Drug and Alcohol Dependence 133 (2013) 838–844

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

# Adolescent binge drinking and risky health behaviours: Findings from northern Russia

Andrew Stickley[a,*], Ai Koyanagi[a], Roman Koposov[b], Yury Razvodovsky[c], Vladislav Ruchkin[d]

[a] Stockholm Centre on Health of Societies in Transition (SCOHOST), Södertörn University, Huddinge, Sweden
[b] The Regional Centre for Child and Adolescent Mental Health and Child Welfare – North, Institute of Clinical Medicine, University of Tromsø, Norway
[c] Grodno State Medical University, Grodno, Belarus
[d] Department of Social and Forensic Psychiatry, Division of Neuroscience, Karolinska Institute, Huddinge, Sweden

ARTICLE INFO

*Article history:*
Received 13 November 2012
Received in revised form 25 August 2013
Accepted 30 August 2013
Available online 11 September 2013

*Keywords:*
Russia
Adolescent
Binge drinking
Health risk behaviour

ABSTRACT

*Background:* Some evidence suggests that in recent years the prevalence of heavy drinking has increased among Russian adolescents. However, as yet, little is known about either heavy alcohol consumption or its relationship with other adolescent health risk behaviours in Russia. The aim of this study therefore was to investigate the association between binge drinking and health risk behaviours among adolescents in Russia.
*Methods:* Data were drawn from the Social and Health Assessment (SAHA), a survey carried out in Arkhangelsk, Russia in 2003. Information was obtained from a representative sample of 2868 adolescents aged 13–17 regarding the prevalence and frequency of binge drinking (five or more drinks in a row in a couple of hours) and different forms of substance use, risky sexual behaviour and violent behaviour. Logistic regression analysis was used to examine the association between binge drinking and adolescent involvement in various health risk behaviours.
*Results:* Adolescent binge drinking was associated with the occurrence of every type of health risk behaviour – with the sole exception of non-condom use during last sex. In addition, there was a strong association between the number of days on which binge drinking occurred and the prevalence of many health risk behaviours.
*Conclusions:* Binge drinking is associated with a variety of health risk behaviours among adolescents in Russia. Public health interventions such as reducing the affordability and accessibility of alcohol are now needed to reduce binge drinking and its harmful effects on adolescent well-being.
© 2013 Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

Alcohol consumption is associated with a wide variety of adverse health and social consequences (Babor et al., 2010). Although much research has focused on the overall quantity of alcohol consumed in relation to alcohol-related harm, a growing body of evidence suggests that the way alcohol is consumed, i.e., the drinking pattern, is also important (Babor et al., 2010; Norström and Ramstedt, 2005). Specifically, a drinking pattern that leads to intoxication may be especially detrimental (Norström and Ramstedt, 2005). One intoxication-oriented drinking style that is widespread in Europe and that has been associated with a variety of negative consequences is 'binge drinking' (Farke and Anderson, 2007), which is commonly defined as the consumption of five or more drinks on a single occasion.

Binge drinking is mainly concentrated among the young in Europe with its prevalence peaking among older adolescents or in the early adult years (Kuntsche et al., 2004). Some evidence suggests that there has been a growth in adolescent binge drinking in many European countries in recent years (Farke and Anderson, 2007; Hibell et al., 2009). Data from the European School Survey Project on Alcohol and Other Drugs (ESPAD) revealed that 43% of survey students reported past 30-day binge drinking in 2007, with a particularly sharp increase occurring among girls between 2003 and 2007 (Hibell et al., 2009). This is deeply worrying as binge drinking has been associated with a number of risky health behaviours among adolescents that can entail serious consequences. Studies from the United States have reported for example, that adolescents who binge drink are more likely to be sexually active (Miller et al., 2007), and have multiple sexual

* Corresponding author at: Stockholm Centre on Health of Societies in Transition (SCOHOST), Södertörn University, 141 89 Huddinge, Sweden. Tel.: +46 8 608 4689; fax: +46 8 608 4030.
*E-mail address:* andrew.stickley@sh.se (A. Stickley).

0376-8716/$ – see front matter © 2013 Elsevier Ireland Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.drugalcdep.2013.08.028

partners (Howard and Wang, 2004). Adolescent binge drinking has also been linked to a higher risk of experiencing sexual victimisation (Champion et al., 2004), engaging in fighting (Swahn et al., 2004; Valois et al., 1995), and illicit drug use (Miller et al., 2007).

Binge drinking may be having an especially damaging impact in Russia, the setting for the current study. It has been suggested that both the high volume of alcohol consumed, together with a binge drinking style of consumption, may underlie the high levels of alcohol mortality currently observed in the country (Stickley et al., 2007). Indeed, some evidence suggests that binge drinking has a long history in Russia and may be associated with detrimental health outcomes across time (Andreev et al., 2013; Stickley et al., 2009). Given this, and the growing drunkenness observed among Russian adolescents in recent years (Kuntsche et al., 2011; Verho et al., 2012), the claim that drinking to intoxication is one form of 'self-destructive coping strategy' among some young people in an increasingly insecure and difficult environment (Dafflon, 2009) is a cause for serious concern. Yet, little is known about the association between binge drinking and risky health behaviours among adolescents in Russia.

