania in 1994–2006.

Methods

Results from WHO collaborative cross-national Health Behavior in School-aged Children (HBSC) study are presented. In Lithuania, representative samples of 5428, 4513, 5645 and 5632 students aged 11-, 13- and 15-years-old were included into school-based questionnaire survey correspondingly in 1994, 1998, 2002 and 2006. The standardized methods of international HBSC study were applied. Frequency of use of different alcohol categories (beer, wine, spirits, sparkling wine, liqueur, alcohol mixes) and reported episodes of drunkenness were in focus of this research.

Results

Prevalence of students who reported have been drunk 'two or more times' in their lifespan has increased by 2.5 times (from 9.8% to 25.6%) during 1994–2006. Significant increase of drinking frequency among girls was observed—percentage of girls who have reported alcohol use (50.3%) was almost approached the level of boys (56.8%, $P = 0.006$). The reported mean age of the first onset of drinking had shifted by 2 years toward younger age during the period of observation. The comparison of reported drunkenness 'two or more times' show that Lithuanian respondents are among the most tending to be drunken (29.0% in boys and 22.1% in girls) and were in the second worst position in the rating scale when comparing with other 36 countries involved in HBSC study. The results suggest that increased use of 'light' alcoholic beverages could predict increase of drunkenness prevalence. The recent data show that ready-to-drink beverages ('alcopops') at least once per week were used by 15.3% of boys and 17.5% of girls ($P = 0.216$), beer—16.9% of boys and 5.6% of girls ($P < 0.001$).

Conclusions

Significant shift of the onset of drinking alcohol toward younger age was observed during 1994–2006 in Lithuania. The trend of increase of alcohol consumption among school-aged children in our country

has resulted that our population of young people approached the highest levels of alcohol consumption in Europe.

The effect of personality dimensions and alcohol availability on alcohol consumption by Young adolescents

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Background

Monitoring regular alcohol consumption in the period of transition from childhood to adulthood is an important task of public health policy. The aim of this study was to explore the separated and combined associations of selected intraindividual and social predictors with alcohol consumption by Young adolescents.

Methods

The research sample (data collection in 2007) consisted of 3599 young Slovak adolescents (mean age 14.4, 49.6% girls). Binary logistic regression was performed to assess the impact of the Big Five personality factors (extroversion, agreeableness, emotional stability, conscientiousness, openness to experience) in the first model and also alcohol availability (1 = very easy to 7 = very difficult) in the second adjusted model on alcohol consumption (drinking per last month or not). Analyses of these two types of models were performed separately for genders.

Results

In the models containing only personality factors higher extroversion for both genders increased the probability of alcohol consumption. Higher agreeableness and conscientiousness decreased alcohol consumption only among girls ($c = 0.55$; 95% CI 0.53–0.58 for boys and $c = 0.58$; 95% CI 0.55–0.61 for girls). In the second adjusted models combining the Big Five personality variables and alcohol availability the effect of personality factors disappeared. The only risk predictor of alcohol consumption for both genders remained alcohol availability ($c = 0.72$; 95% CI 0.69–0.74 for boys and $c = 0.77$; 95% CI 0.75–0.8 for girls).

Conclusions

The results support the meaningfulness of the restriction of alcohol availability as a prevention policy health strategy regarding alcohol consumption by young people.

E-interventions for students with hazardous or problematic alcohol use: a pilot study in Antwerp, Belgium

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Background

In 2005, the University of Antwerp (UA) did an electronic survey on substance use among the student population of Antwerp. Results showed that 10% of the male student population has an indication of problematic alcohol use. Literature research shows that brief electronic interventions have a positive effect in reducing alcohol use of students and that students prefer electronic above face-to-face interventions.

Methods

A website was developed to motivate students with hazardous or problematic alcohol use to reduce their alcohol consumption and to enlarge their willingness to search for help. The website contains a questionnaire where students can test their alcohol use. The AUDIT (Alcohol Use Disorders Identification Test) was developed by the World Health Organization (WHO). AUDIT is a validated test with 10 questions assessing hazardous and harmful patterns of alcohol consumption. According to their answers, the students receive immediately a personal feedback. After the test, they get the possibility to send a mail to a student counsellor for questions, guidance or advice. The website is promoted by the student counsellors per campus by means of flyers, posters, an e-mail to all students, in student magazines and so on. Begin April 2008 the website www.eentjeteveel.be was launched in the UA and all schools for higher education in Antwerp.

Results

After 3 weeks the site counted 2000 visits. Of them, 41.9% show no risk of problematic alcohol use (AUDIT score of 0–7), 40.5% show a moderate risk (8–15), 9.7% a high risk (16–20) and 7.9% a very high risk (21–40). Of the people who scored more than 15, 46% stopped the test after receiving the feedback, 13.5% searched for information and 3.7% asked for guidance, an appointment or asked for advice.

Conclusions

The effect of the e-intervention on the problematic alcohol use of the Antwerp students will be evaluated in a survey.

Teenager's sexual behaviour and drinking style in Finland

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Background

Adolescent's early sexual activity and alcohol use have been widely recognised as a major public health problem. In this large-scale study we focused on the relationship between adolescent's sexual behaviour and drinking style. Three aspects of sexual risk-taking were included: early activity, unprotected sexual intercourse, and having sex with multiple partners. Furthermore, to obtain more comprehensive perception of adolescent alcohol use, we made the distinction between different drinking styles, i.e. alcohol drinking and drunkenness-related drinking.

Methods

Cross-sectional school survey data from School Health Promotion Study was collected in Finland in 2002–2003. The national sample consisted a total of 100790 adolescents from the eight and ninth grades. Mean ages were 14.8 and 15.8 years. The SHPS questionnaire concentrates on adolescent's health and health-related behaviours, such as sexual behaviour and use of alcohol. To examine the association between sexual behaviour and drinking style among teenagers, we used logistic regression analysis.

Results

The likelihood of engaging in sexual intercourse increased with the frequency of alcohol drinking among 14–16-year-old teenagers. In particular, frequent drunkenness-related drinking increased teenager's probability to report that they had experienced not only sexual intercourse, but to engage in sexual risktaking behaviours. We found that the likelihood of engaging in unprotected sex and/or having multiple sexual partners was many-fold for adolescents drinking frequently until they were in a state of drunkenness. Especially for girls, drunkennessrelated drinking at least once a week was associated with multiple partners (OR = 4.21, 95% CI 3.24–5.48).

Conclusions

Results confirmed that it is not the frequency of alcohol drinking per se, but it is the drunkenness-related drinking style that is strongly associated with sexual risk-taking behaviour in adolescence. Consider the short- and long-term harms related to early sexual activity and alcohol drinking, further

research and efficient interventions are needed. For instance, it could be effective to combine both alcohol education and sexual education in school settings to reduce both adolescents' alcohol use and various harms.

2008 Poster Session Migrant health

Comparative description of health status, determinants and health services use among migrant population in Portugal in the National Health Interview Survey (2005/2006)

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Background

The 4th National Health Interview Survey (NHIS4) a general multipurpose survey of a probabilistic multi-stage sample of family households promoted by the Ministry of Health, conducted (2005/2006) by the National Institute of Health in partnership with the National Statistics Institute and the General Directorate of Health.

Objective

Compare immigrants, returned emigrants and Portuguese residents on health status, health determinants, health services use.

Methods

Data analysis from NHIS4. Age-standardized and genderstratified prevalences.

Results

Data of 41 193 persons in family households in Portugal among which 1694 born outside Portugal and 3894 returned Portuguese-born emigrants were studied. A 'good or very good' perceived health status and quality of life was more frequent among immigrants. Smoking was more frequent among immigrants (men 27.7%; women 16.4%). Daily drinking high alcohol content drinks during the previous week was more frequent among returned Portuguese male emigrants (6.6%), than among immigrant (5.4%) or Portuguese never migrant men (5.1%). The National Health Service was mentioned by more than 80% of persons in all three populations both as 'provider of health care' and 'more frequently used provider of health care'. Not using health care was more frequent among immigrant men (2.7%). No medical consultation during the previous 3 months was more frequent among immigrants (men 53.8%; women 46%). Four or more medical consultations during the same period was less frequent among immigrants (men 3.9%; women 6.4%). On average a lower proportion of immigrants reported a waiting time of more than 14 days for the last medical appointment. A 'good or very good' quality for the last medical appointment was more frequent in immigrants (89.8%) than Portuguese never migrants = 81.2%; returned Portuguese emigrants = 78.3%. Dental care use the previous year was higher in immigrant women (50.5%). Use of at least one contraceptive method was lower among immigrants (84.5%) than Portuguese never migrants (85.8%).

Conclusions

Evidence of a healthy immigrant effect; no evidence of lower health care accessibility by immigrants and returned Portuguese emigrants have specific characteristics.

2008 Poster Session Public health epidemiology

Alcohol-related mortality and years of life lost in Lithuania—inequalities by age, sex and place of residence

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Background

Alcohol-related mortality can respond strongly to control measures. The aim of the study—to evaluate alcohol-related mortality and years of life lost due to alcohol by age, sex and place of residence in Lithuania.

Methods

Data on mortality by age, sex and place of residence (urban/ rural) for the year 2006 was obtained from the Lithuanian Department of Statistics. Alcohol-related mortality (all alcohol-related deaths, alcohol-related diseases, and alcohol-related injuries) and its impact on years of life lost (YLL) was defined following the National Institute on Alcohol Abuse, USA (1996) definitions.

Results

Alcohol-related deaths composed 8.1% of all deaths that occurred in Lithuania in 2006 (10.5% in men and 5.4% in women). The biggest proportion of alcohol-related deaths was found between 15 and 50 years of age with the highest level (23.1%) at age 15–19. One decedent due to alcohol consumption lost in average 24.2 years of life. There were no significant differences in alcohol-related deaths by place of residence. Alcohol-related YLL/1000 for the able-bodied population (15–64 years) was 32.2, reaching the highest rate of 52.2 for men in rural areas. Alcohol-related diseases composed 6.0%, while alcohol-related injuries—2.1% of all deaths with twice higher proportions for men in comparison to women. The biggest proportion of alcohol-related injuries was estimated at age 15–19 (22.6%), while alcohol-related diseases composed the biggest part (16.5%) at age 40–44. One decedent due to alcohol-related diseases lost in average 21.9 years of life and due to alcohol-related injuries—30.7. YLL/1000 due to alcohol-related diseases was 21.3, and due to alcohol-related injuries—10.9 for the population aged 15–64 with the highest rates for rural men (30.9 and 21.3, respectively).

Conclusions

Alcohol plays a substantial role in premature mortality in Lithuania. Public health measures should be taken to reduce alcohol-related burden, particularly in early adulthood and among men, especially in rural areas.

