

## **Salvia divinorum: Effects and use among YouTube users.**

Lange JE; Daniel J; Homer K; Reed MB; Clapp JD. *Drug and Alcohol Dependence* 108(1-2): 138-140, 2010. (8 refs.)

Salvia divinorum (salvia) is an intense, short-acting hallucinogenic plant gaining popularity among adolescents in the United States. There has been little scientific documentation of salvia's effects. The popular video-sharing website YouTube has received literally thousands of video-posts of people using salvia. The objective of this study was to assess the effects of salvia use through systematic observations of YouTube videos. A sample of salvia videos was obtained using the search term "salvia." The videos were further screened and only videos that captured the entire drug "trip" without video edits were included in the analyses described here (n = 34). Three trained research assistants independently watched the videos and rated their observations on 42 effects in 30-s intervals. Onset of symptoms was quick (often less than 30 s) and tended to dissipate within 8 min. Further, there was a relationship between salvia dose and effect duration. Since salvia's effects on humans are largely undocumented, this study provides the look at users in a non-laboratory environment (e.g. self-taped videos) exhibiting impairments and behaviors consistent with this powerful hallucinogen. Also, this study demonstrates the feasibility and shortcomings of using YouTube videos to assess emerging drugs and drug effects. Copyright 2010, Elsevier Science.

## **Overweight, obesity, youth, and health-risk behaviors.**

Farhat T; Iannotti RJ; Simons-Morton BG. *American Journal of Preventive Medicine* 38(3): 258-267, 2010. (50 refs.)

Background: The prevalence and severity of obesity have increased among children and adolescents. Although the medical and psychosocial consequences of youth obesity have been well documented, comparatively less information exists on the association of overweight/obesity with healthrisk behaviors, which are considered to be a primary threat to adolescent health. Purpose: This study aims to examine the association of overweight and obesity

with health-risk behaviors among U.S. youth. Methods: Self-reported height and weight, substance use, violence, and bullying were assessed in a nationally representative sample of students aged 11-17 years (N=7825) who participated in the 2005-2006 Health Behaviors in School-Aged Children survey. Data were analyzed in 2009. Results: Significant gender and age differences in the relationship of overweight/ obesity with risk behaviors were observed. Overweight and obesity were significantly associated with substance use among girls only: Frequent smoking and drinking were associated with overweight and obesity among younger girls, whereas these behaviors were associated with obesity among older girls. Frequent smoking and cannabis use were associated with over-weight among younger girls only. Relationships between violent behavior and overweight/obesity were mainly observed among boys: Younger obese boys were more likely to be victims of bullying, whereas older obese boys were more likely to carry weapons compared to boys of normal weight. Conclusions: Overweight and obese young people are at risk of developing health-compromising behaviors that may compound medical and social problems associated with excess weight. Copyright 2010, Elsevier Science.

## **Predictors of sexual debut at age 16 or younger.**

Cavazos-Rehg PA; Spitznagel EL; Bucholz KK; Nurnberger J; Edenberg HJ; Kramer JR et al. *Archives of Sexual Behavior* 39(3): 664-673, 2010. (52 refs.)

The present study examined the extent to which variables within the self system (i.e., symptoms of alcohol dependence and conduct disorder, gender, race, and metropolitan status) and the familial system (i.e., having an alcohol dependent biological parent or second-degree relative, religious background, educational background of parents, and being born to a teenage mother) were associated with sexual debut at 16 years old or earlier. Participants were 1,054 biological relatives, aged 18-25 years, of alcohol dependent probands who participated in the Collaborative Study on the Genetics of Alcoholism project. Comparison participants (N = 234) without alcohol dependent biological parents were also evaluated. Clinical and sociodemographic variables

were assessed by structured, personal interviews. Parental history of alcohol dependence was evaluated by direct interview of parents in most cases and family history in uninterviewed parents. In a multivariate survival analysis, increased risk of becoming sexually active at 16 years of age or earlier was significantly associated with 6 of the 10 predictor variables, including race, one or more alcohol dependence symptoms, and/or one or more conduct disorder symptoms. Having an alcohol dependent biological parent or second-degree relative (e.g., aunt, uncle, or grandparent), educational background of mother, and being born to a teenage mother were also significantly associated with increased risk. These results provide evidence that specific variables in the self and familial systems of influence are important in predicting sexual debut at 16 years old or earlier. Copyright 2010, Springer.

