

### **The influence of age and gender on party drug use among young adults attending dance events, clubs, and rock festivals in Belgium.**

Van Havere T; Vanderplasschen W; Broekaert E; De Bourdeaudhui I. *Substance Use & Misuse* 44(13): 1899-1915, 2009. (56 refs.)

A random sample of visitors of dance events, clubs, and rock festivals in Belgium (Flanders) was selected to complete an anonymous survey regarding their use of "party" drugs (alcohol, cannabis, xtc, cocaine, and amphetamines) and patterns of going out. The results of 670 respondents recruited in 2005 are reported and compared with 2003 for gender and age. Drug use in these nightlife settings is higher than in the general population. In younger age groups, the illegal drug use increases, but it decreases in older age groups. This might be linked to more responsibilities. Men still use drugs more often than women, but the gender differences seem to decrease. The changing role of women in society could be an explanation for this evolution. Limitations and implications of this research are discussed. Copyright 2009, Taylor & Francis.

### **Timing of alcohol use and the incidence of premenstrual syndrome and probable premenstrual dysphoric disorder.**

Bertone-Johnson ER; Hankinson SE; Johnson SR; Manson JE. *Journal of Women's Health* 18(12): 1945-1953, 2009. (41 refs.)

Background: Relatively little is known about factors that influence the initial development of premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD), although these conditions are common in reproductive age women and are associated with substantial impairment. Previous studies have observed higher alcohol use in prevalent PMS/PMDD patients compared with controls, but it is unknown if drinking predisposes women to developing these disorders or is instead influenced by symptom experience. Methods: To address this, we conducted a case-control study nested within the prospective Nurses' Health Study II (NHS2). Participants were a subset of women aged 27-44 and free from PMS at baseline (1991), including 1057 women who developed PMS over 10 years of follow-up, 762 of

whom also met criteria consistent with PMDD, and 1968 control women. Alcohol use at various time periods, before and after onset of menstrual symptoms, was assessed by questionnaire. Results: Overall, alcohol use was not strongly associated with the incidence of PMS and probable PMDD. Relative risks (RR) for women with the highest cumulative alcohol use vs. never drinkers were 1.19 (95% confidence interval [CI] 0.84-1.67) for PMS and 1.28 (95% CI 0.86-1.91) for PMDD, although results did suggest a positive relationship in leaner women (p trend 0.002). Women who first used alcohol before age 18 had an RR of PMS of 1.26 (95% CI 0.91-1.75) compared with never drinkers; the comparable RR for PMDD was 1.35 (95% CI 0.93-1.98). Conclusions: These findings suggest alcohol use is not strongly associated with the development of PMS and PMDD, although early age at first use and long-term use may minimally increase risk. Copyright 2009, Mary Ann Liebert.

### **Incentives for retention of pregnant substance users: A secondary analysis.**

Brigham G; Winhusen T; Lewis D; Kropp F. *Journal of Substance Abuse Treatment* 38(1): 90-95, 2010. (27 refs.)

Retention of pregnant substance users in treatment is challenging. In a multisite clinical trial, 200 pregnant substance users entering outpatient treatment at one of four programs were randomized to either three individual sessions of Motivational Enhancement Therapy for Pregnant Substance users or three individual sessions normally provided. Retail scrip from \$25 to \$30 was provided for attendance of research visits but not treatment visits. A post hoc analysis of the non-methadone-maintained participants (n = 175) evaluated the hypotheses that monetary reinforcement for attendance would result in more consecutive, and overall, weeks of attendance of research versus nonincentivized treatment visits. Findings indicate participants were nearly three times as likely to attend 4 consecutive weeks of research visits versus treatment sessions. There was no effect for income while fewer dependents were associated with more consecutive weeks of attendance. Incentives in the \$25-to-\$30 range may serve to significantly

increase attendance and retention. Copyright 2010, Elsevier Science.

**Active, but not passive cigarette smoking was inversely associated with mammographic density.**

Butler LM; Gold EB; Conroy SM; Crandall CJ; Greendale GA; Oestreich N et al. *Cancer Causes & Control* 21(2): 301-311, 2010. (65 refs.)