Educational inequalities in the amount of alcohol consumption in different European regions

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Background

Alcohol abuse has been identified as a main contributor to socioeconomic inequalities in male mortality in Europe. Evidence from mortality studies suggested this contribution to be larger in southern and eastern European countries as compared to western and northern countries. However, there is yet no direct evidence from alcohol prevalence data to support this suggestion. The objective of this analysis is to compare countries from different European regions with regards to educational inequalities in average alcohol consumption.

Methods

We collected and harmonized data from national health interview surveys carried out after 2000 in the south of Europe (Italy, Spain), the west (Belgium, Germany, England), the north (Denmark, Finland, Norway), the Baltic (Lithuania, Latvia, Estonia) and the east (Hungary, Slovak and Czech Republics). For each of these countries, estimates of average weekly alcohol consumption were made on the basis of detailed questions on alcohol consumption patterns during the past week. Associations with educational level were assessed using age-standardized prevalence rates and the Relative Index of Inequality.

Results

We found important variations by gender and country in the relationship between educational level and mean alcohol consumption. Among men in the south and east, alcohol consumption was higher among lower educated men (ca. 50% difference), while in western and northern countries, alcohol consumption was higher among high educated men (ca. 15–35% difference), with the Baltic in-between. Among women, all countries showed a similar pattern of higher alcohol consumption among high educated (ca. 25–50% difference). Different patterns were observed with regards to binge drinking.

Conclusions

The results support the suggestion from mortality studies that regular alcohol consumption made a large contribution to inequalities in mortality among men, especially in the southern and eastern

countries. Prevention of excessive alcohol consumption among lower socioeconomic groups is an essential part of policies to reduce inequalities in mortality among men especially in these countries.

Ethnic differences in subjective health and health behaviour among Lithuanian adult population.

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Background

Information of ethnic differences in life style is important since some ethnic groups may be particularly vulnerable to the adverse health effects associated with health behaviour. The objective of this study was to evaluate ethnic differences in subjective health and health behaviour among various ethnic groups in Lithuania.

Methods

In 1994–2006 seven cross-sectional surveys have been carried out within the international Finbalt Health Monitor project. For every survey random sample of 3000 Lithuanians aged 20–64 was taken from the National Population Register. The response rates varied from 59.2% to 74.4%. The majority of respondents were Lithuanians (85.3%), 6.2% Russians, 6% Poles and 2.5% other nationalities. The study material was collected by mailed questionnaires. Multiple logistic regression was used for evaluation of relationship between ethnic Group and lifestyle factors.

Results

Lithuanian women evaluated their health better than Russian women did (39.4% and 31.9% respectively; $P < 0.05$). The proportion of daily smoking Russian women was higher (18.4%) compared with Lithuanian women (12.9%). No ethnic differences were found in prevalence of daily smoking among men. Drinking of strong alcohol at least once a week was reported by 41.5% of Polish, 33.1% of Russian and 28.4% of Lithuanian men ($P < 0.05$). Differences in physical activity by ethnicity were found only among women. Nutrition habits were related with ethnicity. Russian people compared with Lithuanians drank less high-fat milk, consumed less meat and meat products, however they more often used vegetable oil for cooking.

Conclusions

The obtained data on ethnic differences in self-reported health should be taken into account when planning interventions designed to eliminate these disparities.

Drunk driving in Finland between 1989 and 2007

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Background

Driving under the influence (DUI) of alcohol is considered a serious road safety problem. People with DUI arrests are often associated with alcohol dependence and health problems. The aims of the study were to investigate the incidence and trends of suspected drunk driving during 19 years between 1989 and 2007 by age and sex in Finland.

Methods

The data included all suspected drunk driving cases ($N = 440\,000$) in Finland between 1989 and 2007. Cases involving illicit or medical drugs were excluded. The data were limited to motorized road traffic. The annual incidence per 1000 population by sex and age was calculated.

Results

The changes in the number of drunken driving cases followed trends in the trends of economic development and changes in overall alcohol consumption. These changes were strongest amongst 18–19-year olds whose incidence rate was halved from 20.5 to 10.2 per 1000 population between 1990 and 1994. The proportion of women among drunken drivers was almost doubled from 6.5% to 11% of

all cases. The incidence of drunk driving among those over 50 years increased 2.5-fold. Most events took place during the weekend nights.

Conclusions

The proportion of women and the aged among drunk drivers has steadily increased. Still, young men aged 18–19 years are at the highest risk of committing drunken driving offences. Alcohol consumption shapes drunk driving more among the young than other drivers. Preventative measures in healthcare should be targeted for youths close to the legal age of driving. Traffic control is needed, especially during weekends, national holidays and late hours.

Patterns of alcohol consumption in the elderly: trends (1998–2006) in France

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Background

'Baby-boomers' grew in social acceptance of alcohol consumption. However the misuse of alcohol could lead to serious health problems in the elderly. The aim of this study was to describe the patterns of alcohol consumption in the elderly and to estimate the trends from 1998 to 2006.

Methods

We carried out a repeated cross-sectional study. Data collected during the periodic health examination (PHE) among people aged ≥65, referred to the 85 Centers for health prevention of the French health insurance were used. The PHE included clinical examinations, several tests and autoquestionnaire. Alcohol use was assessed using the autoquestionnaire. Alcohol users were classified as: non users, former users, episodic users and regular users. The outcome measure was the annual prevalence rate of alcohol consumption. The Joinpoint regression analysis was used to compute temporal changes in alcohol use.

Results

330 948 participants were included in the study. 50.2% were men and the mean age was 70.02 ± 4.5 years [65–98]. 68.2% live in couple. 71.6% of participants used at least one medication. 34.8% (48.6% of men and 20.7% of women) were regular alcohol consumers. The annual rates of regular users decreased significantly from 38.2% in 1998 to 28.9% in 2006. The Annual Percent Change (APC) was –3.9% per year [–4.9, –2.9]; $P < 0.000$. About 2% of participants were former users. The trends in this group were unchanged. There was a generational effect on the trends of alcohol use: participants born in 1923 consumed more alcohol than those born in 1933 at equal age.

Conclusions

This study showed a decrease in alcohol consumption in French elderly from 1998 to 2006. However, the prevalence rate remained high and the fact that there was no change in the trends of former users for the observed period suggests that improvements in health prevention programs in this topic are still needed.

2008 Parallel Session F6 Public health policy and interventions

Programmes, interventions and policies for preventing tobacco, alcohol and drugs use: evidence of effectiveness

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Background

The use of tobacco, alcohol and other drugs is the predominant cause of the burden of disease in developed countries, including mortality excess, and wide-ranging effects on personal safety, mental health and social well-being. The aim of this work is to identify the programmes, interventions and policies effective for preventing tobacco and drug use, and alcohol misuse.

Methods

Systematic reviews, reports of international agencies, and guidelines of preventive practice were searched and examined. The Cochrane Library (Issue 1/2007), the Medline database and the websites of NICE, CDC, European Union, WHO, SIGN, NIDA and EMCDDA were also explored. All documents useful for the research question were examined and synthesized. The primary prevention interventions were classified in: (i) universal prevention, when targeted to the general population as well as to specific unselected populations (school, family and community); (ii) selective prevention, when targeted to subsets of the population identified as having a higher risk of drug use than average; and (iii) indicated prevention, when targeted to those who have already taken drugs and are considered to be at risk of becoming addicted.

Results

Bans and restrictions are effective in preventing tobacco and alcohol use. School-based programmes based on the comprehensive social influence approach, and family programmes for selected populations appear to be effective. Mass media campaigns can be effective in reducing tobacco use, especially when associated with school-based and community programmes. Knowledge-based school programmes and employment skills programmes are not effective. No evidence is available on the interaction among market advertising, prevention campaigns and programmes at the community levels.

Conclusions

The availability of data on effectiveness of interventions is far from satisfactory, particularly for interventions at a population level. However, the evidence collected so far is sufficient on which to base effective public health policies.

2008 Parallel Session C3 On child and adolescent public health1

Effectiveness evaluation of the school-based cannabis prevention programme 'Xkpts.com' in Barcelona adolescents

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Background

To evaluate the effects of a drug prevention programme specifically oriented towards cannabis use ('xkpts.com'), on regular cannabis consumption, among secondary school adolescents.

Methods

A quasi-experimental study was designed. The intervention group (IG) (1863 pupils) was exposed to the programme and compared with a control group (CG) (1326 students) regarding cannabis use. Two surveys linked by an individual code were administered to students before and a year after the programme. The intervention included a school-based programme, consisting of two sessions with regard to cognitive issues, attitudes, making decisions and consequences of drug consumption; and two sessions about social pressure and refusal skills in front of cannabis offers.

Results

At 12 months after the intervention, 8.3% of students became new cannabis users (in the last 30 days) in the IG vs 11.6% in the CG ($P < 0.05$). The incidence in the IG decreases from 8.3% to 4.3%, when we select those students exposed to the programme when it was correctly implemented ($P < 0.05$). Besides the intervention [OR = 2.4 (95% CI 1.3–4.4)], the main factors associated with progression towards regular cannabis consumption at 12 months were to be regular smokers [1.6 (1.1–2.4)], to get drunk in the last 6 months (1.8 (1.2–2.5)), to report binge-drinking (1.4 (1.0–2.0)) to show low self-efficacy [1.6 (1.1–2.2)], to have easy access to cannabis (1.9 (1.2–2.9)), to have cannabis consumer friends [2.3 (1.2–4.1)] and the intention to consume cannabis in the future [4.0 (2.8–5.8)].

Conclusions

These results endorse the effectiveness of the school-based drug prevention programme with skills on how to cope with cannabis. The right implementation of the intervention increases the differences in cannabis prevalence related to the control group.

The importance of general, social and drinking refusal self-efficacy for alcohol drinking patterns among Slovak university students

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Background

Excessive use of alcohol by university students is a significant health problem. Quantity and drinking frequency are two important factors in determining drinking patterns. The aim of this study was to investigate how different types of self-efficacy contribute to these drinking patterns among university students by gender.

Methods

The sample consisted of 934 Slovak university students (First to fourth year; mean age 21.1_{-1.8}; 63.8% female). Binary logistic regression was performed separately for both genders to assess the impact of five predictors (social self-efficacy and general self-efficacy as factors of the Self-efficacy Scale; self-efficacy for avoiding drinking under social pressure, for emotional relief and opportunistic drinking as factors of the Drinking Refusal Self-efficacy Scale) on drinking frequency (<1 drinking days per week versus >1 day) and quantity (at least once >5 drinks on one occasion in the preceding month versus <5 drinks).