#### **Drug-induced gynecomastia in children and adolescents.**

Goldman RD. *Canadian Family Physician* 56(4): 344-345, 2010. (11 refs.)

QUESTION I frequently see adolescent boys in my practice with transient gynecomastia. My management includes reassuring the boys and their families; however, I also understand that specific medication, alcohol, and drugs can cause gynecomastia. How common is this phenomenon, and what medications can induce gynecomastia? ANSWER While gynecomastia is a physiologic phenomenon in most newborns and adolescents, it is important to consider pathologic conditions and medications that can cause breast enlargement. Antibiotics, antiulcer drugs, growth hormones, and chemotherapy have been reported to induce gynecomastia. Adolescents who use anabolic steroids, or who abuse alcohol, marijuana, heroin, or amphetamines, should be alerted to the fact that gynecomastia might develop. Treatment of drug-induced gynecomastia includes discontinuation of the offending drug. Very rarely is surgical intervention required. Copyright 2010, College of Family Physicians of Canada.

#### **Adolescent caffeine use, ADHD, and cigarette smoking.**

Walker LR; Abraham AA; Tercyak KP. *Children's Health Care* 39(1): 73-90, 2010. (59 refs.)

The purpose of this study was to describe the prevalence of adolescent caffeine use and its association with attention deficit hyperactivity disorder (ADHD) and cigarette smoking. A total of 448 adolescents between the ages of 13 and 21 years consecutively presenting for routine, well-child care

were studied. Twenty-four percent had a pre-existing diagnosis of ADHD, and 47% reported a positive lifetime history of cigarette smoking. Eighty-five percent of participants reportedly consumed a caffeinated beverage within the past 30 days; 38% had consumed 1+ cups of caffeinated coffee, and 78% had consumed 1+ glasses of another caffeinated beverage other than coffee (e.g., tea or soft drinks). After controlling for sociodemographic and other potential confounding factors, an ADHD diagnosis and a positive lifetime smoking history were significantly associated with caffeine use: Adolescents with ADHD were nearly twice as likely to use more caffeine than were adolescents without ADHD (odds ratio [OR] = 2.08; 95% confidence interval [CI] = 1.23, 3.50,  $p = .006$ ); lifetime smokers were 80% more likely to use more caffeine than were adolescents who had never smoked (OR = 1.80; 95% CI = 1.16, 2.79,  $p = .009$ ). Caffeine use is elevated among adolescents diagnosed with ADHD and those who have ever tried cigarette smoking. Although caffeine is a non-illicit psychostimulant, these findings add to the emerging data on substance use behaviors among adolescents with ADHD. Health care professionals who work with adolescents with ADHD should regularly screen for both cigarette and caffeine use among their patients. Copyright 2010, Taylor & Francis.

#### **De-normalising smoking in the classroom: Does it cause bullying?**

Hanewinkel R; Isensee B; Maruska K; Sargent JD; Morgenstern M. *Journal of Epidemiology and Community Health* 64(3): 202-208, 2010. (27 refs.)

Background: The Smokefree Class Competition, the largest school-based smoking prevention programme in Europe, aims to create a class climate that denormalises smoking. An analysis was carried out to assess whether it increases bullying or perception of isolation. Methods: A cluster randomised controlled trial was conducted, with two waves of assessment directly before the start and immediately after the end of the prevention programme. Some 3490 students were recruited from 84 secondary schools in Germany, of whom 3123 students (90%) provided data from both waves. Classes from the intervention group (IG) participated in the Smokefree Class Competition, committing themselves to stay smokefree for a period of 6 months, and self-monitoring their smoking status on a weekly basis. Classes that refrained from smoking were eligible for a prize draw. To test the hypotheses that participation in the competition might foster bullying, we measured students' self report of (1) being victimised, (2) engaging in bullying and (3) being isolated. Results: There was a strong association

between daily smoking and higher odds of bullying others at baseline (adjusted proportional OR 4.66; 95% CI 3.38 to 6.43). No significant pre-post differences across treatment assignment groups were found on any bullying measure using generalised linear latent and mixed models. For being isolated, the trends suggested that the programme, if anything, fostered lower levels of isolation at follow-up, especially for those who perceived high levels of isolation at baseline. Conclusion: Participation in the intervention had no effect on bullying or perceptions of isolation. Copyright 2010, BMJ Publishing Group.

