

### **Does exercise have an acute effect on desire to smoke, mood and withdrawal symptoms in abstaining adolescent smokers?**

Everson ES; Daley AJ; Ussher M. *Addictive Behaviors* 31(9): 1547-1558, 2006. (50 refs.)

Objective: Previous studies have shown that exercise acutely reduces desire to smoke and withdrawal symptoms among adult smokers; however, no study has examined these effects in younger smokers. This study investigated the impact of a short bout of moderate intensity exercise on desire to smoke, withdrawal symptoms and exercise-induced affect in temporarily abstinent adolescent smokers. Methods: Thirty-seven low-active male and female smokers aged 16-19 years, abstained from smoking overnight and were assigned to either (i) 10 min of moderate intensity cycle ergometry (n = 18) or (ii) a placebo control condition that involved very light intensity cycle ergometry (n = 19). Measures of desire to smoke, the Mood and Physical Symptoms Scale (MPSS) and Subjective Exercise Experience Scale (SEES) were administered at baseline, 5 min during, 5 min after and 30 min after both conditions. Results and conclusion: A significant interaction effect for group by time was recorded for psychological distress scores, when the baseline value was covaried. Follow-up tests indicated that the exercise group reported significantly higher PD scores than the placebo control during exercise, but not at any other time point. No other significant effects were found for any other variables. Unlike research involving adult populations, a short bout of moderate intensity exercise did not alter desire to smoke among abstaining adolescent smokers and may negatively impact affective responses during exercise. Copyright 2006, Elsevier Science.

### **Gender and weight concerns in adolescent smokers.**

Cavallo DA; Duhig AM; McKee S; Krishnan-Sarin S. *Addictive Behaviors* 31(11): 2140-2146, 2006. (29 refs.)

The aim of this study was to examine smoking-specific weight concerns in a well-characterized sample of adolescent daily smokers and the influence of gender, age, and body mass index (BMI). Adolescent smokers (n = 103) were asked two smoking-specific weight concern questions: "How much do cigarettes help you control your weight?" and

"How concerned are you about gaining weight as a result of quitting?" A significant positive relationship was found between average daily cigarette use and belief in smoking as a means to control weight and a significant negative relationship between the years of smoking and belief that smoking controls weight. There was no significant relationship between BMI and smoking to control weight for females, whereas for males, there was a positive relationship, indicating that heavier males were more likely to report smoking to control weight. Additionally, females who smoked more cigarettes reported more concern about gaining weight upon quitting, a pattern not seen in males. Results highlight potentially important gender differences in the relationship between weight concerns and smoking and the influence these concerns may have on quitting smoking. Copyright 2006, Elsevier Science.

### **Evidence for clinical smoking cessation for adolescents.**

McVea KLSP. *Health Psychology* 25(5): 558-562, 2006. (40 refs.)

Objective: This report reviews the evidence that informs the role of health and mental health care providers in addressing youth smoking cessation. Design: Qualitative literature review. Results: Physicians do not consistently screen adolescents for tobacco use and fail to provide recommended cessation advice. Challenges to addressing smoking cessation include the need for procedures to ensure confidentiality and the existence of competing demands to provide other services. Few published studies have specifically addressed the effectiveness of clinical interventions. Interventions that require return visits or follow-up phone contacts are technically difficult to implement in this population. Successful interventions may require resources not available in nonresearch settings. Most studies have used brief clinical intervention as a control condition, making it impossible to evaluate its effectiveness. Conclusion: There is little evidence that supports current clinical smoking cessation guidelines for adolescents. More research is needed to develop inexpensive, efficient clinical interventions that can provide youths access to smoking cessation help. Future challenges include reorganizing clinical systems to offer greater

counseling by support staff or in electronic formats and to provide effective booster messages and follow-up care in a population that is difficult to track. Copyright 2006, American Psychological Association.

**Escalation and initiation of younger adolescents' substance use: The impact of perceived peer use.**

D'Amico EJ; McCarthy DA. *Journal of Adolescent Health* 39(4): 481-487, 2006. (39 refs.)