Results

C-statistics confirmed the discriminative power and the adequacy of the drinking frequency model (c 0.75; 95% CI 0.69–0.81) for men and (c 0.75; 95% CI 0.68–0.82) for women, as well as the drinking quantity model (c 0.73; 95% CI 0.67–0.79) for men and (c 0.74; CI 0.67–0.81) for women. Low level of self-efficacy for avoiding drinking under social pressure significantly increased the probability of drinking frequency among men (OR 0.89; 95% CI 0.85–0.94) and among women (OR 0.88; 95% CI 0.83–0.93), and also drinking quantity among men (OR 0.73; 95% CI 0.66–0.81) and women (OR 0.86; 95% CI 0.83–0.9). In addition, higher levels of social self-efficacy significantly predicted higher drinking quantity among men (OR 1.18; 95% CI 1.07–1.3) and also among women (OR 1.06; 95% CI 1.01–1.13). General self-efficacy was not associated with alcohol frequency (OR 1.03 for men, OR 0.99 for women) or drinking quantity (OR 0.99 for men, OR 1.00 for women).

Conclusions

Our findings confirm that social situations and peer pressure play an important role in drinking behaviour. Drinking refusal self-efficacy was a strong predictor of alcohol drinking among university students. Intervention programs focusing on enhancing refusal skills, which may influence individuals' abilities to resist peer pressure, look promising.

Unplugged: a European school-based programme effective in preventing tobacco, alcohol and drug use among adolescents

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Background

In the school-based drug abuse prevention field, a large number of programmes have been developed. However, in most cases the effectiveness of the programme in reducing drug use has not been evaluated. Moreover, most of the programmes come from the United States. For this reason the EC funded in 2003 the EU-Dap multicentric study.

Methods

'Unplugged' is the first school-based prevention programme developed in Europe. It was designed by an international group of expert experimented in drug prevention in the frame of EUDAP study. It was then implemented and evaluated through a randomised controlled trial conducted between 2004 and 2006. In the second phase of EU-DAP the teacher handbook was largely revised, namely based on teacher feedback. Moreover, to complement the new teacher handbook a students workbook was developed intended as a personal workbook for the student and containing activities that students are to work through during the 'Unplugged' units. The quiz cards, a set of cards used to teach the risk of drug use have also been revised. A part from the revision of the content a new appealing graphic version was developed.

Results

'Unplugged' is a strongly interactive programme and consists of 12 units, each one with a standard structure. The results of effectiveness evaluation showed at post test, 3 months after the programme, a statistical significant reduction of daily smoking, drunkenness episodes and cannabis use among the intervention students towards the control. The effect on drunkenness and cannabis was maintained at 1-year follow-up. The programme is based on the comprehensive social influence approach, and includes a training of personal and social skills with a specific focus on normative beliefs. Unit 1 introduces the programme to the pupils. Units 3, 5 and 9 are designed to deal mainly with adolescents' knowledge and attitudes. Units 2, 7 and 8 deal with interpersonal skills. Unit 4 includes activity on normative beliefs. Units 6, 10, 11 and 12 deal with intrapersonal skills.

Conclusions

The 'Unplugged' programme has a high degree of standardization: this makes it suitable to be disseminated in the different contexts of the European schools as well as to be adaptable to several language and culture-specific settings.

Evaluation of a national information and prevention campaign on drug and alcohol use in Belgium

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Background

Between 29 January and the 25 February 2008, a national information and prevention campaign was launched on television, big commercial pallets in the streets, newspapers and postal cards. By means of a True-False concept the campaign tried to make the theme 'drug and alcohol' more discussible in the general public. Furthermore, it tried to make people think about it and prompt the public to inform themselves by exploring the suggested sources of information: a dedicated telephone line and a website. The campaign was evaluated to assess its effectiveness.

Methods

The first phase is the evaluation of the campaign in the general public. Following a detailed scenario, a telephonic questionnaire was held, proportionally spread over the different regions in Belgium. A CD-ROM with 4 500 000 fixed phone number subscribers in Belgium was used to obtain a sample of 1000 Belgians. To obtain a more representative group spread over all age groups, extra mobile phone numbers were added and 50 young people were interviewed on the street in Brussels and Antwerp. In the second phase we performed Focus Group Discussions to evaluate the promotion material of the campaign in people from health or youth sectors who used the material.

Results

Response on telephonic questionnaire: of the 2687 called numbers 864 (32.2%) people responded, 1295 (48.4%) could not be reached and 446 (16.5%) people refused to participate. Of the 1000 successful conversations, 191 (19.1%) saw the campaign. For 37% of them, the campaign incited them to think about their drug and alcohol use and that of their environment. Of the people who saw the campaign, 24.1% were incited to talk about their alcohol and drug use and that of their environment. Some first results from the focus groups: the campaign is not enough goal-group oriented and should be more eye-catching.

Pattern in socioeconomic inequalities and drinking behaviour in Belgium, from 1997 to 2004

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Background

Previous studies have comprehensively documented a clear a persistent social gradient in alcohol-related mortality and that socioeconomic status (SES) contributes to unequal rates of alcoholism-related diagnoses. In industrialized countries higher SES groups tend to drink more frequently but smaller amount whereas those in lower SES groups have a higher prevalence of abstainers but those who drink, drink more often in a problematic way. The aim of this study is to investigate how social inequalities operate with regard to heavy drinking behaviour over time in the Belgian adult population.

Methods

Data were obtained from three consecutive Health Interview Surveys (1997 n = 5486, 2001 n = 6286 and 2004 n = 5770). The age range was 25–64 years. SES was measured by educational level. Multiple logistic regression were employed to calculate age-adjusted OR for men and women by educational level for heavy episodic drinking (>6 glasses/day once or more in the past 6 months).

Results

Over time men report in average two times more excessive episodic drinking than women (53% vs 21%). For both gender we observed an unquestionable SES gradient on heavy drinking behaviour: people with higher SES are more likely to drink heavily than those with lower SES. This gradient decreased statistical significant between 1997 and 2001 for finally become stable in 2004, from 2.2 (95% CI 1.7–2.8) to 1.1 (95% CI 0.8–1.4) and from 3.4 (95% CI 2.0–5.6) to 1.3 (95% CI 0.9–1.9), respectively for men and women.

Conclusions

This study reveals unlike prior studies that people with higher SES are at greatest risk for problematic drinking. From 1997 to 2004, the SES gradient in alcohol consumption has significantly decreased especially for women. Further analysis should look at the reasons behind such an evolution in the effect of SES on drinking behaviour and provide more information on alcohol-related problems in order to describe more clearly where and how SES contribute to differential risks for alcohol misuse and help, in a more efficient way, to better tailor preventive actions.

2008 Parallel Session B5 Obesity 1

Alcohol, beer, wine, spirits, drinking patterns and obesity

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Background

Anecdotally, beer has long been seen as more obesogenic than wine or spirits but empirical data on this important public health question are sparse and contradictory. Similarly, little is known about whether episodic drinking has similar effects as regular intake. We investigated the association between body mass index (BMI) and waist-hip ratio (WHR) in large cohorts in populations with different drinking patterns and beverage preferences.

Methods

The HAPIEE Study examined random population samples of men and women aged 45–69 years in Novosibirsk (Russia), Krakow (Poland) and six cities of the Czech Republic. Anthropometric indices were measured in a clinic. Intake of beer, wine spirits and total alcohol in the last week was assessed by a questionnaire. Data were analysed separately in men (n = 13 519) and women (n = 15 075), first in the full sample and then in subjects who drank exclusively beer, wine and spirits, after controlling for age, country, education, physical activity, cholesterol and smoking.

Results

In men, BMI was not associated with intake of beer, wine, spirits or total alcohol. In contrast, WHR was positively associated with weekly intake of beer, spirits and total ethanol but not wine. In women, intake of each beverage and Total alcohol intake was inversely associated with BMI and, of marginal significance, positively with WHR. The magnitude of statistically significant effects was modest, not exceeding 0.004 units of WHR (positive effect) and 0.5 units of BMI (negative effect) per 100 g of ethanol per week. There was a statistically significant effect of binge drinking pattern, which was independent from the weekly intake; men and women who drank >80 g of alcohol per single drinking occasion at least once a month had WHR 0.008 (P > 0.001) and 0.012 (P = 0.013) units, respectively, higher than those who did not report episodic drinking.

Conclusions

WHR, but not BMI, was positively associated with intake of beer, spirits and total alcohol but the effects were too small to be of practical significance. The positive association of binge drinking with WHR, which was independent from weekly drinking volume, may be of relevance to the discussion about the link between heavy drinking and the metabolic syndrome.

2008 Parallel Session C1 Healthy lifestyles

The effect of 5 years of multi-factorial lifestyle intervention on alcohol intake in a general population: the Inter99 study

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Purpose

To investigate the effect of a population-based multi-factorial lifestyle intervention on changes in long-term alcohol intake.

Methods

The study was a randomized controlled intervention study. Two random samples from a population of 61 301 individuals were drawn (a high-intensity intervention group A, n = 11 708 and a low-intensity intervention group B, n = 1308) and invited for a health screening programme. Participant rate was 52.5%. Participants received a life-style consultation including advice to reduce alcohol intake in those with an intake above the recommended maximum level (men: 21 drinks per week; women: 14 drinks per week). Those defined as at high risk of ischemic heart disease in group A were furthermore offered lifestyle counselling in groups. High-risk individuals in Group B were referred to their general practitioner. The intervention was repeated at 1- and 3-years follow-up in high-risk individuals. From the remaining population, a control Group was drawn (n = 5264) and followed by questionnaires.

Alcohol intake was measured by food frequency questionnaire. Changes in alcohol intake were analysed using multi-level linear regression analyses.

Results

At 3-year follow-up men in group A, compared to the control group, had significantly decreased their intake of drinks (total) per week (net change: 0.94; $P < 0.01$) but at 5-years follow-up the effect attenuated. In men with high intake of alcohol (>21 drinks per week), the intervention effect was maintained at 5-years follow-up (net change: 3.27; $P = 0.03$). The intake of wine was significantly increased at 5-years follow-up in men in group A (net change: 0.46; $P = 0.04$). No significant effects were found in women in total drinks (net change: 0.13; $P = \text{NS}$) or in wine (net change: 0.15; $P = \text{NS}$). Similarly, no significant effect was found in group B.

Conclusion

Multi-factorial lifestyle intervention including both individual and group counselling decreased the total alcohol intake in men, but not women, in a general population.

2008 Parallel Session E5 Mortality

Cause-specific inequalities in male mortality by individual socioeconomic status in Scotland, 1999–2003

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Background

Area-based inequalities in mortality have increased from 1981 to 2001 in Scotland. Our aim is to assess the extent of inequalities in all-cause and cause-specific mortality by individual socioeconomic status.

Methods

Mortality data for 1999–2003 for the whole of Scotland were combined with population data from the 2001 Census for men aged 25–64 years. Socioeconomic status was measured using the seven-group National Statistics SocioEconomic Classification (NS-SEC). Directly standardized mortality rates were calculated for all-cause and cause-specific mortality. Inequalities were assessed using Poisson regression to compare the highest and lowest social groups (higher managers and professionals, and routine occupations), each containing 13–14% of the population.