The opposing carcinogenic and antiestrogenic properties of tobacco smoke may explain why epidemiologic studies have not consistently reported positive associations for active smoking and breast cancer risk. A negative relation between mammographic density, a strong breast cancer risk factor, and active smoking would lend support for an antiestrogenic mechanism. We used multivariable linear regression to assess the associations of active smoking and secondhand smoke (SHS) exposure with mammographic density in 799 pre- and early perimenopausal women in the Study of Women's Health Across the Nation (SWAN). We observed that current active smoking was associated with 7.2% lower mammographic density, compared to never active smoking and no SHS exposure ( $p = 0.02$ ). Starting to smoke before 18 years of age and having smoked a parts per thousand yen20 cigarettes/day were also associated with statistically significantly lower percent densities. Among nulliparous women having smoked a parts per thousand yen20 cigarettes/day was associated with 23.8% lower density, compared to having smoked a parts per thousand currency sign9 cigarettes/day ( $p < 0.001$ ). Our findings support the hypothesis that tobacco smoke exerts an antiestrogenic effect on breast tissue, but counters the known increased risk of breast cancer with smoking prior to first full-term birth. Thus, our data suggest that the antiestrogenic but not the carcinogenic effects of smoking may be reflected by breast density. Copyright 2010, Springer.

**Do treatment improvements in PTSD severity affect substance use outcomes? A secondary analysis from a randomized clinical trial in NIDA's Clinical Trials Network.**

Hien DA; Jiang HP; Campbell ANC; Hu MC; Miele GM; Cohen LR et al. *American Journal of Psychiatry* 167(1): 95-101, 2010. (22 refs.)

Objective: The purpose of the analysis was to examine the temporal course of improvement in symptoms of posttraumatic stress disorder (PTSD) and substance use disorder among women in outpatient substance abuse treatment. Method: Participants were 353 women randomly assigned to 12 sessions of either trauma-focused or health education group treatment.

PTSD and substance use assessments were conducted during treatment and posttreatment at 1 week and after 3, 6, and 12 months. A continuous Markov model was fit on four defined response categories (non-response, substance use response, PTSD response, or global response [improvement in both PTSD and substance use]) to investigate the temporal association between improvement in PTSD and substance use symptom severity during the study's treatment phase. A generalized linear model was applied to test this relationship over the follow-up period. Results: Subjects exhibiting non-response, substance use response, or global response tended to maintain original classification; subjects exhibiting PTSD response were significantly more likely to transition to global response over time, indicating maintained PTSD improvement was associated with subsequent substance use improvement. Trauma-focused treatment was significantly more effective than health education in achieving substance use improvement, but only among those who were heavy substance users at baseline and had achieved significant PTSD reductions. Conclusions: PTSD severity reductions were more likely to be associated with substance use improvement, with minimal evidence of substance use symptom reduction improving PTSD symptoms. Results support the self-medication model of coping with PTSD symptoms and an empirical basis for integrated interventions for improved substance use outcomes in patients with severe symptoms. Copyright 2010, American Psychiatric Association.

**Preventing drug abuse among adolescent girls: Outcome data from an Internet-based intervention.**

Schwinn TM; Schinke SP; Di Noia J. *Prevention Science* 11(1): 24-32, 2010. (40 refs.)

This study developed and tested an Internet-based gender-specific drug abuse prevention program for adolescent girls. A sample of seventh, eighth, and ninth grade girls ( $N = 236$ ) from 42 states and 4 Canadian provinces were randomly assigned to an intervention or control group. All girls completed an online pretest battery. Following pretest, intervention girls interacted with a 12-session, Internet-based gender-specific drug prevention program. Girls in both groups completed the measurement battery at posttest and 6-month follow-up. Analysis of posttest scores revealed no differences between groups for 30-day reports of alcohol, marijuana, poly drug use, or total substance use (alcohol and drugs). At 6-month follow-up, between-group effects were found on measures of 30-day alcohol use, marijuana use, poly drug use, and total substance use. Relative to girls in the control group, girls exposed to the Internet-based intervention

reported lower rates of use for these substances. Moreover, girls receiving the intervention achieved gains over girls in the control group on normative beliefs and self-efficacy at posttest and 6-month follow-up, respectively. Copyright 2010, Springer.