Purpose: The middle school years are peak years for substance use initiation. The current study assessed the impact of peer influence on both initiation and escalation of cigarette, alcohol, and marijuana use among sixth, seventh, and eighth graders. Methods: Youth (n = 974; 45% male) were surveyed twice over an academic year and reported on their personal substance use and their perception of peer substance use. The sample ranged in age from 10 to 15 years at Time 1 (M age = 11.95) and was 44% White, 26% Latino, 7% Asian American/Pacific Islander, 4% African American, and 14% mixed ethnic origin. Results: Hierarchical regressions examined whether personal and perceived peer substance use predicted later substance involvement, and logistic regressions assessed whether Time 1 perceived peer and personal use of other substances discriminated between initiates and noninitiates. After controlling for personal substance use, perceived peer alcohol use predicted both increased alcohol and marijuana use, and perceived peer marijuana use predicted increased alcohol use. Only perceived peer alcohol use was associated with initiation of alcohol, and both perceived peer alcohol and marijuana use predicted onset of marijuana use. Conclusions: Results highlight the importance of perceived peer use in predicting both onset and escalation of use and suggest utilizing a multifaceted prevention approach that targets multiple substances. Copyright 2006, Society for Adolescent Medicine.

**The joint influence of parental modeling and positive parental concern on cigarette smoking in middle and high school students.**

Kalesan B; Stine J; Alberg AJ. *Journal of School Health* 76(8): 402-407, 2006. (34 refs.)

The purpose of the study was to examine the interaction between parental smoking status and parental attitudes, as measured by positive parental concern, on the risk of adolescent cigarette smoking. Parental smoking and parental concern about smoking were measured in a cross-sectional study of 37,244 students, a random sample of Maryland middle and high school students, who were current or never smokers. Parental concern was classified into 3 levels:

strict, moderate, and minimal. The likelihood of youths being current smokers was positively associated with both parental smoking (both versus neither parent smokes: odds ratio [OR] 3.4, 95% confidence interval [CI] 3.1-3.7) and parental concern about smoking (minimal versus strict concern: OR 2.3, 95% CI 2.1-2.4). Youths with parents who did not smoke and with strict concern had the lowest likelihood of smoking. In comparison to this group, after adjustment for other social influences the likelihood of being a current smoker was more than 5 times greater among boys (OR 5.8, 95% CI 4.5-7.4) and girls (OR 5.2, 95% CI 4.1-6.5) whose parents both smoked and were minimally concerned about smoking. Current smoking in youths was independently associated with both parental smoking and less parental concern. When these 2 factors were jointly considered, the prevalence of current smoking in youths increased both with exposure to parental modeling and reduced parental concern about smoking. The results indicate that minimal parental concern about smoking worsens the risk due to parental modeling. Parental modeling and parental attitudes act synergistically to exacerbate the likelihood of smoking. Copyright 2006, Blackwell Publishing.

**Bullying and smoking: Examining the relationships in Ontario adolescents.**

Morris EB; Zhang B; Bondy SJ. *Journal of School Health* 76(9): 465-470, 2006. (34 refs.)

Using data from the 2003 Ontario Student Drug Use Survey (Centre for Addiction and Mental Health, Toronto), the relationships between bullying and smoking in adolescents were examined. A representative sample of 3314 grade 7-12 students was included in the analysis. Models were adjusted for confounders identified in the current literature. Multinomial logistic regression showed that current smokers were more likely to be bullies than nonsmokers (relative risk ratio = 2.3, p < .001); being a current smoker was not associated with being a victim or a bully/victim (one who is both a bully and a victim). Moreover, gender was found to modify the effect of smoking on bullying status. Female smokers were more likely to be bullies and bully/victims than nonsmokers while there were no statistically significant differences for males. The associations between bullying status and smoking are consistent with those found in a multinational World Health Organization survey of adolescent health. Findings of the study suggested that girls were at much higher risk for involvement in bullying if they smoked, although

girls were less frequently involved in bullying. Copyright 2006, Blackwell Publishing.