Results

Male mortality for ages 25–64 years was 583 per 100 000 (95% CI 562–604); corresponding rates for the highest social group 288 (249–327) and 1113 (1041–1185) for the lowest. The rate-ratio was 4.18 (3.99–4.39). All individual causes of death showed inequalities. The ratio for ischaemic heart disease (IHD) [4.36 (3.93–4.85)] was comparable to that for all causes, but was lower for all cancers [2.71 (2.51–2.94)]. IHD and cancers together constitute 53% of mortality at these ages (61% and 48% in the highest and lowest social groups, respectively). For other causes inequalities are of extreme concern; the rate-ratio for deaths from drug use was 46.5 (19.2–112.8), alcohol use = 7.61 (5.44–10.6), assault = 38.8 (12.3–122.0), chronic liver disease = 6.81 (5.57–8.33) and suicide = 5.78 (4.74–7.06). These five causes combined together made up 18% of all mortality (12 and 21% in the highest and lowest groups respectively).

Conclusions

Recent increases in mortality in causes of death related to behaviours—suicide, assault and drug- and alcohol-related mortality—have largely been restricted to deprived communities. The extent of inequality by individual socioeconomic status for these causes, combined with increasing mortality rates, is largely determining the extent of inequalities in Scotland.

2009

2009 Parallel Session 7.4 Safety and injury prevention

Exploration of the impact of a large reduction in alcohol prices on hospital admissions related to alcohol

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Background

In 2004 there was a large reduction in the price of alcohol in Finland due to a reduction in alcohol taxes by one-third, on the average, and due to the abolition of travellers' duty free allowances from the EU. We examined to what extent these changes affected hospital admissions related to alcohol.

Design

Time series intervention analysis with auto-regressive integrated moving average modelling was applied to the monthly aggregations of hospital admissions in Finland for the period 1996–2006 to assess the impact of the reduction in alcohol prices. Analyses were carried out for men and women aged 15–39, 40–49, 50–69 and >69 years.

Results

The impact of the price reduction on hospital admissions related to alcohol varied according to sex and age. The rate in chronic hospital admissions increased in every age-group under age of 70 years in men. Among men aged 50–69 years, the increase was largest: the impact parameter of 0.20 indicates an increase of 22% in mean rate of hospitalizations, which implies an increase of 18.0 monthly hospitalizations per 100 000 person-years. In other age-groups the increase varied from 13 to 16% (4.8–13.0 hospitalizations). Among women aged 50–69 years, the rate in chronic causes increased by 25% (4.3 hospitalizations), while among women under age of 40 years, the rate decreased. Among men, the rate in acute hospital admissions increased in every age-group under age of 70 years. The increase was largest by 18% and 20% (7.2 and 6.2 hospitalizations) among men aged 40–49 and 50–69 years. Among women aged 50–69 years, the rate in acute causes increased by 38% (2.3 hospitalizations), while in other female age-groups, an increase was not statistically significant.

Conclusions

The results obtained in a natural experiment setting with time series analyses suggest that a reduction in alcohol prices led to increases in hospital admissions related to alcohol in certain population subgroups in Finland, even when trends and seasonal variation had been taken into account. Particularly, persons aged 50–69 years were affected.

2009 Poster Session 10 Child and adolescent public health

Leisure time activities, parental monitoring and excessive drinking among adolescents

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Background

One of the most common externalizing problems in adolescence is excessive alcohol use, which is also a major public health issue. The aim of this study was to describe the role of leisure time activities which are considered as 'risky' and the role of parental monitoring in excessive drinking.

Methods

We conducted a cross-sectional questionnaire-based survey among Slovak adolescents in 2006. The sample consisted of 3694 elementary school students from the eight and ninth grades (mean age 14.3, 49.0% males). Respondents answered questions on the frequency of drunkenness in the previous month, on participation in three leisure time activities considered as 'risky' (going out with friends, going to parties and going to sports matches) and on parental monitoring. Binary logistic regression

analyses and t-tests were performed to analyse the association between the adolescents' excessive drinking and leisure time activities as well as parental monitoring.

Results

Adolescents who participate in at least one of three 'risky' leisure time activities (daily or several times a week) and those with lower levels of parental monitoring were more likely to report excessive drinking (drunkenness in the previous month). Moreover, adolescents who participated in at least one 'risky' leisure time activity and reported to have been drunk in the previous month (27%) were significantly less monitored by their mothers, but not by their fathers in comparison with those who participated in the mentioned activities but did not report having been drunk (73%).

Conclusion

Our findings indicate that participation in specific kinds of leisure time activities and low levels of parental monitoring (in particular by mothers) are linked with the likelihood of adolescent excessive alcohol drinking. This supports the importance of parental monitoring of the whereabouts of adolescent children for preventing excessive drinking.

[2009 Parallel Session 4.7 Workshop Preventing socioeconomic inequalities in health behaviour in adolescents in Europe - Findings from project TEENAGE](#)

The prevention of socioeconomic inequalities in alcohol consumption in adolescents in Europe

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Background

In adults, there are well-established inequalities in alcohol consumption: the prevalence of excessive alcohol consumption is much higher among lower as compared with higher socioeconomic groups. Because alcohol consumption often starts in adolescents and the prevalence of consumption is often high, prevention approaches increasingly target adolescents. There is little knowledge as to whether such intervention approaches have a larger impact in higher or lower socioeconomic groups.

Methods

A systematic review was conducted in order to identify intervention studies conducted in the general European population of adolescents since 1995 aimed at the prevention of alcohol consumption. A total of four studies met the inclusion criteria and they were re-analysed for higher and lower socioeconomic groups.

Results

Preliminary results of a comprehensive social influence approach (incorporating components of critical-thinking, decision-making, problem-solving, creative-thinking, effective- communication, interpersonal-relationship skills, selfawareness, empathy, coping with emotions and stress, normative belief and knowledge about the harmful health effects of drugs) showed stronger effects in lower as compared with higher groups. Given the less number of studies identified, there is a need to increase research on preventing socioeconomic inequalities in alcohol consumption.

[2009 Parallel Session 5.4 Physical activity and health promotion](#)

Alcohol consumption and problem drinking as predictors of incident psychiatric hospital admission: evidence of gender differentials in combined analyses of the three linked Scottish Health Surveys (1995–2007)

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Background

Few studies have examined prospective associations of alcohol intake and problem consumption with subsequent mental disorder. We addressed this using pooled analyses of three Scottish cohort studies.

Methods

Responses of participants in the 1995, 1998, and 2003 Scottish Health Surveys were linked to psychiatric hospital admissions until the end of 2007. Analyses were based on 22 577 (95% of respondents) consenting to linkage who had no previous psychiatric admission. We used three measures of alcohol intake and problem drinking: exceeding guideline weekly limits (>21 standard units for men, >14 units for women); binge drinking (≥8 units for men, ≥6 units for women), and CAGE alcohol-related problems screening questionnaire (score₂). Socio-demographic factors: area deprivation, occupational social class, education and marital status; cigarette smoking, physical activity, somatic illness and psychological health (based on GHQ12) were ascertained at survey.

Results

Overall, 21% exceeded weekly drinking guidelines, 21% binge drank and 8% were problem drinkers. There were 115 psychiatric hospitalizations in men; 129 in women. In age-adjusted analyses, exceeding weekly alcohol guidelines was associated with increased risk of psychiatric hospitalization in men (hazard ratio = 1.54; 95% confidence interval: 1.06, 2.24) but not women (0.77; 0.43, 1.45) (sex interaction $P = 0.067$). After additional adjustment for socio-demographic factors, smoking, physical activity and somatic illness, risk among men remained elevated but lost statistical significance (1.38; 0.93, 2.03). Corresponding results for problem drinking were 2.54 (1.44, 4.48) and 1.73 (0.94, 3.16) for all adults. Binge drinking was not associated with psychiatric illness in any of our analyses. Further adjustment for GHQ12 did not alter results. Findings were similar for analyses excluding non-drinkers (comprising never drinkers and ex-drinkers).

Conclusions

Problem drinking and, among men, excess weekly drinking was associated with subsequent psychiatric hospitalization. Associations persisted but not significantly after adjustment for socio-demographic circumstances and covariates including psychological health at survey. Findings were robust to the exclusion of non-drinkers.

2009 Parallel Session 5.6 Sickness absence and mental health

Drinking behaviour and disability retirement in Norway. The HUNT Study

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Background

The role of alcohol consumption in predicting work incapacity, and the relationship between alcohol use, mental health and disability pension (DP), is not clear. We aimed to prospectively investigate the relationship between drinking behaviour and the receipt of DP.

Methods

A large cohort was linked to the national insurance database. Baseline information on 37 842 working age (20–61 years) individuals was gathered from the population-based health study HUNT-2. Participants already awarded DP at baseline were excluded. Among current drinkers risk drinking was assessed using the CAGE-questionnaire. Consequently we were able to compare six groups; abstainers and five groups with CAGE-scores 0–4. Potential confounders included age, gender, and symptoms of depression and anxiety (measured by Hospital Anxiety and Depression Scale). In a sub-sample ($n = 17\ 949$) we also looked at the impact of previous heavy drinking amongst abstainers ('sick-quitting').

Results

A J-shaped association between CAGE-score and risk of subsequent DP was found. A CAGE-score of 1 yielded the lowest risk, while a score of 4 increased the risk (HR, 2.96; 95% CI, 2.07–4.22). Abstainers had an HR equal to 1.42 (95% CI, 1.19–1.70). In the subsample, previous heavy drinking among abstainers did not account for anything in the association with subsequent DP.

Conclusions

Both abstainers and self-reported risk drinkers were at increased risk of being awarded DP compared with individuals reporting a CAGE-score in the range of 0–2. Most likely there are different mechanisms in each end of the curve. The increased risk among abstainers cannot be explained by previous heavy drinking.

2009 Poster Session 5 Health promotion

Ten D by Night (Dark, Dance, Disco, Dose, Drugs, Drive, Danger, Damage, Disability, Death): a European multicentric cross-sectional study

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Background

Alcohol and psychoactive substances play a major role in causing road accidents, particularly among young people during weekends. The aim is to define a European approach to reduce related road accidents among young drivers.

Methods

Belgium, Bulgaria, Italy, Latvia, Poland and Spain have been involved in the project, funded by European Community (EC) on Public Health programme. The partners are currently recruiting a sample of 6000 drivers (16–24 years old) attending disco-clubs during weekends. A multidisciplinary team administers to participants two specific questionnaires, two alcohol tests and two reaction time tests (with a driving simulator) at the entrance and exit of the club, along with a multi-drug test at the exit. In every country, a pilot study has been carried out.

Results

One hundred and sixty-two subjects have been enrolled in pilot studies (75.9% male). The overall alcohol test mean score has been 0.36 g/l (SD 0.56) at the entrance and 0.51 g/l (SD 0.64) at the exit of the clubs, while the average reaction time has been 0.67s (SD 0.23) at the entrance and 0.70 s (SD 0.32) at the exit. The detected consumption of psychoactive substances has been negligible. 20% of subjects have driven in the last month under alcohol effect and 7% reported a traffic accident in the same condition. Individuals with alcohol level higher with respect to law limits (0.5 g/l) had a higher risk of slow reaction time (OR 1.48, 95% CI 0.66–3.32), even if the result is not statistically significant.