The current study will focus on binge drinking among adolescents in the northern Russian city of Arkhangelsk. This research setting may be especially apposite for examining the effects of adolescent drinking on health risk behaviour. Not only does heavier drinking occur in the north (and east) of Russia (Walker, 2011), but earlier studies in Arkhangelsk (Leont'eva, 2008; Stickley et al., 2013) have indicated that a convergence is now taking place between boys and girls in terms of the prevalence of both alcohol consumption and binge drinking. Until now however, binge drinking and its consequences have been considered as being primarily a male problem in Russia. The aim of the current study is thus twofold: (1) to investigate the association between binge drinking and a number of health risk behaviours among adolescent boys and girls in Russia; and (2) to examine whether a dose-dependent relationship exists between the frequency of binge drinking and risky health behaviour. In addition, we will explore whether gender modifies the association between binge drinking and risky health behaviour. Understanding the link between alcohol misuse and risky health behaviours is essential when it comes to designing and implementing interventions that will be effective against these risk behaviours.

## 2. Methods

### 2.1. Data collection

Data in this study come from the Social and Health Assessment (SAHA). This survey was undertaken in the United States (Schwab-Stone et al., 1995, 1999) and several other countries around the world including Russia (Ruchkin et al., 2006; Vermeiren et al., 2003). In terms of the current study, after obtaining ethical approval from the Northern State Medical University in Arkhangelsk and Yale University School of Medicine, the survey was undertaken in 2003, with data being gathered from a representative sample of 6–10th grade students in public schools in the northern Russian city of Arkhangelsk. This city can be considered as a typical Russian city in terms of its socioeconomic profile. Data from the 2002 census indicated that 30,000 of the city's 356,000 inhabitants were in the 12–17 age group (Vserossiskaya Perepis' Naseleniya, 2002). Approximately 10% of them were randomly selected from the four districts of the city, proportional to the total number of adolescents living in each district, from schools that were themselves randomly selected from a list of all schools in each district. The survey questionnaire was administered in classes randomly selected from those within each school. Both parents and children had the right to refuse to participate in the study. Students completed the survey in their classrooms during a normal school day. Written informed consent was given by all participants. In total, information was obtained from 2892 students which equated to a survey response rate of 96.4%.

### 2.2. Measures

The data in the current study were collected using the SAHA survey instrument (Ruchkin et al., 2004). This contains questions on a number of different health behaviours. In this study we used questions relating to the following behaviours:

*2.2.1. Binge drinking.* This was assessed by responses to the question: 'During the past 30 days, on how many days, if any, did you have five or more drinks of alcohol in a row, that is, within a couple of hours?'. Options ranged from 0 to 6 or more days. Responses were dichotomised to represent those who had engaged in binge drinking on one or more days (scored 1) and those who did not binge drink on any days (scored 0).

*2.2.2. Substance use.* Information was gathered on three forms of substance use. Smoking behaviour was assessed with the question, 'During the past 30 days, on how many days did you smoke?'. The answer was dichotomised to 0 days (no) and on one or more days (yes). Lifetime marijuana use was assessed with the question, 'Have you ever used marijuana?'. The answer options were 'No, never', 'Yes, but only once', 'A few times' and 'More than a few times'. All those respondents who had used marijuana at least once in their lifetime were categorised as users. Information was also gathered about lifetime use of other illicit drugs – glue/aerosols; amphetamines, ecstasy or dust; and LSD (lysergic acid diethylamide (acid))/PCP (phencyclidine (angel dust)). Students were dichotomised into users (those who answered yes to using any of these substances previously – scored 1) and non-users (scored 0).

*2.2.3. Sexual behaviour.* Four questions were asked about students' sexual behaviour. Information on lifetime sex was obtained by asking 'Have you ever had sexual intercourse ("gone all the way")?'. Details of student substance use during their last sexual encounter were obtained by asking, 'The last time you had sexual intercourse, had you been drinking alcohol or using drugs?'. Similarly, information on condom use at last sex was obtained by asking, 'The last time you had sex did you or your partner use a condom?'. For any of these questions if students answered yes they were scored 1 while no answers were scored 0. Students were also asked 'How many times have you been pregnant or got someone pregnant?' with response options ranging from 0 to 2 or more times.

*2.2.4. Violent behaviour.* Three questions related to the students' experience of violence in the past year. They were asked how many times they had 'Started a fistfight or shoving match', 'Hurt someone badly in a physical fight so that they had to be treated by a doctor or nurse' or 'Carried a blade, knife, or gun in school'. Response categories ranged from 0 to $\geq$5 times. These answers were dichotomised into 1 or more times (yes) and 0 times (no).

*2.2.5. Control variables.* Information was also obtained on the age and sex of the students as well as on the educational level of their parents/guardians. This latter variable was dichotomised into having graduated from college (high education) and having less than a college graduate's education (low education). If both parents (or the male or female guardian) were in the home, the

Download English Version:

https://daneshyari.com/en/article/1069929

Download Persian Version:

https://daneshyari.com/article/1069929

Daneshyari.com