**Designing smoking cessation services for school-age smokers: A survey and qualitative study.**

Molyneux A; Lewis S; Coleman T; McNeill A; Godfrey C; Madeley R et al. *Nicotine & Tobacco Research* 8(4): 539-546, 2006. (32 refs.)

To identify the preferred design characteristics of smoking cessation services for school-age smokers, we conducted focus groups with teenage smokers motivated to stop smoking. We surveyed all pupils in years 9-11 (aged 13-16) in a random sample of 10 schools in Nottinghamshire, United Kingdom, to elicit details of smoking behavior, and conducted 25 focus groups in 6 schools with current smokers who wanted to stop smoking. Of 4,065 pupils surveyed, 888 (22%) were current smokers, and 438 (50% of smokers) wanted to quit smoking. We sampled 226 of these individuals for focus group studies, and 135 (60%) participated. These participants were motivated to quit, and almost all had tried to do so but had found it too difficult. Many were aware of smoking cessation methods but had low perceptions of their effectiveness based on their own or others' poor experiences of these interventions, and few were aware of the possibility of professional cessation support. Given clear, nondirective information about interventions, participants reported a preference for confidential, nonjudgmental services delivered during school time by a trained counselor, allowed the option to attend with friends, and offered nicotine replacement therapy (NRT). School-age smokers in Nottinghamshire, United Kingdom, who are motivated to stop smoking have low knowledge and opinions of smoking cessation interventions. Our findings indicate that young smokers would favor school-based services offering confidential professional counseling and NRT. Copyright 2006, Taylor & Francis.

**Tobacco cessation interventions for young people. (review).**

Grimshaw GM; Stanton A. *Cochrane Database of Systemic Reviews* 4(article no. CD003289), 2006. (110 refs.)

Background: Teenage smoking prevalence is around 15% in developing countries (with wide variation from country to country), and around 26% in the UK and USA. Although most tobacco control programmes for adolescents are based around prevention of uptake, there are also a number of initiatives to help those who want to quit. Since those who do not smoke before the age of 20 are significantly less likely to start as adults,

there is a strong case for programmes for young people that address both prevention and treatment. Objectives: To evaluate the effectiveness of strategies that help young people to stop smoking tobacco. Search strategy We searched the Cochrane Central Register of Controlled Trials (CENTRAL) and the Cochrane Tobacco Addiction Group's Specialized Register, MEDLINE, EMBASE, PsycINFO, ERIC, CINAHL, and the bibliographies of identified trials. We also searched the 'grey' literature (unpublished materials), and contacted authors and experts in the field where necessary. Selection criteria Types of studies: Randomized controlled trials, cluster-randomized controlled trials and controlled trials. Types of participants: Young people, aged less than 20, who are regular tobacco smokers. Types of interventions: The interventions ranged from simple ones such as pharmacotherapy, targeting individual young people, through complex programmes targeting people or organizations associated with young people (for example, their families or schools), or the community in which young people live. We included cessation programmes but excluded programmes primarily aimed at prevention of uptake. Types of outcome measures: The primary outcome was smoking status at six months follow up, among those who smoked at baseline. We report the definition of cessation used in each trial (e. g seven- or thirty-day point prevalence abstinence, or sustained or prolonged abstinence), and we preferred biochemically verified cessation when that measure was available. Data collection and analysis Both authors independently assessed the eligibility of candidate trials identified by the searches, and extracted data from them. We categorized included trials as being at low, medium or high risk of bias, based on concealment of allocation, blinding (where applicable) and the handling of attrition and losses to follow up. We conducted limited meta-analyses of some of the trials, provided that it was appropriate to group them and provided that there was minimal heterogeneity between them. We estimated pooled odds ratios using the Mantel-Haenszel method, based on the quit rates at longest follow up for trials with at least six months follow up from the start of the intervention. Main results We found 15 trials, covering 3605 young people, which met our inclusion criteria (seven cluster-randomized controlled trials, six randomized controlled trials and two controlled trials). Three trials used or tested the transtheoretical model (stages of change) approach, two tested pharmacological aids to quitting (nicotine replacement and bupropion), and the remaining trials used various psychosocial interventions, such as motivational