**Alcohol use among female sex workers and male clients: An integrative review of global literature. (review).**

Li Q; Li XM; Stanton B. *Alcohol and Alcoholism* 45(2): 188-199, 2010. (122 refs.)

Aims: To review the patterns, contexts and impacts of alcohol use associated with commercial sex reported in the global literature. Methods: We identified peer-reviewed English-language articles from 1980 to 2008 reporting alcohol consumption among female sex workers (FSWs) or male clients. We retrieved 70 articles describing 76 studies, in which 64 were quantitative (52 for FSWs, 12 for male clients) and 12 qualitative. Results: Studies increased over the past three decades, with geographic concentration of the research in Asia and North America. Alcohol use was prevalent among FSWs and clients. Integrating quantitative and qualitative studies, multilevel contexts of alcohol use in the sex work environment were identified, including workplace and occupation-related use, the use of alcohol to facilitate the transition into and practice of commercial sex among both FSWs and male clients, and self-medication among FSWs. Alcohol use was associated with adverse physical health, illicit drug use, mental health problems, and victimization of sexual violence, although its associations with HIV/sexually transmitted infections and unprotected sex among FSWs were inconclusive. Conclusions: Alcohol use in the context of commercial sex is prevalent, harmful among FSWs and male clients, but under-researched. Research in this area in more diverse settings and with standardized measures is required. The review underscores the importance of integrated intervention for alcohol use and related problems in multilevel contexts and with multiple components in order to effectively reduce alcohol use and its harmful effects among FSWs and their clients. Copyright 2010, Oxford University Press.

**Substance use disorders in women with anorexia nervosa.**

Root TL; Pinheiro AP; Thornton L; Strober M; Fernandez-Aranda F; Brandt H et al. *International Journal of Eating Disorders* 43(1): 14-21, 2010. (41 refs.)

Objective: We examined prevalence of in women substance use disorders (SUID) with: (1) anorexia nervosa (AN) restricting type (RAN); (2) AN with

purging only (PAN); (3) AN with binge eating only (BAN); and (4) lifetime AN and bulimia nervosa (ANBN). Secondary analyses examined SUD related to lifetime purging behavior and lifetime binge eating. Method: Participants (N = 731) were drawn from the international Price Foundation Genetic Studies. Results: The prevalence of SUD differed across AN subtypes, with more in the ANBN group reporting SUD than those in the RAN and PAN groups. Individuals who purged were more likely to report substance use than those who did not purge. Prevalence of SUD differed across lifetime binge eating status. Discussion: SUD are common in AN and are associated with bulimic symptomatology. Results underscore the heterogeneity in AN, highlighting the importance of screening for SUD across AN subtypes. Copyright 2010, John Wiley & Sons.

**Drug abusing women in the community: The impact of drug court involvement on recidivism.**

Shaffer DK; Hartman JL; Listwan SJ. *Journal of Drug Issues* 39(4): 803-827, 2009. (92 refs.)

Developing community-based options for drug abusing women is important for a variety of reasons. One option that shows promise is the treatment-oriented drug court. Although drug courts enjoy considerable empirical support, relatively few studies have examined the efficacy of this model for women. The current study uses a quasi-experimental design to compare outcomes between a sample of moderate to high-risk drug court participants (n=91) and probationers (n=80). Over the course of an average two year follow-up period, female drug court participants were found to have significantly lower rates of recidivism than their probation counterparts. The results of an event history analysis confirmed that drug court participants were significantly less likely to recidivate even after controlling for differences in length of follow-up. These findings provide support for the ability of drug court programs to successfully treat drug-involved women. Copyright 2009, Journal of Drug Issues, Inc.

**A brief alcohol intervention for hazardously drinking incarcerated women.**

Stein MD; Caviness CM; Anderson BJ; Hebert M; Clarke JG. *Addiction* 105(3): 466-475, 2010. (34 refs.)