Conclusions

The preliminary results confirm the effect of alcohol on driving reaction time and show a large percentage of participants not considering it as a potential risk for driving performance. These findings should increase our efforts for improving Young drivers' awareness about the dangerous effects of alcohol and should encourage the implementation of European shared actions. Further data analysis may add insights on driving behaviors and consumption habits of the youth and help planning more tailored preventive programs.

2009 Poster Session 6 Inequalities and migrant health

Socio-economic factors, ethnicity and alcohol-related mortality in regions of Slovakia. What might tree analysis add to our understanding?

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Background

Alcohol is a major determinant of premature death, particularly in Central Europe. Regional differences in alcohol-related mortality might reflect strong socio-economic differences between regions. The aim of this study is to explore this relationship.

Methods

Selected area characteristics (proportion of inhabitants with tertiary education, unemployment, Roma ethnicity, average income) and regional differences in alcohol-related mortality for inhabitants aged 20–64 years in the period 2001–03 were explored in all 79 districts of the Slovak Republic. Linear regression analysis and a non-parametric regression tree analysis were used separately for males and females.

Results

Socio-economic differences in regional alcohol-related mortality were found among males, but not among females. Aside from a region's proportion of Roma inhabitants, the crude effect of all socio-economic variables explored were significant for explaining from 11.1 to 18.2% of the variance. The model exploring the mutually adjusted effect revealed slightly different results, including a significant effect of the ethnicity measure, explaining 30.3% of the variance. Using the tree analyses, districts were divided into four groups, mentioned in ascending order with regard to average male mortality rate: districts with (i) a high proportion of tertiary educated (avgSMR = 1.404), (ii) a low proportion of tertiary educated and high proportion of Roma (avgSMR = 1.572), (iii) a low proportion of tertiary educated, low proportion Roma and low proportion of unemployed (avgSMR = 1.671), and finally (iv) a low proportion of tertiary educated, low proportion Roma and high proportion of unemployed (avgSMR = 2.145). A district's unemployment rate was assumed to be the strongest predictor of the outcome measure.

Conclusion

Male, but not female, alcohol-related mortality was associated with the socio-economic characteristics of a district. The unemployment rate and low education appeared as important determinants of regional alcohol-related mortality, while the proportion of Roma and income were not significantly associated with alcohol-related mortality among males in Slovak districts.

Urban–rural differences in smoking and alcohol consumption in Lithuania

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Background

Smoking and alcohol consumption are increasingly associated with social disadvantage.

Aim

To evaluate urban-rural differences and trends in smoking and alcohol consumption in Lithuania over the transition period (1994–2002).

Methods

Since 1994 five health behaviour surveys have been carried out in Lithuania within the international project FINBALT HEALTH MONITOR. The national random samples of 3000 Lithuanians aged 20–64 were taken out from the National Population Register for every survey. The data were obtained from mailed questionnaires covering sociodemographic characteristics and health behaviour indicators, including smoking and alcohol consumption. The response rates varied between 64% and 74%.

Results

In 2002 the prevalence of daily smoking was 43.6% among men and 12.4% among women. Since 1994, the proportion of daily smokers among women has doubled and has not changed among men. The changes were greater in rural areas. The prevalence of daily smoking among rural women increased from 4.5% in 1994 to 10.8% in 2002. In 1994 smoking was most prevalent among men living in rural areas. Over period of eight years the difference disappeared because of decreasing trends in prevalence of smoking among rural men. The frequency of beer drinking is continuously increasing. In the last survey 58.9% of men and 18.4% of women reported beer drinking at least once a week, while in 1994 – 43.5% and 7.1% respectively. The most significant increase in beer drinking was observed in men living in small towns and in women living in rural areas. Since 1994 the frequency of drinking strong alcohol has increased only among women in rural areas.

Conclusions

The increasing trends in smoking among women and alcohol consumption among rural population over the transition period demand the urgent development of tobacco and alcohol control strategies reaching the target groups of Lithuanian population.

2009 Poster Session 13 Training and education

Psychosocial variables and alcohol binge drinking and problematic drinking patterns among university students

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Background

Binge and problematic college alcohol drinking are important public health problem, because there is a risk that some individuals can continue with this form of risk behaviour after college. The aim of this study was to investigate the association between the social skills and the alcohol refusal skills under pressure, as well as binge and problematic alcohol drinking among university students.

Methods

Binary logistic regression was used in order to explore the simultaneous contribution of social skills (the behavioural factor of The Tromso Social Intelligence Scale) and alcohol refusal skills under the pressure (the factor of the Drinking Refusal Self-Efficacy Questionnaire) towards binge drinking (5 or more drinks at least once during the last month), and problematic drinking patterns (two or more positive answers on the questions of CAGE test) among university students (934 university students; mean age 21, SD 1.8; 63.8% girls) from three universities in Kosice, Slovakia.

Results

Social skills and the alcohol refusal skills under pressure among both females and males were found to be significantly associated with binge and problematic drinking patterns. Higher levels of social skills and lower levels of alcohol refusal skills under the pressure were found to be significantly associated with alcohol binge drinking and problematic drinking.

Conclusions

Our findings confirmed that social skills, as important part of students' psychosocial competence, might be included among risk factors of binge and problematic alcohol use among university students. The importance of the development of alcohol refusal skills under the pressure was confirmed in this research not only among adolescents, but also among university students.

2010

Cognitive ability measured in adolescence and later alcohol-related problems—longitudinal study on Swedish men

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Background

Cognitive ability is associated with several health-related outcomes and different mechanisms have been suggested: childhood circumstances, individual management of health and adult socio-economic circumstances. Previous research has presented diverse results regarding the association between IQ and alcohol-related problems. This study aimed at investigating the relationship between cognitive ability measured at age 18–19 years and later alcohol-related problems, while controlling for established risk factors for such problems.

Methods

A total of 43 834 men born 1949–51 in Sweden were followed from time of conscription for compulsory military training 1969–70 until 2006–07. At conscription, data on cognitive ability (IQ) was collected, as well as extensive information on family background, social adjustment and personality characteristics. Adult socio-economic position (education, occupation, income) was obtained from national censuses. Information on alcohol-related hospital admissions were collected from national comprehensive health-related databases.

Results

Cognitive ability had an inverse and graded association with later alcohol-related problems. For the follow-up between 1971 and 2007 the crude result showed a hazard ratio (HR) of 1.29 [95% confidence interval (CI) = 1.27–1.32] for one point decrease on the nine point IQ scale regarding alcohol-related hospital admissions (2341 cases). Adjusting for risk factors measured in adolescence (psychiatric diagnoses, low emotional control, social misbehaviour, smoking, risk use of alcohol) attenuated the association (adjusted HR 1.17, 95% CI = 1.15–1.19). When the cohort was followed between the years 1991–2007 (1 039 first admissions) the crude HR was lower, HR 1.21 (95% CI = 1.17–1.25). After adjustment for risk factors from adolescence (only adjusted risk factors measured in adolescence, HR 1.13, 95% CI = 1.10–1.17) and also the measures of achieved socio-economic position the HR was considerably lowered (fully adjusted HR 1.05, 95% CI = 1.02–1.09).

Conclusions

The association between cognitive ability and alcohol-related hospital admission among men was markedly attenuated when adjusted for risk factors. Our findings suggests that social position as adult could be a strong mediating factor.

The influence of parents on alcohol use in adolescence in the Netherlands, 2000–08

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Background

Alcohol use during adolescence provides risk for health and social participation. Recent studies have shown that the earlier the onset of alcohol use, the higher the risk of developing alcohol-dependence later in adolescence and adulthood. But not all those early starters will develop dependency. Evidence on protective and risk factors is important for public health interventions aiming at the reduction of alcohol related risks. Previous research have shown that parents strongly influences adolescents' behaviour. The objective of this study was to determine which parental factors predict the developing of problematic alcohol use during adolescence.

Methods

Data from 1641 adolescents (53.2% girls) participating in the prospective cohort study TRAILS, Tracking Adolescents' Individual Lives Survey, were analysed. At ages 10–12 years adolescents

completed questionnaires on alcohol use and parent–child relationship (assessed by the subscale Emotional Warmth of the EMBU-questionnaire). From parents data were obtained about the family situation (divorced/not-divorced), socio-economic status (SES) and alcohol use. We used multivariate logistic regression to predict adolescents’ problematic alcohol use reported at age 15-18 (defined as seven or more glasses a week for boys and six or more glasses a week for girls).

Results

Alcohol use in early adolescence increased the probability of problematic alcohol use during late adolescence [respectively odds ratio (OR) 1.83 and OR 3.18 for one consumption and >one consumption]. Also parental divorce (OR 1.46), low SES (OR 1.51) and father and mother alcohol use [(scale divided into six categories) respectively OR 1.15 and OR 1.21] increased this likelihood significantly. Sex and the parent– child relationship did not contribute to this prediction of problematic alcohol use.

Conclusions

Early alcohol use is an important predictor of problematic alcohol use in adolescents. Family factors also play in important role: parental divorce, low SES and high amounts of parental alcohol use contribute to the prediction of problematic alcohol use. This knowledge can be used for the identification of risk groups.

The distribution and characteristics of alcohol outlets across Glasgow, Scotland and associations with area deprivation

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Background

Alcohol is a significant and growing problem in Scotland, with alcohol-related death rates among the highest in Western Europe. Rates of alcohol-related morbidity and mortality are highest in deprived areas in Scotland. Alcohol availability may be a contributory factor and some studies (mostly north American) have found that alcohol may be more readily available in deprived areas. We examine the distribution of alcohol outlets by area deprivation across Scotland’s largest city (Glasgow) using a variety of spatial scales (small areas and larger neighbourhoods or localities). We also explore whether there are systematic differences in the way alcohol is displayed and promoted in different areas across Glasgow.

Methods

All alcohol outlets (n = 2221, including pubs, off sales and other outlets such as restaurants and hotels) were mapped and density per 1000 residents and proximity to nearest outlet calculated across quintiles of area deprivation. Photographs were taken of the window displays of all off sales outlets (n = 450, comprising shops selling alcohol only and those which were general food stores licensed to sell alcohol). Photographs were subsequently coded and analysed to examine the characteristics of the outlets such as price promotions or signage related to harm reduction.

Results

The socio-spatial distribution of alcohol outlets varied by deprivation across Glasgow but not systematically. Some deprived areas contain the highest concentration while others in similar deprivation quintiles contain very few. Alcohol outlets in deprived areas were more likely to have price promotions for cut price alcohol. Less than 1% of outlets had any harm reduction signage, with little difference across areas.

