

Advances in adolescent substance abuse treatment.

Winters KC; Botzet AM; Fahnhorst T. *Current Psychiatry Reports* 13(5): 416-421, 2011. (36 refs.) Alcohol and other drug use among adolescents has been a public health problem for decades. Although some substance use may be developmentally routine, a concerning number of adolescents meet criteria for a substance use disorder and could greatly benefit from a quality treatment experience. However, parents and health care providers want evidence of the efficacy of adolescent-specific treatment programs. This review summarizes four factors surrounding the efficacy of current adolescent treatment programs: 1) adolescent-specific treatment services; 2) the variety of therapeutic modalities; 3) relapse and recovery rates; and 4) the need for evidence-based, quality assessments and research. Current adolescent treatment efforts are summarized, and the recent literature regarding the efficacy of adolescent treatment and recovery rates is discussed. Copyright 2011, Springer.

Alcohol dependence symptoms among recent onset adolescent drinkers.

Lee CT; Rose JS; Engel-Rebitzer E; Selya A; Dierker L. *Addictive Behaviors* 36(12): 1160-1167, 2011. (27 refs.) This study examined prevalence of alcohol dependence symptoms and diagnosis among a nationally representative sample of recent onset adolescent drinkers aged 12-21 years (mean 17 years) across different levels of drinking drawn from National Survey of Drug Use and Health (N = 9490). We assessed whether the relationship between level of alcohol use and alcohol dependence was similar for individuals from different socio-demographic groups (i.e., gender, age group, ethnic group, family income, and substance use in the past year). The most prevalent DSM-IV alcohol dependence criteria at low levels of alcohol use were "unsuccessful efforts to cut down", "tolerance", and "time spent" in activities necessary to obtain alcohol or recover from its effect. Logistic regression with polynomial contrasts indicated increasing rates of each criterion and an overall dependence diagnosis with increasing alcohol exposure that differed most between the lowest levels of recent drinking frequency. After controlling for

drinking quantity, younger adolescents, females, Native American/Alaskans and Asian/Pacific Islanders were most likely to experience alcohol dependence symptoms and a diagnosis of dependence, suggesting that these demographic subgroups may experience dependence symptoms or develop dependence more quickly after beginning to drink. Recognizing early symptoms of alcohol dependence may assist in early identification and intervention of those at risk for heavier drinker in the future. Copyright 2011, Elsevier Science.

Cannabis use in young people: The risk for schizophrenia. (review).

Casadio P; Fernandes C; Murray RM; Di Forti M. *Neuroscience and Biobehavioral Reviews* 35(8, special issue): 1779-1787, 2011. (131 refs.) Cannabis is one of the most commonly used illicit drugs, and despite the widely held belief that it is a safe drug, its long-term use has potentially harmful consequences. To date, the research on the impact of its use has largely been epidemiological in nature and has consistently found that cannabis use is associated with schizophrenia outcomes later in life, even after controlling for several confounding factors. While the majority of users can continue their use without adverse effects, it is clear from studies of psychosis that some individuals are more vulnerable to its effects than others. In addition, evidence from both epidemiological and animal studies indicates that cannabis use during adolescence carries particular risk. Further studies are warranted given the increase in the concentration of the main active ingredient (Delta(9)-tetrahydrocannabinol) in street preparations of cannabis and a decreasing age of first-time exposure to cannabis. Copyright 2011, Elsevier Science.

Effects of physical activity on teen smoking cessation.

Horn K; Dino G; Branstetter SA; Zhang JJ; Noerachmanto N; Jarrett T et al. *Pediatrics* 128(4): E801-E811, 2011. (51 refs.) OBJECTIVE: To understand the influence of physical activity on teen smoking-cessation outcomes. METHODS: Teens (N = 233; 14-19 years of age) from West Virginia high schools who smoked >1 cigarette