### **Camel No. 9 cigarette-marketing campaign targeted young teenage girls.**

Pierce JP; Messer K; James LE; White MM; Kealey S; Vallone DM et al. *Pediatrics* 125(4): 619-626, 2010. (41 refs.)

CONTEXT: The 1998 Master Settlement Agreement (MSA) restricted tobacco industry advertising practices that targeted teens. OBJECTIVE: To assess whether cigarette-advertising campaigns conducted after the MSA continue to influence smoking among adolescents. DESIGN, SETTING, and PARTICIPANTS: Participants were a national longitudinal cohort of 1036 adolescents (baseline age: 10-13 years) enrolled in a parenting study. Between 2003 and 2008, 5 sequential telephone interviews were conducted, including the participant's report of brand of "favorite" cigarette advertisement. The fifth interview was conducted after the start of RJ Reynolds' innovative "Camel No. 9" advertising campaign in 2007. Smoking outcome reported from the fifth survey. RESULTS: The response rate through the fifth survey was 71.8%. Teenagers who reported any favorite cigarette ad at baseline (mean age: 11.7 years) were 50% more likely to have smoked by the fifth interview (adjusted odds ratio: 1.5 [95% confidence interval: 1.0-2.3]). For boys, the proportion with a favorite ad was stable across all 5 surveys, as it was for girls across the first 4 surveys. However, after the start of the Camel No. 9 advertising campaign, the proportion of girls who reported a favorite ad increased by 10 percentage points, to 44%. The Camel brand accounted almost entirely for this increase, and the proportion of each gender that nominated the Marlboro brand remained relatively stable. CONCLUSIONS: After the MSA, adolescents continued to be responsive to cigarette advertising, and those who were responsive were more likely to start smoking. Recent RJ Reynolds advertising may be effectively targeting adolescent girls. Copyright 2010, American Academic Pediatrics.

### **Television and video game viewing and its association with substance use by Kentucky elementary school students, 2006.**

Armstrong KE; Bush HM; Jones J. *Public Health Reports* 125(3): 433-440, 2010. (20 refs.)

Objective. We sought to determine if the number of hours elementary school students viewed television (TV) and video games is associated with substance use. Methods. We distributed the California Healthy Kids Survey Elementary School Questionnaire to elementary schools in Kentucky in 2006. A total of 4,691 students, primarily fourth and fifth graders, completed the survey. The students provided responses to questions on topics such as drug use, alcohol use, TV and video game viewing time, and their home life. We analyzed the survey using Chi-square tests and logistic regression. Results. Approximately one-third of respondents indicated substance use, which was defined as alcohol use, illegal drug use, smoking/tobacco use, or sniffing solvents. Significantly more children (28% of those watching  $\geq 3$  hours of TV/video games compared with 20% of those watching greater than zero but  $\leq 2$  hours of TV/video games) reported alcohol use ( $p < 0.05$ ). Similar results were seen for sniffing solvents, with 9% of those watching  $\geq 3$  hours of TV/video games reporting they sniffed solvents compared with 4% who watched TV/video games for greater than zero but  $\leq 2$  hours ( $p < 0.05$ ). The results of the logistic regression indicated that the odds of drinking alcohol (odds ratio [OR] = 1.48, 95% confidence interval [CI] 1.23, 1.79) and sniffing solvents (OR=1.97, 95% CI 1.42, 2.75) were significantly higher for those watching  $\geq 3$  hours of TV/video games compared with those who watched TV/video games for greater than zero but  $\leq 2$  hours. Conclusions. The hours of TV and video games viewed were associated with alcohol use and sniffing solvents for our sample. However, limitations exist due to the inability to separate TV viewing from video game viewing. Copyright 2010, Association of Schools of Public Health.

### **Early smoking is associated with peak bone mass and prevalent fractures in young, healthy men.**

Taes Y; Lapauw B; Vanbillemont G; Bogaert V; De Bacquer D; Goemaere S et al. *Journal of Bone and Mineral Research* 25(2): 379-387, 2010. (45 refs.)