Conclusions

Considerations of the local context are important in examining access to alcohol. There is scope to develop public health interventions around the sale and promotion of alcohol in local communities.

Reducing health inequalities by integrating public health with consumer protection

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Issue

Liverpool has amongst the worst indicators in England for binge drinking and hospital stays for alcohol-related harm. There is also a high incidence of smoking-related deaths, high smoking prevalence (28% of the adult population smoke) with 19% of 11- to 18-year olds described as regular smokers.

Description

In recognition that treatment alone will not have a significant impact on tobacco- and alcohol-related harm, Liverpool Primary Care Trust has invested in a unique public health intervention. Since October 2008, a dedicated Alcohol and Tobacco Unit has been in place within the Trading Standards department of the City Council. This enforcement unit is funded by Liverpool Primary Care Trust and supported by Merseyside Police and works co-operatively with Her Majesty's Revenue and Customs. The unit aggressively targets illicit and counterfeit alcohol and tobacco sales and sales to children to support a range of health outcomes.

Headline results

- _ Approximately 2561 l of counterfeit and smuggled alcohol and £1 100 000 worth of illegal tobacco has been seized.
- _ Over 200 test purchases (i.e. under-age sales) have resulted in 27 vendors receiving a financial penalty for alcohol sales and fourteen prosecutions for tobacco.
- _ Intelligence links and system developed to monitor and undertake judicial interventions.
- _ Proactive campaigns conducted, targets include the student population, schools and music venues.
- _ Work with the trade representatives to encourage a responsible sales ethos.

Lessons

As fiscal policies are an effective deterrent for tobacco use and alcohol misuse, this innovative partnership has demonstrated that aggressive enforcement of existing legislation (e.g. Licensing and Trade Mark Legislation) can reduce the supply of cheap and illicit products. Multi-agency co-operation has been essential to the success of the unit and other areas are now considering replicating this example of good practice.

Implementation and programme fidelity of a community action programme targeting alcohol userelated problems at licensed premises in Sweden.

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Background

A community action programme aiming to prevent alcohol-related violence and injuries by means of co-operation, responsible beverage service training structured supervision of on-licensed premises, has been developed and spread in Sweden during the last decade. Before the programme was spread it had been evaluated in Stockholm showing a violence reduction of 29%. The aim of this study was to analyse research-based components of the implementation process, the barriers and facilitators for successful implementation, in all municipalities (N= 290) in Sweden and relate these to programme fidelity.

Methods

We captured the aspects of implementation (2010) and the programme fidelity (2007 and 2008) by questionnaires in three separate surveys. The surveys were sent to all municipalities in Sweden and the response rates in all three surveys were high (94-98%). Programme fidelity and aspects of implantation was measured by using indexes created by the research group. The relation between implementation and programme fidelity was analysed by means of regression.

Results

The dissemination of the programme seems to be successful with 258 (89%) of the municipalities reporting that they work according to the programme. When controlling for programme fidelity however, the number of municipalities with complete utilization of the programme decreases to 25 (9%). For municipalities with high programme fidelity evaluation and feed back combined appeared to be the most significant implementation components, $t = 7.06$ ($P < 0.0001$).

Conclusions

To measure programme fidelity is of great importance in implementation research. Evaluation and feed back is in this study confirmed as significant factors for successful implementation of community action programmes.

2010 conference: Parallel Session 6.12. Injury prevention

The contribution of smoking- and alcohol-related deaths to the gender gap in mortality in 30 European countries in 2005

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Background

Women now outlive men in all countries, and have done so for centuries in some in European countries. Debate continues about the causes of the gap; smoking has been a major contributor to the difference in earlier decades.

Objectives

To compare the magnitude of the gender gap in all-cause mortality in 30 European countries, and assess the contribution of smoking-related and alcohol-related deaths.

Methods

Data on all-cause, smoking-related and alcohol-related mortality by country were extracted from the WHO-Health for All database for year closest to 2005 (range 2003/4 to 2006). Rates were directly standardized to the European population standard for all ages. The proportion of the gender gap in all-cause mortality attributable to smoking-related and alcohol-related deaths was calculated.

Results

There was considerable variation in the magnitude of the male 'excess' of all-cause mortality, ranging from 188 (Iceland) to 942 (Ukraine) per 100 000 per year. Smoking-related deaths per 100 000 ranged from 52 to 329 in men and 18 to 77 in women, and accounted for 40–60% of the gender gap (range 38% [Portugal, France] to 74% [Malta]). Similar variation in alcohol-related mortality was seen (rates per 100 000 202–1081 in men, 75–586 in women) and typically accounted for around 20% of the gender gap (range 13% [Malta] to 30% [Lithuania]).

Conclusions

Smoking continues to be the most important cause of gender gap in mortality across Europe, but its importance as an explanation for this difference is often overshadowed by presumptions about other differences between men and women. Changes in smoking patterns suggest the gender gap in mortality will diminish in coming decades. Continuing links between smoking and drinking and cultural constructions of gender suggest that action to reduce smoking and drinking cannot be tackled at an individualistic level alone.

2010 conference: Moderated Poster Session: Environment, health and safety

The effect of Lithuania's year of sobriety (2008) on losses due to alcohol-related injuries

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The period of 2007–08 was the time for legislative work on alcohol control policies in Lithuania and 2008 was designated as 'The year of sobriety'. Objective of the study—to evaluate the changes in

years of potential life lost due to alcohol-related injuries in Lithuania for the 'Year of sobriety' (2008) in comparison to the years 2006 and 2007.

Methods

Data on mortality of the able-bodied population (15–64 years old) for the years 2006, 2007 and 2008 was obtained from the Lithuanian Department of Statistics. Age-standardized rates of alcohol-related years of potential life lost (YPLL) per 100 000 population due to injuries (ICD-10 codes V01-Y98) were calculated. The alcohol-attributable fraction was based on results of the Lithuanian forensic autopsies.

Results

Age-standardized YPLL/100 000 population due to alcohol-related injuries in 2008 was 2284.9 (3999.9 for males, 646.1 for females). One descendent lost in average 20.5 years of life due to alcohol-related injuries (one male in average 21.0, one female—18.1) in 2008. Significant decline of 17.5% in YPLL/100 000 was estimated throughout 2006–08. The leading cause of YPLL among all alcohol-related injuries for males were suicides and reached 1133.8/100 000 population in 2008. However, since 2006 till 2008 it increased by 17.7%. The second leading cause of YPLL for males and the First leading cause for females were alcohol-related traffic accidents (for males—550.3 and for females 111.1/100000 population in 2008). YPLL/100 000 population due to alcohol-related traffic accidents significantly declined during the period of 2006–08: for males by 33.4% and for females by 43.8%. General decline was observed in YPLL due to other major types of injuries both for males and females during the study period.

Conclusions

The positive changes in YPLL due to alcohol-related injuries indicate successful implementation of evidence-based alcohol control measures, which are likely to result in significant improvements in health of Lithuanian population.

2010 conference: Poster Occupational health and safety

Long-term sick leave in Sweden 1992–2008 and the role of economic conditions, legislation, demography, work environment and alcohol consumption

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Background

In Sweden, absence from work due to disease or injury has fluctuated considerably and this pattern is more pronounced than in most other European countries. Over time there has been a shift from short-term to long-term sick leave, more mental disorders, and increasingly more women than men are on sick leave. The aim of the study was to identify potentially important factors behind variations in long-term sickness absence.

Methods

Aggregated monthly data 1992–2008 were used to assess factors correlated with the number of ongoing cases of sickness absence lasting more than 59 days among women and men. OLS-regression on first-differenced time-series was applied. Associations with potential explanatory factors were analysed using statistics from national social insurance records, labour force and working conditions surveys, and other official statistics.

Results

Some changes in the sickness insurance and disability pension schemes were important, but the results showed no consistent associations for the study period. Instead, there was an upward trend during the 1990s and a downward trend from 2003 and onwards, regardless of whether the amendments entailed more generous or more restrictive rules. Compared with earlier findings, workforce composition were weakly associated with variations in long-term sickness absence. On the other hand, increased alcohol

sales, high work pace and among men also disorders caused by stress and strain at work, were associated with increased long-term sick leave.

Conclusions

In general, amendments to the social insurance schemes, and the composition of the labour force were only weakly associated with the variations in long-term sickness absence during the last decades. Amendments to legislation tend to lag behind rather than lead changes in long-term sick leave. Notably, our findings imply that public health indicators such as alcohol consumption and factors related to working conditions and worker health are more strongly associated with prolonged periods of sick leave.

2010 conference: Moderated Poster Session: Health systems and policy

Stakeholders' opinions on the alcohol policy measures in Slovenia

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In the process of designing and implementing the alcohol policy (AP) rather different stakeholders with the opposing interests are anticipated: one group wants to decrease and the other to increase the consumption of alcohol. The aim of our research was to study opinions on the policy impact and importance in reducing the harm done by the alcohol among different stakeholders in AP in Slovenia. Through their opinions stakeholders express their perspective on the subject, causes of a problem, evidence and solutions and thus consequently articulate their interests. A national questionnaire survey was completed by alcohol policy stakeholders that were divided into four main groups: governmental organizations (GOs), public health organizations (PHOs), non-governmental organizations (NGOs) and alcohol and related industry (AI). The questionnaire comprised of 25 items across nine alcohol policy domains. The percentage of overall response was 54.1%. The received data were analysed with SPSS and the differences in the opinions on particular alcohol measures between groups were measured using ANOVA and t-test. Three main factors were revealed by factor analysis: education, regulation and pricing. All stakeholders gave most emphasis in terms of impact and importance to the measures related to the education, communication, training and public awareness. GOs, NGOs and PHOs score the perception of the likely impact of the regulatory AP measures and the importance of imposition of regulatory measures on reducing the harm done by alcohol significantly higher than the AI. The AI perceive the impact and importance of pricing measures for reducing harm done by alcohol significantly lower than the group of other stakeholders. In comparison to the similar research on European level we have as well found that different interests in relation to particular AP measures guide different stakeholders but there are also some differences as a consequence of national and regional particularities. Despite the fact, that stakeholders share different opinions and interests, we have identified many common grounds on which different stakeholders could start cooperating to avoid impasses and prepare better and more effective AP measures for alcohol harm prevention in Slovenia.

2010 conference: Moderated Poster Session: Lifestyles

Eating habits, drinking, physical activity, smoking and usage of illegal narcotics in Estonia: gender differences

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Background

An improper diet, smoking, alcohol and illegal narcotics are known to harm health. In general, unhealthy lifestyles are more characteristic of men than women. There is some evidence about

unfavourable eating and drinking habits in Estonia. The extensive health gap between Estonia and western European countries, especially among male population is disclosed by several studies.

Aims

To study a magnitude of the prevalence of unhealthy lifestyles among Estonian adult population to explore whether the health gap between the genders in Estonia, and also between Estonia and the western European countries can be at least partly explained by the lifestyle differences.