in the previous 30 days were included. High schools with >300 students were selected randomly and assigned to brief intervention (BI), Not on Tobacco (N-O-T) (a proven teen cessation program), or N-O-T plus a physical activity module (N-O-T + FIT). Quit rates were determined 3 and 6 months after baseline and carbon monoxide validation was obtained at the 3-month follow-up evaluation. RESULTS: Trends for observed and imputed self-classified and 7-day point prevalence rates indicated that teens in the N-O-T + FIT group had significantly higher cessation rates compared with those in the N-O-T and BI groups. Effect sizes were large. Overall, girls quit more successfully with N-O-T compared with BI (relative risk [RR]: >infinity) 3 months after baseline, and boys responded better to N-O-T + FIT than to BI (RR: 2-3) or to N-O-T (RR: 1-2). Youths in the N-O-T + FIT group, compared with those in the N-O-T group, had greater likelihood of cessation (RR: 1.48) at 6 months. The control group included an unusually large proportion of participants in the precontemplation stage at enrollment, but there were no significant differences in outcomes between BI and N-O-T ($z = 0.94$; $P = .17$) or N-O-T + FIT ($z = 1.12$; $P = .13$) participants in the precontemplation stage. CONCLUSIONS: Adding physical activity to N-O-T may enhance cessation success, particularly among boys. Copyright 2011, American Academy of Pediatrics.

Examining correlates of different cigarette access behaviours among Canadian youth: Data from the Canadian Youth Smoking Survey (2006).

Vu M; Leatherdale ST; Ahmed R. *Addictive Behaviors* 36(12): 1313-1316, 2011. (21 refs.)

Understanding factors associated with youth cigarette access behaviours can provide insight into the development of more effective means of preventing youth from accessing cigarettes. This cross-sectional study used self-reported data collected from 41,886 students in grades 9 to 12 who participated in the 2006/07 Youth Smoking Survey to examine the student- and school-level characteristics that differentiate youth smokers who usually access cigarettes from a social source versus buying their own from retailers. Analyses revealed significant between-school variability in the odds of a smoking student reporting that they usually buy their own cigarettes. Important student-level characteristics associated with how youth usually access their cigarettes included binge drinking and being asked for age or photo identification when purchasing cigarettes from a retailer. cigarette access behaviour. Copyright 2011, Elsevier Science.

Exposure to alcohol advertising and alcohol consumption among Australian adolescents.

Jones SC; Magee CA. *Alcohol and Alcoholism* 46(5): 630-637, 2011. (42 refs.)

Aims: Underage drinking is a major problem in Australia and may be influenced by exposure to alcohol advertising. The objective of the present study was to collect data on 12-17 year old Australian adolescents' exposure to different types of alcohol advertising and examine the association between exposure to advertising and alcohol consumption. Methods: A cross-sectional survey of 1113 adolescents aged 12-17 years recruited with a variety of methods to gain a cross-section of participants across metropolitan, regional and rural New South Wales (including independent schools, mall intercepts and online). Participants answered a series of questions assessing adolescents' exposure to alcohol advertising across eight media (including television, Internet and point-of-sale). Alcohol consumption was assessed using three questions (initiation, recent consumption and frequency of consumption in the previous 12 months). Results: The majority indicated that they had been exposed to alcohol advertisements on television, in newspapers and magazines, on the Internet, on billboards/posters and promotional materials and in bottleshops, bars and pubs; exposure to some of these types of alcohol advertisements was associated with increased alcohol consumption, with differences by age and gender. Conclusion: The results are consistent with studies from other countries and suggest that exposure to alcohol advertisements among Australian adolescents is strongly associated with drinking patterns. Given current high levels of drinking among Australian youth, these findings suggest the need to address the high levels of young people's exposure to alcohol advertising. Copyright 2011, Oxford University Press.

Family involvement in adolescent substance abuse treatment and recovery: What do we know? What lies ahead?

Hornberger S; Smith SL. *Children and Youth Services Review* 33(1, special issue): s70-s76, 2011. (30 refs.)

Families represent the most important resources that young people have in their journey through treatment toward recovery. Unfortunately, family members are often seen as part of the problem and not as part of the solution to adolescent alcohol and other drug (ACID) treatment and recovery. This attitude and misperception can be changed through education, outreach, and engagement of family members. Family involvement and creating a parent-professional

collaborative partnership is a step toward improving the outcomes for adolescents in need of treatment and recovery. It is crucial that families understand the treatment process, as well as the hope, process, and reality of recovery. Without information families may not understand the importance of a treatment and recovery plan for their adolescent, the potential adverse consequences, and the impact of these AOD problems on other family members. Families need to learn the continuum of services and supports available, and how family participation improves treatment outcomes and strengthens the recovery process. Family involvement should be an essential part of intake, treatment, and recovery planning, as well as the foundation for effective parent-professional partnerships. Copyright 2011, Elsevier Science.