Smoking is associated with lower areal bone mineral density (aBMD) and higher fracture risk, although most evidence has been derived from studies in elderly subjects. This study investigates smoking habits in relation to areal and volumetric bone parameters and fracture prevalence in young, healthy males at peak

bone mass. Healthy male siblings ( $n = 677$ ) at the age of peak bone mass (25 to 45 years) were recruited in a cross-sectional population-based study. Trabecular and cortical bone parameters of the radius and cortical bone parameters of the tibia were assessed using peripheral quantitative computed tomography (pQCT). Areal bone mass was determined using dual energy X-ray absorptiometry (DXA). Sex steroids and bone markers were determined using immunoassays. Prevalent fractures and smoking habits were assessed using questionnaires. Self-reported fractures were more prevalent in the current and early smokers than in the never smokers ( $p < .05$ ), with a fracture prevalence odds ratio for early smokers of 1.96 (95% confidence interval 1.18-3.24) after adjustment for age, weight, educational level, and alcohol use and exclusion of childhood fractures. Current smoking was associated with a larger endosteal circumference ( $\beta = 0.027 \pm 0.009$ ,  $p = .016$ ) and a decreased cortical thickness ( $\beta = -0.034 \pm 0.01$ ,  $p = .020$ ) at the tibia. In particular, early smokers ( $\leq 16$  years) had a high fracture risk and lower areal BMD, together with a lower cortical bone area at the tibia and lower trabecular and cortical bone density at the radius. An interaction between free estradiol and current smoking was observed in statistical models predicting cortical area and thickness ( $\beta = 0.29 \pm 0.11$ ,  $p = .01$ ). In conclusion, smoking at a young age is associated with unfavorable bone geometry and density and is associated with increased fracture prevalence, providing arguments for a disturbed acquisition of peak bone mass during puberty by smoking, possibly owing to an interaction with sex steroid action. Copyright 2010, American Soc. for Bone and Mineral Research.

#### **A multisite description of juvenile drug courts program models and during-program outcomes.**

Hiller ML; Malluche D; Bryan V; DuPont ML; Martin B; Abensur R et al. *International Journal of Offender Therapy and Comparative Criminology* 54(2): 213-235, 2010. (54 refs.)

Like adult drug courts, juvenile drug courts have proliferated at a rapid rate during the past 15 years, but comparatively little research has been conducted on them. Although a few studies indicate that these programs appear to show promise as an intervention, almost nothing has been published using systematic and empirical methods to provide a description and specific examples of how these programs are structured and implemented. The purpose of the current study, therefore, is to summarize and integrate findings from systematic process evaluations of three

juvenile drug courts. Similarities and differences in the structure and design of the programs are noted and findings regarding the program model for each juvenile drug court, including target population, therapeutic activities, and initial and long-term goals are presented. During-program outcome data also are presented, and findings are reported as a "snapshot" of what happened during one calendar year in the operation of each program. Copyright 2010, Sage. Publ.

#### **The added risk of opioid problem use among treatment-seeking youth with marijuana and/or alcohol problem use.**

Subramaniam GA; Ives ML; Stitzer ML; Dennis ML. *Addiction* 105(4): 686-698, 2010. (27 refs.)

Objectives: To determine the added risk of opioid problem use (OPU) in youth with marijuana/ alcohol problem use (MAPU). Methods: A total of 475 youth (ages 14-21 years) with OPU + MAPU were compared to a weighted sample of 475 youth with MAPU only (i.e. no OPU) before and after propensity score matching on gender, age, race, level of care and weekly use of marijuana/alcohol. Youth were recruited from 88 drug treatment sites participating in eight Center for Substance Abuse Treatment-funded grants. At treatment intake, participants were administered the Global Appraisal of Individual Need to elicit information on demographic, social, substance, mental health, human immunodeficiency virus (HIV), physical and legal characteristics. Odds ratios with confidence intervals were calculated. Results: The added risk of OPU among MAPU youth was associated with greater comorbidity; higher rates of psychiatric symptoms and trauma/victimization; greater needle use and sex-related HIV risk behaviours; and greater physical distress. The OPU + MAPU group was less likely to be African American or other race and more likely to be aged 15-17 years, Caucasian; report weekly drug use at home and among peers; engage in illegal behaviors and be confined longer; have greater substance abuse severity and polydrug use; and use mental health and substance abuse treatment services. Conclusions: These findings expand upon the existing literature and highlight the substantial incremental risk of OPU on multiple comorbid areas among treatment-seeking youth. Further evaluation is needed to assess their outcomes following standard drug treatment and to evaluate specialized interventions for this subgroup of severely impaired youth. Copyright 2010, Society for the Study of Addiction to Alcohol and Other Drugs.