

**Attention and adolescent tobacco use: A potential self-regulatory dynamic underlying nicotine addiction.**

Gardner TW; Dishion TJ; Posner MI. *Addictive Behaviors* 31(3): 531-536, 2006. (8 refs.)

Examines the covariation of attention processes in childhood and adolescence with tobacco use in middle adolescence, controlling for both comorbid antisocial behavior and psychosocial risk. Childhood ratings of inattention increased the risk of early-onset smoking (odds ratio = 4.12). During adolescence, high performance on an attention task was associated with increased risk (odds ratio = 2.07) for patterned tobacco use after controlling for antisocial behavior and known psychosocial risk factors. These analyses suggest a possible regulatory dynamic linking patterned tobacco use and inattention. Given the role of attention in the regulation of negative affect, it is possible that tobacco use among vulnerable youth results in enhanced sense of well-being, compared to less vulnerable youth. Future research requires repeated assessments of attention, affective states and tobacco use to clarify issues of temporal ordering. Copyright 2006, Elsevier Science.

**Effects of a minimum-age tobacco law: Swedish experience.**

Sundh M; Hagquist C. *Drugs: Education, Prevention and Policy* 12(6): 501-510, 2005. (15 refs.)

The purpose of this study was to increase understanding of the prerequisites for tobacco prevention. The situations before and after the introduction of a minimum-age law were compared with respect to opportunities for adolescents to buy tobacco, and to attitudes towards the law. Data were collected in 1996 and 2000 with a questionnaire among all pupils in years 7 and 9 of compulsory school, and among pupils in year 2 of upper-secondary school in three regions of Sweden. Tobacco had become less available from shops, while there was an increase in the proportion of adolescents who buy tobacco from friends. Among smokers the support for this law was higher in 2000 than 1996, while the pattern among non-smokers was not consistent across age-groups or gender. Regardless of smoking habits, age-group and gender, the proportion of adolescents who believed that the law had an effect in reducing

smoking had decreased. The changes described in this article are discussed in terms of the different ways available to improve the implementation of the minimum-age law. Copyright 2005, Taylor and Francis Ltd.

**Parental anti-smoking socialization: Associations between parental anti-smoking socialization practices and early adolescent smoking initiation.**

Blokland EAWD; Hale WW; Meeus W; Engels RCME. *European Addiction Research* 12(1): 25-32, 2006. (27 refs.)

This longitudinal study of 600 families concentrates on the influence of parental anti-smoking socialization by examining both (a) the effects of eight indicators of anti-smoking socialization on adolescent smoking and (b) the influence of parental smoking on the effectiveness of their anti-smoking socialization. Robust differences between smoking and non-smoking parents demonstrated that both kinds of families hold different norms and attitudes about adolescent smoking and how to deal with it. In terms of effective anti-smoking socialization, it appeared that parental involvement on a more abstract level, such as feeling confident one has influence on the smoking behaviour of one's child and having knowledge whether one's child and his or her friends smoke, seemed important in preventing early adolescent smoking, while concrete communication or house rules about smoking were not. Copyright 2006, Karger.

**The A-R-T of tobacco use counseling with adolescents: A new office approach.**

Spigarelli MG; Heyman RB. *Patient Care* 39(12): 27-35, 2005. (15 refs.)

This article focuses on practical strategies for working with young people, with application for counseling on any risky behavior. The article is organized around the 5As (ask, advise, assist, assess, and arrange; the 5 Rest (relevance, risks, rewards, roadblocks and repetition); and the 5 Ts (terminate, tend, teach, tune in and talk.) While long term health consequences of smoking such as emphysema, cardiovascular disease and lung cancer are not significant disincentives for the young, social issues such as stained clothing, bad breath, dental problems and cost, can be motivation. Support for the use of nicotine replacement can be drawn from the harm reduction model. Nicotine by itself is safer than

the combination of nicotine and other chemical taken in by using tobacco. The 5 "Ts" are related to having an on-going conversation with parent as well as child through all periods of childhood, and to promote prevention in the broadest sense. Terminate refers to the need to terminate all tobacco use during pregnancy to deal with health concerns. "Tend" refers to efforts to keep the child's environment smoke-free. Teach encourages parents to teach their children about the dangers of tobacco use; tune in refers to noting the messages in the media and marketing to which children are exposed. Talk refers to encouraging parent and adolescents to continue to talk about not using tobacco. The authors also consider the application of motivational interviewing, again providing useful examples. Copyright 2005, Medical Economics.