enhancement or behavioural management. The trials evaluating TTM interventions achieved moderate long-term success, with a pooled odds ratio (OR) at one year of 1.70 (95% confidence interval (CI) 1.25 to 2.33) persisting at two-year follow up with an OR of 1.38 (95% CI 0.99 to 1.92). Neither of the pharmacological intervention trials achieved statistically significant results (data not pooled), but both were small-scale, with low power to detect an effect. The three interventions (5 trials) which used cognitive behavioural therapy interventions did not individually achieve statistically significant results, although when the three Not on Tobacco trials were pooled the OR 1.87; (95% CI 1.00 to 3.50) suggested some measure of effectiveness. Although the three trials that incorporated motivational interviewing as a component of the intervention achieved a pooled OR of 2.05 (95% CI 1.10 to 3.80), the impossibility of isolating the effect of the motivational interviewing in these trials meant that we could not draw meaningful inferences from that analysis. Authors' conclusions: Complex approaches show promise, with some persistence of abstinence (30 days point prevalence abstinence at six months), especially those incorporating elements sensitive to stage of change. There were few trials with evidence about pharmacological interventions (nicotine replacement and bupropion), and none demonstrated effectiveness for adolescent smokers. Psycho-social interventions have not so far demonstrated effectiveness, although pooled results for the Not on Tobacco trials suggest that that this approach may yet prove to be effective; however, their definition of cessation (one or more smoke-free days) may not adequately account for the episodic nature of much adolescent smoking. There is a need for well-designed adequately powered randomized controlled trials for this population of smokers, with a minimum of six months follow up and rigorous definitions of cessation (sustained and biochemically verified). Attrition and losses to follow up are particularly problematic in trials for young smokers, and need to be kept to a minimum, so that management and interpretation of missing data need not compromise the findings. Copyright 2005, John Wiley & Sons.

### **Tobacco and other drug use among high school students with asthma.**

Jones SE; Merkle S; Wheeler L; Mannino DM; Crossett L. *Journal of Adolescent Health* 39(2): 291-294, 2006. (9 refs.)

The 2003 national Youth Risk Behavior Survey data were analyzed to compare drug use among high school students with and without asthma. High school students with current asthma used cigarettes, cigars, marijuana, and inhalants (huffing) at rates equal to or greater than high school students without current asthma. Copyright 2006, Society for Adolescent Medicine.

### **Can home smoking restrictions influence adolescents' smoking behaviors if their parents and friends smoke?**

Szabo E; White V; Hayman J. *Addictive Behaviors* 31(12): 2298-2302, 2007. (9 refs.)

Research suggests that the presence of a total ban on smoking in the home is associated with a reduced likelihood of tobacco experimentation among adolescents. While the influence of parental smoking on this association is examined in this work, no study has examined the influence of friends' smoking behavior. In this study, we use data from a statewide survey of students (n = 4125) from the Australian State of Victoria to examine the association between home smoking bans and stage of smoking uptake after controlling for parental smoking and smoking among friends. Logistic regression revealed that students residing in homes with a total ban on smoking were least likely to be susceptible to smoking or to have experimented with smoking. While there was an interaction between parental smoking status and home bans on smoking uptake stage, indicating that the effect of home bans was strongest when neither parent smoked, there was no interaction between home bans and friends' smoking. The results suggest that home smoking bans reduce the likelihood of an adolescent trying tobacco regardless of their friends' smoking behavior. By adopting strong home smoking bans, parents can reduce some of the influence friends' smoking can have on the smoking behavior of their adolescent. Copyright 2007, Elsevier Science.