Methods

The data on health behaviour were gathered from the Estonian Biobank Database. The final study population consisted of 4067 randomly selected respondents aged ≥ 18 years. The data analysis was performed by the SAS statistical packages (version 9.1).

Results

The prevalence of unhealthy lifestyles, especially in men was high. The men consumed cereals, fruits and vegetables less frequently, and the meat products, salt and alcohol more frequently than women. Total of 82.1% of the subjects consumed alcohol, 81% of them drank more than twice a month. Men began drinking at a younger age in comparison with women. The prevalence of smoking among men was 60.2% and among women 34.5%. Only 33.4% of the subjects were engaged in recreational or professional sports twice or more times a week. There were close positive correlations between unhealthy lifestyles.

Conclusions

The prevalence of unhealthy lifestyles in Estonian population, especially among men was much more pronounced than in western European populations. This might contribute to the poor health indices and the health gap between the genders in Estonia, and between the populations of Estonia and the western European countries. The results could be used by policy-makers for the development of a responsible health policy in Estonia.

[2010 conference: Moderated Poster Session: Public Health epidemiology](#)

Comparison of alcohol consumption in Estonia and Finland in 1994–2006

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Background

Alcohol consumption has been regarded as an important contributor to the high premature mortality rates. The objective of this study was to describe and compare alcohol consumption and its socio-demographic determinants among adults in two neighbouring countries Estonia and Finland.

Methods

The study was based on a 25–64-year-old subsample of nationally representative postal cross-sectional surveys conducted in Estonia ($n = 10\,340$) and Finland ($n = 19\,672$) during 1994–2006. Amount of alcohol consumed were examined. The effect of socio-demographic factors on pure alcohol consumed per week was calculated using linear regression.

Results

Throughout the study period, amount of alcohol consumed per week increased for both genders in Estonia and for women in Finland, but was stable for men in Finland. In the final study year, proportion of medium risk alcohol drinkers per week was nearly 1.5 times higher among men in Estonia than in Finland (16.2 and 11.6%, respectively), but about half that among women in Estonia than in Finland (4.7 and 10.0%, respectively). Compared with ethnic majority in Estonia, amount of pure alcohol drunk per week was 6 g higher among women of ethnic minority. In Finland, amount of pure alcohol drunk per week was 31 g lower for men and 8 g lower for women of ethnic minority. Compared with married/cohabiting adults, greater amount of alcohol consumed per week was more prevalent among single and divorced/separated respondents in Finland, but only among divorced/separated men in Estonia. Compared with higher educated adults, amount of consumed

alcohol per week was higher among men with secondary and basic education in Estonia (18 and 26 g, respectively), but 7 g lower among women with basic education in Finland.

Conclusions

National alcohol policies should reflect findings of alcohol epidemiology in order to introduce measures that will reduce alcohol-related harm in the population effectively.

2010 conference: Parallel Session 1.11. Adolescent health

Are materialism and gender role orientation associated with young people's smoking and drinking?

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Background

It has been suggested that the materialism of modern Western culture comes at a high price. Although the research focus has been mental health, the small number of studies on risk behaviours suggest higher substance use among more materialistic people. Risk behaviours have also been associated with 'masculinity'. We examine how materialism and gender role orientation are associated with substance use in contemporary European teenagers.

Methods

Data, obtained early in 2010, via a schools-based self-completion survey of 2800 Scottish 12–14 year olds, included items representing consumer involvement and a list of material possessions (e.g. 'Xbox 360, PS3 or Wii', 'ipod touch or iphone'). Analyses to date suggest four consumer involvement factors: dissatisfaction (e.g. 'feel like other kids have more stuff than I do'), image awareness ('like clothes with popular labels'), consumer orientation ('usually have something in mind that I want to buy or get') and anticonsumerism ('don't mind what kind of car my family has'). Respondents were categorized as a current smoker and drinker (1+ drinks on a usual occasion). Brief 'masculinity' (e.g. 'I am tough') and 'femininity' ('I am gentle') scales were also included.

Results

Analyses to date show that among both males and females, smoking and drinking were positively related to number of material possessions, and the consumer involvement factors 'dissatisfaction' and 'image awareness'. Both behaviours were also positively related to 'masculinity' and (except male smoking) negatively to 'femininity'. These relationships remained in mutually adjusted analyses and after accounting for age group and family affluence.

Conclusions

Policy makers may need to take account of the impact of not only specific tobacco and alcohol images on young people's smoking and drinking, but also of the ways in which modern materialism and gendered imagery might encourage the adoption of such health risk behaviours.

2010 conference: Parallel Session 4.6 Disease-based disparities

Does the effect of peers and parents on adolescents' binge drinking differ among Roma and non-Roma adolescents?

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Background

Binge drinking among adolescents is a major public health problem. The influence of peers and parents is considered to be substantial in adolescents' binge drinking but might operate differently in

ethnic minority groups. The aim of this study was to explore the effect of peers and parents on binge drinking among Roma and non-Roma adolescents.

Methods

A cross-sectional study was performed among Roma (N= 330; mean age = 14.5; interview) and non-Roma adolescents (N= 722; mean age = 14.9; questionnaire) in elementary schools. The interactions of ethnicity with peer influences (best friend drinks alcohol at least once a week) and of ethnicity with a lack of parental monitoring (parents did not know with whom they are when they go out) on adolescents' binge drinking (having been drunk in the past four weeks) were explored using logistic regression adjusted for gender, age and highest education.

Results

Being drunk in the past four weeks was reported by 12.4% of Roma and 19.6% of non-Roma adolescents. Age, gender, highest education of parents and ethnicity did not contribute significantly to adolescents' binge drinking. Both peer influences [odds ratio (OR)/confidence interval (CI) 3.56/2.37–5.34] and lack of parental monitoring (OR/CI 2.18/1.42– 3.36) increased the probability of adolescents' binge drinking in both ethnic groups. The interactions of ethnicity with peer influences (OR/CI 1.77/0.69–4.53) as well as with parental monitoring (OR/CI 1.44/0.59–3.54) on adolescents' binge drinking were not significant.

Conclusions

Peer and parental influences are considered to be crucial in many strategies to prevent adolescents' binge drinking. Our findings imply that such strategies might be effective in different ethnical/cultural settings, such as among the Roma. The effects of peers and parents on adolescents' binge drinking are mostly similar among Roma and non-Roma adolescents.

2010 conference: Parallel Session 7.13. Alcohol

Sick-quitting, alcohol use and mortality in a British population-based survey

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Background

Moderate alcohol consumption have been reported to be associated with a decreased risk for coronary heart disease, diabetes mellitus, cancer and common mental disorders, compared with both abstinence and high levels of consumption. Several studies have also investigated the association between abstainers and moderate alcohol consumers and mortality. Most of these have found increased risk for mortality among abstainers compared with moderate consumers. The reason for this increased risk is not yet clear, and competing explanations exist. One specific explanation that has been forwarded is that previous (heavy) drinkers are included in the abstinence group (sick-quitters), thus increasing the risk for the abstinence group as a whole. We aimed to investigate the contribution of sick-quitting to the relationship of alcohol use with all-cause mortality by separating lifelong abstainers from current abstainers in the sample.

Methods

We used the Health and Lifestyle Survey, a British population-based study initially conducted in 1984–85. Data from participants were linked to the national mortality registry. Self-reported alcohol consumption and alcohol-related problems as measured by the CAGE were exposures. The CAGE consists of four binary questions about alcohol-related problems. In the current survey, both current drinkers and ex-drinkers were asked the CAGE, the latter being asked about former use. Covariates were age and gender, and crude and adjusted hazard ratios (HRs) were calculated for both exposures.

Results

Of the 9003 interviews completed, 8602 (96%) participants had complete data. Among the current drinkers, those who scored 0–2 on the CAGE questionnaire had equivalent all-cause mortality compared with the lifelong abstainers in the sample. Those individuals scoring ≥ 3 were at increased risk. Among the current non-drinkers, individuals scoring 0, 1 and 4 were at increased risk. Compared

with the lifelong abstainers, the current abstainers (sick-quitters) were at increased risk HR (95% confidence interval) = 1.13 (1.00–1.27) (P = 0.047).

Conclusions

In this large representative sample, we found that no Group had a lower risk of all-cause mortality than the lifelong abstainers. This finding does not support the hypothesis that moderate alcohol use is beneficial to health.

2010 conference: Poster Child and adolescent health

Characterizing youth concerning alcohol: using audience segmentation

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Audience segmentation in health promotion is not new. By means of audience segmentation a population is divided into separate (more homogeneous) groups. The idea is that every member of a segment behaves in a similar way. Currently, segmentation is mainly based on socio-demographic variables such as age and socio-economic status. Many local authorities in the working area of the Public Health Service Hart voor Brabant have an active prevention policy focused on alcohol use among youth. We proposed that segmentation based on value orientation and perceptions could have value for developing and implementing effective alcohol prevention interventions and policy. Therefore, in the spring of 2009 a pilot project was conducted to study whether it was possible to distinguish different groups of adolescents based on their values, perceptions and attitudes towards alcohol. Based on the results of a workshop with experts and focus groups with adolescents a questionnaire was developed. Seven thousand adolescents were invited to fill in our questionnaire via internet. An explorative factor analysis on the 56 propositions about alcohol yielded five different factors: aversion to drunkenness, alcohol is normal, admiration by others, alcohol as enjoyment and lack of interest in alcohol. Subsequently, a latent class analysis was conducted with these five factors. This analysis yielded five segments: 'socials' (42%), 'high spirits' (22%), 'consciously fresh' (17%), 'sobers' (11%) and 'enjoyers' (8%). These segments differ from each other both in their scores on the five factors and in alcohol consumption. Our study has indicated that it is possible to distinguish different segments with regard to alcohol. In a future study, we want to investigate whether this segmentation can be translated into ways of reaching the audience of adolescents better (both literally and in terms of connecting to their characteristics, requirements and needs) by differentiating between interventions based on these segments.

The importance of media literacy in adolescent smoking and drinking

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Background

Media exerts a strong socialization effect on adolescents who are particularly susceptible to different messages in this life period. Therefore, examining adolescents' media literacy was put in the focal point of the present study. We have analysed media literacy in light of socio-demographics (age, gender), as well as smoking and drinking status.

Methods

Survey participants were 546 adolescents from Mako[´] (Southern Hungary). The sample was comprised of 288 (52.7%) Grade 12 and 258 (47.3%) Grade 8 students; 49.5% of the sample was male and 50.5% female. The instrument contained items on lifetime and monthly prevalence of smoking and drinking, attitudes related to substance use, and media literacy, as well as socio-demographics.

Factor analysis with varimax rotation was applied to a media literacy scale (31 items). In relation to socio-demographics and behaviours, these aspects were analysed by t-tests.