**Adolescent smoking and depression: Which comes first? (rapid communication).**

Steuber TL; Danner F. *Addictive Behaviors* 31(1): 133-136, 2006. (7 refs.)

Despite the well-known health risks of smoking, adolescents continue to smoke at alarming rates. Smoking is also known to be associated with depression, but the direction of this relation is unclear. This study used data from the National Longitudinal Study of Adolescent Health (Add Health) to evaluate the direction of the relation between cigarette smoking and depression among adolescents. A total of 14,634 adolescents (7132 males and 7502 females) completed in-home surveys in 1995 and 1996 and were split into four smoking status groups. Adolescents who were Starters, Quitters, and Maintainers were found to be 1.5, 1.4, and 2.0 times more likely, respectively, than Nevers to be depressed at Time 2. In addition, females showed a striking pattern of increases in depression around the onset of smoking and decreases around the time of quitting. While these findings do not prove that smoking leads to depression, they are consistent with such a prediction. Copyright 2006, Elsevier Science Ltd.

**Industry sponsored anti-smoking ads and adolescent reactance: Test of a boomerang effect. (review).**

Henriksen L; Dauphinee AL; Wang Y; Fortmann SP. *Tobacco Control* 15(1): 13-18, 2006. (48 refs.)

Objective: To examine whether adolescents' exposure to youth smoking prevention ads sponsored by tobacco companies promotes intentions to smoke, curiosity about smoking, and positive attitudes toward the tobacco industry. Design: A randomised controlled experiment compared adolescents' responses to five smoking prevention ads sponsored by a tobacco

company (Philip Morris or Lorillard), or to five smoking prevention ads sponsored by a non-profit organisation (the American Legacy Foundation), or to five ads about preventing drunk driving. Setting: A large public high school in California's central valley. Subjects: A convenience sample of 9th and 10th graders (n = 832) ages 14 - 17 years. Main outcome measures: Perceptions of ad effectiveness, intention to smoke, and attitudes toward tobacco companies measured immediately after exposure. Results: As predicted, adolescents rated Philip Morris and Lorillard ads less favourably than the other youth smoking prevention ads. Adolescents' intention to smoke did not differ as a function of ad exposure. However, exposure to Philip Morris and Lorillard ads engendered more favourable attitudes toward tobacco companies. Conclusions: This study demonstrates that industry sponsored anti-smoking ads do more to promote corporate image than to prevent youth smoking. By cultivating public opinion that is more sympathetic toward tobacco companies, the effect of such advertising is likely to be more harmful than helpful to youth. Copyright 2006, BMJ Publishing Group.

**The behavioral dynamics of youth smoking.**

Gilleskie DB; Strumpf KS. *Journal of Human Resources* 40(4): 822-866, 2005. (27 refs.)

Individual smoking behavior persists over time, but is this repeated behavior attributed to past use or individual heterogeneity? Using longitudinal data on teens from all 50 United States from 1988 to 1992, we find a significant causal role for endogenous past cigarette consumption even after controlling extensively for observed and unobserved heterogeneity. We also find measurable evidence of different sensitivities to cigarette price depending on past use. These two findings suggest that a cigarette price increase will have a larger aggregate effect in the long run than in the short run as more individuals accumulate in the price-sensitive nonsmoking group. Copyright 2005, University of Wisconsin Press.

**The adolescent and substance abuse: Current concepts.**

Greydanus DE; Patel DR. *Disease-a-Month* 51(7): 392-431, 2005. (93 refs.)

This review addresses alcohol and other drug use among adolescents. The article addresses its etiology, adolescent development and how this is affected by and influences substance use. It also addresses factors which may be risk factors including the presence of psychiatric illness, environmental stresses and the widespread availability and access to drugs. The symptoms and stages of drug use and abuse are

described. Specific attention is directed to alcohol, marijuana, nicotine, cocaine, opiates, amphetamines, methamphetamines, ecstasy, ketamine, the inhalants, gamma-hydroxybutyrate, barbiturates, PCP, as well as agents used to enhance athletic performance, including the anabolic steroids. There is also discussion of management and approaches to treatment. There are twenty-nine accompanying tables. Copyright 2005, Mosby Inc.