Rural adolescent alcohol, tobacco, and illicit drug use: A comparison of students in Victoria, Australia, and Washington State, United States.

Coomber K; Toumbourou JW; Miller P; Staiger PK; Hemphill SA; Catalano RF. *Journal of Rural Health* 27(4): 409-415, 2011. (25 refs.)

Purpose: There are inconsistent research findings regarding the impact of rurality on adolescent alcohol, tobacco, and illicit substance use. Therefore, the current study reports on the effect of rurality on alcohol, tobacco, and illicit drug use among adolescents in 2 state representative samples in 2 countries, Washington State (WA) in the United States and Victoria (VIC) in Australia. Participants: Samples of students from Grade 7 (aged 12 to 13 years) and Grade 9 (aged 14 to 15) in both states. A total of 3,729 students responded to questions about alcohol, tobacco, cannabis, and other illicit substance use ($n(\text{VIC}) = 1,852$; $n(\text{WA}) = 1,877$). In each state, males and females were equally represented and ages ranged from 12 to 15 years. Methods: Data were analyzed to compare lifetime and current (past 30 days) substance use for students located in census areas classified as urban, large or small town, and rural. Findings were adjusted for school clustering and weighted to compare prevalence at median age 14 years. Findings: Rates of lifetime and current alcohol, tobacco, and cannabis use were significantly higher in rural compared to urban students in both states (odds ratio for current substance use = 1.31). Conclusions: In both Washington State and Victoria, early adolescent rural students use substances more frequently than their urban counterparts. Future studies should examine factors that place rural adolescents at risk for alcohol, tobacco, and illicit drug use. Copyright 2011, Wiley-Blackwell.

School performance and alcohol use problems in early adulthood: A longitudinal study.

Hayatbakhsh MR; Najman JM; Bor W; Clavarino A; Alati R. *Alcohol* 45(7): 701-709, 2011. (48 refs.)

There is inconsistent evidence about the association between school performance and subsequent use of alcohol and alcohol problems in adolescents and young adults. This study examines whether school performance at 14 years is associated with drinking problems in early adulthood; and whether this association is explained by family and individual factors in childhood and adolescence. Data were from a 21-year follow-up of 3,478 Australian young adults from birth to the age of 21 years when data on use of alcohol were collected. Child school performance (CSP) was assessed at 14 years via self- and maternal report. Alcohol consumption at 21 years was measured via self-report, and alcohol abuse and dependence were assessed by the computerized version of Composite International Diagnostic Interview (CIDI-Auto). Potential confounding factors were prospectively measured between the child's birth and age of 14 years. School performance at 14 years predicted young adults' alcohol consumption and alcohol use disorders (AUDs). After controlling for confounding, children who had lower school performance had increased risk of drinking more than two glasses of alcohol per day in early adulthood (odds ratio = 1.7; 95% confidence interval: 1.1-2.6). There was a similar pattern of association between CSP and young adults' alcohol abuse and dependence (AUD) measured by CIDI-Auto. Level of academic performance in high school children predicts their drinking problems as young adults, independently of a selected group of individual and family confounders. Exploration of the pathway linking school performance and alcohol problems in young people may help identify opportunities for preventive interventions. Copyright 2011, Elsevier Science.

Testing a level of response to alcohol-based model of heavy drinking and alcohol problems in 1,905 17-year-olds.

Schuckit MA; Smith TL; Heron J; Hickman M; Macleod J; Lewis G et al. *Alcoholism: Clinical and Experimental Research* 35(10): 1897-1904, 2011. (56 refs.)

