Institutionen för Folkhälsovetenskap

Adolescent alcohol use: Implications for prevention

AKADEMISK AVHANDLING
som för avläggande av medicine doktorsexamen vid Karolinska Institutet offentligen försvaras i Rehabsalen, Norrbacka plan 1, Karolinska universitetssjukhusets område i Solna

Fredagen den 25 februari 2011, kl. 10.00

av

Anna-Karin Danielsson

Huvudhandledare:
Professor Anders Romelsjö
Karolinska Institutet
Institutionen för Folkhälsovetenskap

Bihandledare:
Medicine Doktor Anders Tengström
Karolinska Institutet
Institutionen för Klinisk Neurovetenskap
Centrum för Psykiatriforskning

Fakultetsopponent:
Professor Thor Norström
Stockholms universitet
Institutet för social forskning, SOFI

Betygsnämnd:
Professor Britt af Klinteberg
Karolinska Institutet/Stockholms universitet
Psykologiska institutionen
CHESS, Centre for Health Equity Studies

Professor Per-Anders Rydelius
Karolinska Institutet
Institutionen för Kvinnors och barns hälsa
Enheten för barn- och ungdomspsykiatri

Docent Tommy Andersson
Umeå Universitet
Institutionen för Socialt arbete

Stockholm 2011
ABSTRACT

Background Alcohol use, especially heavy episodic drinking, at an early age has been associated with various problems (e.g. risky sexual behaviours, health problems, depression, and heavy alcohol consumption at a later age). Thus, a better understanding of the risk and protective factors that influence adolescent alcohol use is crucial to developing effective prevention strategies. The aim of this thesis is to examine the importance of risk and protective factors in the development of heavy episodic drinking and subsequent problems for adolescent boys and girls. In addition, the prevention paradox (most alcohol-related problems occur in the 90 % of the population with lowest alcohol consumption) was examined among adolescents in Sweden and Europe.

Methods Data from three different questionnaire studies were analysed: (1) a longitudinal cohort study with 1222 adolescents from Stockholm, aged 13 to 19 years, (2) a cross-sectional study with 3000 adolescents aged 15 years and 17 years from random samples of school classes throughout the whole of Sweden, and (3) a cross-sectional study (the European School Survey Project on Alcohol and Other Drugs, ESPAD) performed in 35 countries among students who turned 16 during the year of the data collection. Twenty-three countries with 38 370 alcohol-consuming adolescents were included.

Results Smoking and peer alcohol use were strongly associated with heavy drinking among both boys and girls, both cross-sectionally and longitudinally. Some gender differences were found; parental provision of alcohol in the 7th grade increased the odds for heavy alcohol use in girls two years later, and truancy was associated with later heavy alcohol use in boys. For boys, heavy episodic drinking at age 13 was one of the most distinct predictors of later heavy episodic drinking. For girls, secure bonds to parents lowered the risk for heavy episodic drinking, even if the girls had friends who drank alcohol, money to spend, or parents who offered them alcohol. For boys whose parents offered them alcohol, parental monitoring had a protective effect. Also, we found that adolescents on a consistent high alcohol use trajectory during early adolescence had higher levels of heavy episodic drinking and alcohol-related problems at age 19. Furthermore, the prevention paradox was valid for adolescent boys and girls in Sweden and in most European countries; despite differences in annual alcohol consumption, levels of heavy episodic drinking, and reported problems, the heavy episodic drinkers in the bottom 90% consumer group accounted for a majority of all reported problems.

Conclusions Effective population strategies may have large potential to reduce risk drinking and the overall problem level. A comprehensive prevention strategy should nevertheless also include efforts to reach adolescent high consumers. Furthermore, our results lend support to prevention initiatives to strengthen the parent–child relationship, to focus on adolescents’ ability to resist peer pressure, and to limit parental provision of alcohol.

ISBN 978-91-7457-205-6