**Drug counselor report of adolescents abuse of nicotine replacement therapy.**

Hyland A; Bradford D; Gitchell J. *Journal of Addictive Diseases* 24(4): 105-113, 2005

Background. Nicotine replacement products (NRT) are formulated and marketed to reduce their abuse liability among adolescents. Few studies have examined the extent of adolescent abuse. The objective of this manuscript is to describe the youth abuse rate for NRT and other over-the-counter (OTC) abusable substances. Methods. Two cross-sectional telephone surveys of Safe and Drug Free School Coordinators were conducted in 1996/7 (N = 562) and 1998/9 (N = 501). Abuse of NRT and other OTC drugs and circumstances surrounding NRT abuse was ascertained. Results. NRT abuse rates were low and did not change significantly between the two surveys (2.7% in 1996/7 to 4.6% in 1998/9). NRT abuse rates were well below those of other OTC abusable substances (e.g., diet pills and inhalants). Conclusions. Concerns over promotion of youth dependence to nicotine by offering the sale of NRT OTC to adults have not been realized and policymakers should consider reducing barriers to access these products. Copyright 2005, American Society of Addiction Medicine.

**Prediction of adolescent smoking from family and social risk factors at 5 years, and maternal smoking in pregnancy and at 5 and 14 years.**

O'Callaghan FV; O'Callaghan M; Najman JM; Williams GM; Bor W; Alati R. *Addiction* 101(2): 282-290, 2006. (46 refs.)

Aims: This study examines associations between maternal smoking and family, social or child risk factors when the child is aged 5 and adolescent smoking. The influence of mothers who smoke in pregnancy or continue to smoke at 14 years was also examined. Design The Mater-University of Queensland Study of Pregnancy is a prospective cohort study. Participants Participants included 8556 women enrolled between 1981 and 1984 at their first antenatal visit. Completed questionnaires were obtained for 7223 offspring, comprising the study birth cohort. Of the 7223 eligible children a total of 4541

had information on both maternal smoking when the child was aged 5 years and adolescent smoking at 14 years. Measurements Measures included maternal smoking during pregnancy and when the child was aged 5 and 14 years, child smoking at 14 years, maternal alcohol use, child behaviour problems and social and demographic variables. Findings Adolescent smoking was predicted by a risk score at 5 years involving maternal smoking and alcohol use, non-married status, having a partner who had ever been arrested, having four or more children in the household, and child aggression at 5 years. Continued maternal smoking from 5 to 14 years was associated strongly with adolescent smoking. There was also evidence that smoking in late pregnancy may exert an independent effect on adolescent smoking. Conclusions: The results suggest the possibility of a direct effect of prenatal smoking on adolescent smoking and highlight a set of environmental risk factors in the development of adolescent smoking. These risk factors may be used as early warning signs that intervention may be needed, and given the similarities with risk factors for other adverse childhood outcomes, the benefits of early intervention may extend beyond smoking to other problem behaviours. The possibility of being able to predict other disorders, because of these associations, also warrants further investigation. Copyright 2006, Society for the Study of Addiction to Alcohol and Other Drugs.

**"Withdrawal symptoms" in adolescents: A comparison of former smokers and never-smokers.**

Prokhorov AV; Hudmon KS; Cinciripini PM; Marani S. *Nicotine & Tobacco Research* 7(6): 909-913, 2005. (31 refs.)

Since the early 1980s, investigators have been reporting that adolescent smokers felt "dependent" on cigarettes and that adolescents trying to quit smoking experienced the same withdrawal symptoms observed in adult quitters, including restlessness, insomnia, increased appetite and weight gain, irritability or anger, depression, craving for cigarettes, and trouble concentrating. We hypothesized that most of these symptoms might be attributed to adolescence itself. To investigate this hypothesis, we examined the prevalence of these seven "adult" withdrawal symptoms in a population of adolescent former smokers and never-smokers. Participants were high school students in Houston, Texas, participating in a nested, group-randomized control group study designed to estimate the impact of a CD-ROM intervention for smoking prevention and cessation. We measured differences in symptoms frequency between never-smokers and former smokers, matched in a 2:1