Background: The low level of response (LR) to alcohol is one of several genetically influenced characteristics that increase the risk for heavy drinking and alcohol problems. Efforts to understand how LR operates through additional life influences have been carried out primarily in modest-sized U.S.-based

samples with limited statistical power. This study evaluates a full LR-based model of risk in a large sample of adolescents from the United Kingdom. Methods: Cross-sectional structural equation models were used for the approximate first half of the age 17 subjects assessed by the Avon Longitudinal Study of Parents and Children, generating data on 1,905 adolescents (mean age 17.8 years, 44.2% boys). LR was measured with the Self-Rating of the Effects of Alcohol Questionnaire, outcomes were based on drinking quantities and problems, and standardized questionnaires were used to evaluate peer substance use, alcohol expectancies, and using alcohol to cope with stress. Results: In this young and large U.K. sample, a low LR related to more adverse alcohol outcomes both directly and through partial mediation by all 3 additional key variables (peer substance use, expectancies, and coping). The models were similar in boys and girls. Conclusions: These results confirm key elements of the hypothesized LR-based, supporting some generalizability beyond U.S. groups. They also indicate that with enough statistical power, multiple elements contribute to how LR relates to alcohol outcomes and reinforce the applicability of the model to both genders. Copyright 2011, Wiley-Blackwell.

Web-based intervention for adolescent nonsmokers to help parents stop smoking: A pilot feasibility study.

Patten CA; Hughes CA; Lopez KN; Thomas JL; Brockman TA; Smith C et al. *Addictive Behaviors* 31(1): 85-91, 2011. (38 refs.)

A novel approach to tobacco control is to engage adolescent nonsmokers in support roles to encourage and help their parents stop smoking. This pilot study examined the feasibility and potential efficacy of a web-based support skills training (SST) intervention for adolescents to help a parent stop smoking. Forty nonsmoking adolescents 13-19 years of age (70% female, 93% White) were enrolled and randomly assigned to a health education (HE) control group (n=20) or SST (n=20). Both consisted of written materials and five weekly, 30min, web-based, counselor-facilitated group sessions. Parents were enrolled for assessments only. Adolescents and parents completed assessments at baseline, week 6 (post-treatment), week 12 and 6-months follow-up. Both interventions were feasible based on treatment acceptability ratings, study retention and treatment compliance. The biochemically confirmed 6-month smoking abstinence rate was higher for parents linked to teens. About half of parents in each group reported a quit attempt since study enrollment. Teens can be

engaged to help parents stop smoking. Future research is warranted on determining effective intervention approaches. Copyright 2011, Elsevier Science.

Where It's At! The role of best friends and peer group members in young adults' alcohol use.

Overbeek G; Bot SM; Meeus WHJ; Sentse M; Knibbe RA; Engels R. *Journal of Research on Adolescence* 21(3): 631-638, 2011. (23 refs.)

We examined the hypothesis that best friends and members from a broader peer group would not differ in the amount of influence they have on young adults' alcohol consumption and that what counts would be the mere presence of drinking peers in a given context—irrespective of the type of relationship such peers would have with the target young adult. Data were used from a naturalistic observation study that was conducted in a "bar-lab" among 221 young adults aged 18-25 years. Both hierarchical and multilevel regression analyses showed that group effects (i.e., average group levels of alcohol consumption) explained young adults' drinking. When taking into account these group effects, best friends' alcohol consumption in the bar-lab was a nonsignificant predictor of young adults' alcohol use although best friends' questionnaire-assessed drinking did predict alcohol consumption in the bar-lab. Copyright 2011, Wiley-Blackwell.

Adolescent substance use, sleep, and academic achievement: Evidence of harm due to caffeine.

James JE; Kristjansson AL; Sigfusdottir ID. *Journal of Adolescence* 34(4): 665-673, 2011. (45 refs.)

Using academic achievement as the key outcome variable, 7377 Icelandic adolescents were surveyed for cigarette smoking, alcohol use, daytime sleepiness, caffeine use, and potential confounders. A substantial proportion of variance in academic achievement, which might otherwise have been attributed to the harmful effects of cigarette smoking and alcohol use, was found to be attributable to caffeine. Evidence was obtained that daytime sleepiness, which was found to be independently associated with usage of licit substances (nicotine and alcohol) and caffeine, may be an important mediator of the negative impact of those substances on academic achievement. Findings suggest the importance of including measurements of caffeine consumption in future studies of adolescent substance use. Copyright 2011, Foundation for Professionals in Services for Adolescents.