Objective: To test the hypothesis that among hazardously drinking incarcerated women who are returning to the community, a brief alcohol intervention will result in less alcohol use at follow-up relative to standard of care. Methods: Eligible participants endorsed hazardous alcohol consumption—four or more drinks at a time on at least 3 separate

days in the previous 3 months or a score of 8 or above on the Alcohol Use Disorders Identification Test. Participants were randomized to either an assessment-only condition or to two brief motivationally focused sessions, the first delivered during incarceration, the second 1 month later after community re-entry. Participants recalled drinking behaviors at 3 and 6 months after the baseline interview using a 90-day time-line follow-back method. Results: The 245 female participants averaged 34 years of age, and were 71% Caucasian. The mean percentage of alcohol use days in the 3 months prior to incarceration was 51.7% and heavy alcohol use days was 43.9%. Intervention effects on abstinent days were statistically significant at 3 months (odds ratio = 1.96, 95% confidence interval 1.17, 3.30); the percentage of days abstinent was 68% for those randomized to intervention and 57% for controls. At 6 months the effect of the intervention was attenuated and no longer statistically significant. Conclusions: Among incarcerated women who reported hazardous drinking, a two-session brief alcohol intervention increased abstinent days at 3 months, but this effect decayed by 6 months. Study participants continued to drink heavily after return to the community. More intensive intervention pre-release and after re-entry may benefit hazardously drinking incarcerated women. Copyright 2010, Society for the Study of Addiction to Alcohol and Other Drugs.

**A randomized experimental study of gender-responsive substance abuse treatment for women in prison.**

Messina N; Grella CE; Cartier J; Torres S. *Journal of Substance Abuse Treatment* 38(2): 97-107, 2010. (50 refs.)

This experimental pilot study compared postrelease outcomes for 115 women who participated in prison-based substance abuse treatment. Women were randomized to a gender-responsive treatment (GRT) program using manualized curricula (Helping Women Recover and Beyond Trauma) or a standard prison-based therapeutic community. Data were collected from the participants at prison program entry and 6 and 12 months after release. Bivariate and multivariate analyses were conducted. Results indicate that both groups improved in psychological well-being; however, GRT participants had greater reductions in drug use, were more likely to remain in residential aftercare longer (2.6 vs. 1.8 months,  $p < .05$ ), and were less likely to have been reincarcerated within 12

months after parole (31% vs. 45%, respectively; a 67% reduction in odds for the experimental group,  $p < .05$ ). Findings show the beneficial effects of treatment components oriented toward women's needs and support the integration of GRT in prison programs for women. Copyright 2010, Elsevier Science.

**Screening for hepatitis C virus infection in methadone-maintained mothers and their infants.**

Liu AJW; An EI; Murray HG; Tetstall E; Leroi MJ; Nanan RKH. *Medical Journal of Australia* 191(10): 535-538, 2009. (25 refs.)

Objective: To describe the patterns of screening for hepatitis C virus (HCV) infection in methadone-maintained pregnant women and their infants. Design, setting and patients: Retrospective review of medical records from one rural and two metropolitan hospitals in New South Wales for pregnant women on methadone maintenance treatment and infants born to these women between 1 January 2000 and 31 December 2006, as well as records for pregnant women who were not on methadone treatment. Main outcome measures: Rates of anti-HCV antibody and HCV RNA testing for pregnant women and their infants, and ages at which infants attended follow-up appointments. Results: Of 295 pregnant women on methadone maintenance treatment, 288 were tested for anti-HCV antibodies (98%), compared with 1995 of 9987 women who were not on methadone treatment (20%) ( $P < 0.001$ ). Seropositive results were obtained for 243 women in the methadone group (84%) and 54 in the non-methadone group (3%) ( $P < 0.001$ ), of whom 44 (18%) and 17 (31%), respectively, were subsequently tested for HCV RNA ( $P = 0.03$ ). HCV RNA test results were positive for 31 (70%) and 10 (59%) seropositive women in the methadone and non-methadone groups, respectively ( $P = 0.39$ ). Of infants of HCV-seropositive methadone-maintained mothers, 27% of those for whom we had follow-up attendance data received HCV screening, and one of these infants tested positive for anti-HCV antibodies and HCV RNA. Conclusions: Screening for HCV infection in the high-risk population of pregnant women on methadone maintenance treatment and their infants is inadequate. This could lead to significant underdetection of active HCV infection in this high-risk population, and their infants. Current screening guidelines may therefore need to be revised. Copyright 2009, Australasian Medical Publishing.