ratio on sex and race/ethnicity, and differences in symptoms among former smokers as a function of time since final quit attempt and prior level of smoking. Only former heavy smokers have shown significantly higher prevalence of withdrawal symptoms compared with never-smokers. Of the seven symptoms assessed, only craving incrementally increased with the intensity of smoking. Overall the individual withdrawal symptoms did not effectively differentiate between 112 never-smokers and 34 former lighter smokers (persons who used to smoke less than "a few cigarettes on most days"). Withdrawal symptoms can reliably differentiate former heavy smokers from light smokers and never-smokers, among adolescents. Because most adolescents tend to be lighter smokers, future tobacco use and cessation studies should interpret adult withdrawal symptoms among adolescents with caution. Copyright 2005, Taylor & Francis Ltd.

#### **A practical clinical approach to the treatment of nicotine dependence in adolescents.**

Upadhyaya H; Deas D; Brady K. *Journal of the American Academy of Child and Adolescent Psychiatry* 44(9): 942-946, 2005. (23 refs.)

Child and adolescent psychiatrists are in a position to prevent and treat nicotine dependence because many of our patients smoke cigarettes. Unfortunately, nicotine dependence is frequently underdiagnosed and undertreated among adolescents in psychiatric settings. In a systematic assessment of 120 adolescents admitted to an inpatient psychiatric unit, only six of the 47 current smokers had a chart diagnosis of nicotine dependence (Upadhyaya et al., 2003). Nicotine withdrawal can become a significant issue among adolescents admitted to locked inpatient psychiatric units because they are not allowed to smoke. Common nicotine withdrawal symptoms include irritability, anxiety, decreased concentration, increased appetite, and craving for cigarettes (American Psychiatric Association, 2000). These symptoms can mimic symptoms of other psychiatric disorders as well as make patients more difficult to manage on the unit. Hence, in this clinical perspective article, we offer practical advice for addressing nicotine dependence by child and adolescent psychiatrists. The authors discuss assessment with several rating scales described, and practical pointers provided for assisting adolescents in accurately recalling patterns of use. Daily smoking is suggested as a point of discrimination for pharmacological treatment, e.g., bupropion sustained release [SR]) as

well as newer agents, as well as nicotine replacement, appropriate doses and length of use are discussed. Supportive therapies and behavioral approaches are reviewed. The authors include a variety of practical tips, drawn from their clinical practice. Copyright 2005, Lippincott, Williams & Wilkins.

#### **A multihealth behavior intervention integrating physical activity and substance use prevention for adolescents.**

Werch CC; Moore MJ; DiClemente CC; Bledsoe R; Jobli E. *Prevention Science* 6(3): 213-226, 2005. (61 refs.)

The primary purpose of this study was to test the efficacy of a brief, multi-health behavior intervention integrating physical activity and alcohol use prevention messages for high school-aged adolescents. A total of 604 participants, 335 9th and 269 11th grade students from a suburban high school in northeast Florida participated in this study. A randomized control trial was conducted with participants randomly assigned within grade levels to receive either a brief consultation and prescription with a mailed reinforcing follow-up flyer (Project SPORT) or a minimal intervention control consisting of a wellness brochure provided in school and a pamphlet about teen health and fitness mailed to the home. Differences between intervention groups were evaluated with a series of MANCOVA tests. Project SPORT participants demonstrated significant positive effects at 3-months post-intervention for alcohol consumption, alcohol initiation behaviors, alcohol use risk and protective factors, drug use behaviors, and exercise habits, and at 12-months for alcohol use risk and protective factors, cigarette use, and cigarette initiation ( $p$ 's < 0.05). A post hoc analysis examining interactions between past 30-day use of marijuana and/or cigarettes by treatment group indicates significant positive effects for drug using adolescents who received Project SPORT on alcohol consumption, drug use behaviors, and drug use initiation at 3-months, and for drug use behaviors and exercise habits at 12-months ( $p$ 's < 0.05). A brief, 12-min one-on-one consultation integrating alcohol avoidance messages within those promoting fitness and other positive health behaviors holds promise for influencing adolescent alcohol and cigarette use and other health behaviors at posttreatment and 1 year later. Long-term sustained effects for cigarette and marijuana use, and both vigorous and moderate physical activity, were found among adolescents using marijuana and/or cigarettes prior to intervention. Copyright 2005, Springer