Results

The results show that factors of media literacy were well differentiated not only by socio-demographics, such as age ($P < 0.05$) and gender ($P < 0.01$) but also according to smoking and drinking status ($P < 0.001$). For example, girls ($P < 0.05$) and younger adolescents ($P < 0.001$), whose rates of substance use were smaller yet, were more willing to notice the hidden messages of the substance use shown in advertisements and films, and the presence of the media interests of tobacco and alcohol industry. According to behaviour, non-smokers and non-drinkers were more aware of the manipulation effects of the media ($P < 0.001$).

Conclusions

Findings show that girls, older students and substance users tend to have positive attitudes towards media exposure to smoking and drinking and this suggests that special attention should be paid on media literacy that would be a part of prevention programmes for adolescent smoking and drinking. Such a public health action would be innovative in Hungary since no previous programmes have addressed this issue yet.

Parental support and control and adolescent alcohol use

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Background

The social integration perspective claims that participation in cohesive societies and groups protects individuals against disordered functioning. The parenting style perspective suggests that parenting styles influence adolescent adjustment. Both perspectives agree that parental support and parental control can protect against adolescent alcohol use and other health risk behaviours. The purpose of the study was to assess linear, as well as non-linear and interactive effects of parental control and parental support on alcohol use in midadolescence.

Methods

The study is based on a national school-based survey of Icelandic 10th grade students, entitled Health Behaviour in Schoolchildren (HBSC). The present study is based on questionnaire responses from 1918 students (response rate 86%).

Results

Parental control and parental support both affect adolescent alcohol use. However, the effects are non-linear. Thus, the importance of parental control depends on the level of social support. The combination of high parental support and high parental control is associated with the lowest frequency of adolescent alcohol use.

Conclusions

Generally, the results speak to the importance of parents as agents of socialization during adolescence. Systematic efforts by health professionals to help parents improve their parenting style may be an effective way to reduce or prevent alcohol use during adolescence.

Alcohol and tobacco: approach, use and risk perception in the adolescents of the south Europe

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Background

Alcohol and tobacco have human, economic and social costs, now they become unsustainable. Monitoring is essential to plan prevention interventions. The aim of this study is to investigate on use of alcohol and tobacco and then to understand the perception of their risks.

Methods

During the 2007–08 school-year, an anonymous and semistructured self-administered questionnaire was administered to 432 middle school students of Catania, to know the Young people behaviour about alcohol and tobacco.

Results

The results revealed an early approach to alcohol and tobacco (mean age of 11.9 years). A total of 52.1% claim to have already tasted alcoholic drinks and the 18.1% have yet smoke. A total of 11.8% of the student population have used both alcohol and tobacco. The drinkers consume an average 7.0 g day⁻¹ of anhydrous alcohol, the smokers consume 3.6 cig day⁻¹, drinkers and smokers population take an average of 18.6 g day⁻¹ and 4.3 cig day⁻¹. Every day 3.0% of students exceeds the threshold values of alcohol, while 0.9% of smokers smoke >5.0 cig day⁻¹. A total of 7.9% of students had an acute alcohol intoxication, of these 16.5% belongs to the drinker group and 50.0% to smoker group. A total of 52.1% of the students' families makes use of alcohol and 55.6% smokes tobacco. Finally, 31.0% of students are living together with someone who smokes or drinks.

Conclusions

The early approach and the widespread use of alcohol and tobacco highlights the high risk for the investigated population, so it is important to propose a healthier lifestyle, to enhance prevention and to strengthen public health surveillance systems.

Alcohol (ab)use and health among Dutch college students

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Background

Alcohol use among students of tertiary education is on the rise worldwide regarding the prevalence, the incidence of drinking sessions and binge drinking, and closing of the gender gap in alcohol use, abuse and dependence. Nearly all students drink alcohol. Students drink more than non-studying peers, especially those in student societies. Binge drinking needs to be reduced because of its negative effects on health and academic performance.

Methods

A pilot questionnaire with questions on health, quality of life and life style (including alcohol consumption) was distributed to students in the waiting room of the Student Health Service of the University of Amsterdam (march–april 2010). Response rate: 70%. Alcohol use and abuse is measured with the AUDIT. Regressions of alcohol use on measures of physical and psychological health (SF-36, k-6) and grade point average were performed, controlling for gender and age.

Results

In our sample of 265 Amsterdam students 96% uses alcohol. Of the male population 60% drinks 2–3 times a week, 18% 4 or more times. Of the women 49% drinks 2–3 times a week, 14% 4 or more times. Regarding binge drinking, 69% of college students report drinking 4–6 or more drinks in one sitting at least once a month, men with 73% (6 or more) against women with 67% (4 or more). Alcohol (ab)use is significantly and negatively ($r = -.15$) related to general health ($r^2 = .02$, $p = .05$). And alcohol (ab)use is significantly and negatively ($r = -.20$) related to grade point average ($r^2 = .04$, $p = .01$). No significant results were demonstrated for psychological health.

Conclusions

Our preliminary results on alcohol use and abuse indeed show a negative correlation with health and study results. These findings support steps with regard to self-regulation of (at risk-) students, including individual feedback and a social norms intervention.

Normative misperceptions of alcohol behaviours in students

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Background

Research in the American college system has demonstrated that students significantly over-estimate rates of alcohol misuse in their peers. Correction of these misperceptions has become adopted as a widely used and apparently successful method of reducing alcohol related harm in the USA, as evidenced in a recent systematic review. However there is lack of research student populations outside the USA.

Methods

The study to be presented reports an ongoing annual survey of approximately 30 000 students at 200 university and college sites in the UK on misperceptions of alcohol use. These figures have also been used to create an alcohol education campaign, which is currently being implemented at selected sites.

Results

Preliminary analyses of the results indicate that on average students consume 5 alcoholic drinks once a week, but significantly overestimate ($p < 0.05$) their peers to drink 7 alcoholic drinks twice a week. Furthermore the size of these misperceptions vary by several factors including gender, age, ethnicity, residence, social interaction with other students and how much of a typical student the respondent perceive themselves to be. Perceived alcohol use of peers was also found to be correlated with personal behaviour ($r = 0.5$), an effect which in keeping with work in the USA increased as social distance fell.

Conclusions

This provides further evidence for social norms theory and highlights several areas of attention for future student health interventions. The data also compares with similar, smaller scale projects elsewhere in Europe and illustrates some crosscultural differences in misperceptions.

Online-intervention alcohol—a new gender-related module for the portal ‘Rauschbarometer’

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Background

The portal ‘Rauschbarometer’ with its online counselling service has established itself as a starting point for information about counselling services and self-help in the context of addiction in the Hamburg region. The module ‘Online Intervention Alcohol’ (www.trink-kompass.de) has been implemented in April 2010. Users will be channelled according to their gender and age to gender-specific information and interventions.

Methods

The implemented user-tracking is being used continuously to identify weaknesses and strong-points of the approach. A workshop was organized to ensure the participation and the input of experts of both sexes and from various professional background. A usability pre-test will be designed in order to gain information on gender-related acceptance, appropriateness and manageability of the tool.

Results

In 2009 over 59 000 users visited the portal. Counselling service pages accounted for about half of these. Almost half of the test results showed moderate consumption or abstinence. The most popular term searched for was ‘alcohol’. Onlinecounselling was very popular among females with a wide range of drug-related problems. The workshop highlighted the various aspects where target-group/gender specific intervention is required or preferable.

Conclusions

The portal www.rauschbarometer.de is well established in Hamburg. In order to motivate persons with problematic alcohol use to seek help and/or actually change their drinking behaviour the new self-

management-module has been implemented. The gender-related approach is hoped to further the motivation and enhance the percentage of users with benefit from the program.

2010 conference: Poster Health promotion

Prevalence, consequences and motivations for alcohol consumption in Portuguese university students

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Background

Alcohol consumption is a real public health problem. As part of the young, is associated with certain risky behaviours, including unprotected sex, conflict, consumption of other drugs, truancy and disapprovals. Aim of the study to determine the prevalence of alcohol consumption in Young Portuguese students and relate it to some motivations and consequences associated with consumption.

Methods

In a cross-sectional study of quantitative nature, inquires a sample of 354 college students, aged between 18 and 35 years (mean = 20.86 years, SD = 3.52) and 61.60% women enrolled in four Portuguese universities. The information (collected in class) was obtained through a questionnaire for self completion.

Results

It found a daily consumption of alcohol in 28.6% of students. The motivations described as being associated with consumption of alcoholic beverages are to be happy (24.0%), to disinhibit (18.7%), to overlook the problems of everyday life (13.3%), because it gives you pleasure (25.7%), to calm (7.4%), to relate to others who drink (7.9%), because they miss their family or friends (6.8%), to forget problems/quarrels with her boyfriend or friends (5.9%). The most striking consequences associated with consumption of alcoholic beverages are: go to school without sleeping (8.6%), often missing school (8.3%), have unprotected sex after drinking alcohol (2.4%), have poor academic performance (3.2%), get drunk several days (6.4%), get depressed the next day (6.8%), seek to avoid friends and family (3.5%) and they get in conflicts (2.6%).

Conclusions

The evidence presented here based guidelines for preventive and health promotion in the university context. The reasons for the consumption of alcoholic drinks, reported by Young people, show a strong socio-cultural and anthropological. It is necessary to develop effective preventive action aimed at information/education of young people in order to promote health and quality of life.

2010 conference: Poster Migrant health and social inequalities

Self-reported health and lifestyle factors among Finnish migrants in Sweden—results from a population-based study in two counties

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Background

Finns are the largest migrant group in Sweden. Previous studies indicate that incidence of some diseases (such as CHD, alcohol-related diseases and suicide) is higher among Finns living in Sweden than among native Swedes. This study investigates self-reported health and lifestyle factors among Finns living in two Swedish counties with relatively high proportion of Finnish migrants.

Methods

The analyses were performed both at municipality and at individual level. Over 14 000 persons at ages 18–84 years answered a questionnaire about health, lifestyle and living conditions in spring 2008: 12 280 of them were born in Sweden and 976 in other Nordic countries. In these two counties about 90% of inhabitants born in other Nordic countries are born in Finland. The overall response rate was 59%.

Results

In municipalities with high proportion of Finnish migrants self-rated health was, in general, poorer than in municipalities with low proportion of Finnish migrants. Analyses at individual level strengthened these results. Persons born in other Nordic countries had poorer self-rated health, higher prevalence of musculoskeletal pain, obesity and hypertension than native Swedes even after adjustment for age and educational level. Heavy alcohol use, and among men also smoking, was more common among persons born in other Nordic countries than among native Swedes. There was no difference in physical activity or in psychological distress between these groups.

Conclusions

The study supports the notion that Finns living in Sweden have a poorer self-rated health than native Swedes. Finnish migrants seem to have a higher prevalence of musculoskeletal pain, obesity and hypertension as well as some unhealthy lifestyle habits. No differences in psychological distress or in physical activity were observed.