

Gender differences in the relationship between depressive symptoms and cravings in alcoholism.

Boykoff N; Schneekloth TD; Hall-Flavin D; Loukianova L; Karpyak VM; Stevens SR et al. *American Journal on Addictions* 19(4): 352-356, 2010. (24 refs.)

This study examines the clinical correlates of alcohol craving in men and women self-referred for addiction treatment. Admission clinical data from patients participating in the Mayo Clinic 1-month Intensive Addictions Program were evaluated. Women had higher BDI and PACS scores compared with men in both the entire cohort and Dual Diagnoses group. Alcohol-dependent females had the most marked correlation between BDI and PACS ($r = .78$). Further prospective study is encouraged to evaluate whether depressive symptoms and concomitant alcohol cravings in women are a marker for relief cravings and, as such, a target symptom for treatment intervention. Copyright 2010, Wiley-Blackwell.

Implication of gender differences in heroin-assisted treatment: Results from the German randomized controlled trial.

Eiroa-Orosa FJ; Verthein U; Kuhn S; Lindemann C; Karow A; Haasen C et al. *American Journal on Addictions* 19(4): 312-318, 2010. (44 refs.)

Despite a lower prevalence of opioid dependence among females, drug-related problems and risk factors such as prostitution have a negative effect for women in treatment. This study was conducted with the purpose of analyzing gender differences in the German trial on heroin-assisted treatment (HAT), which compared HAT with methadone maintenance treatment (MMT). Significant baseline gender differences were found, with females showing a greater extent of mental distress. Differences in retention and outcome were significant for male patients, but no differences between treatment options were found for female patients. Ongoing prostitution was found to influence drug use outcomes. Other outcome criteria may need to be stressed when assessing the effect of HAT for women. Copyright 2010, Wiley-Blackwell.

Alcohol intake and endometrial cancer risk: A meta-analysis of prospective studies.

Friberg E; Orsini N; Mantzoros CS; Wolk A. *British Journal of Cancer* 103(1): 127-131, 2010. (50 refs.)
BACKGROUND: Studies on alcohol intake in relation to endometrial cancer risk have produced inconsistent results. METHODS: For a meta-analysis, we identified cohort studies of alcohol and endometrial cancer by a literature search of Pub-Med and Embase up to 1 March 2010 and by searching the reference lists of relevant articles. RESULTS: Seven cohort studies, including 1 511 661 participants and 6086 endometrial cancer cases, were included in the dose-response random-effect meta-regression model. Compared with non-drinkers, women drinking less than 1 drink of alcohol (13 g of ethanol) per day had a lower risk for endometrial cancer; this risk was lower by 4% (95% confidence interval (95% CI): 0.93-1.00) for consumption up to 0.5 drink per day and by 7% (95% CI: 0.85 1.02) for consumption up to 1 drink. However, we found evidence of an increased risk for endometrial cancer for intakes higher than two alcoholic drinks per day: compared with non-drinkers, the risk was higher by 14% (95% CI: 0.95-1.36) for 2-2.5 drinks per day and by 25% (95% CI: 0.98-1.58) for >2.5 drinks per day. CONCLUSION: Our meta-analysis indicates a possible J-shaped relationship between alcohol intake and endometrial cancer risk. Copyright 2010, Nature Publishing.

Nicotine and metabolites in meconium as evidence of maternal cigarette smoking during pregnancy and predictors of neonatal growth deficits.

Gray TR; Eiden RD; Leonard KE; Connors G; Shisler S; Huestis MA. *Nicotine & Tobacco Research* 12(6): 658-664, 2010. (29 refs.)

Many women continue tobacco use during pregnancy despite known adverse consequences on neonatal growth and development. Testing meconium, the first neonatal feces, for tobacco biomarkers offers objective evidence of prenatal tobacco exposure. However, relationships between the amount, frequency, and timing of cigarette smoking during gestation and tobacco biomarker meconium concentrations and neonatal outcomes are unclear. Eighty-seven pregnant

women provided detailed self-reports of daily tobacco consumption throughout pregnancy. Nicotine, cotinine, and trans-3'-hydroxycotinine were quantified in neonatal meconium by liquid chromatography-tandem mass spectrometry. Among nonsmokers, all meconium specimens were negative, whereas nearly all meconium specimens were positive if the mother self-reported tobacco use into the third trimester. Tobacco biomarker concentrations were significantly albeit weakly correlated with mean cigarettes per day in the third trimester. Reduced birth weight, gestational age, or head circumference were observed if meconium contained one or more tobacco biomarkers, but deficits did not correlate with biomarker concentrations. While previously thought to reflect second and third trimester drug exposure, meconium appears to reliably identify only third trimester drug use. While a 10 ng/g nicotine, cotinine, or trans-3'-hydroxycotinine cutoff in meconium was previously proposed to differentiate tobacco-exposed from nonexposed or passively exposed neonates, improved maternal self-reporting techniques in this cohort suggest that a lower cutoff, equivalent to the analytic limits of quantification, is more appropriate. Copyright 2010, Oxford University Press.

Burden of smoking on cause-specific mortality: Application to the Nurses' Health Study.

Kenfield SA; Wei EK; Rosner BA; Glynn RJ; Stampfer MJ; Colditz GA. *Tobacco Control* 19(3): 248-254, 2010. (19 refs.)

Objective The burden of smoking on six causes of death in women was evaluated using various novel modelling approaches. **Design** A prospective US-based nationwide cohort study. **Participants** 102 635 women in the Nurses' Health Study followed biennially from 1980 to 2004. **Methods:** The relation between cigarette smoking and cause-specific death was compared using baseline versus biennially updated smoking status. The authors used competing risk survival analysis to formally compare associations of smoking-related variables on risk of death as a result of coronary heart disease (CHD), cerebrovascular diseases, lung cancer, other respiratory diseases, other smoking-caused cancers and other causes. **Results:** The associations of current and former smoking were stronger with most cause-specific mortality when using updated information. The effect of each smoking-related variable differed significantly ($p(h) < 0.0001$) across some causes of death. For example, risks increased by 5% for death due to other causes up to 37% for lung cancer death for a 5-year earlier age at initiation. Compared with continuing to smoke, former smokers with 5-10 years

of cessation had a 25% reduction in risk of dying from other causes of death up to a 61% reduction in risk of dying from CHD and cerebrovascular diseases. **Conclusions:** The risks of smoking and the benefits from quitting are greater than previously reported, when utilising repeated measures of smoking data collected during follow-up, and vary by cause of death. Focused efforts to communicate the benefits of quitting to smokers and to prevent smoking initiation among children and youths should remain top public health priorities to reduce the worldwide mortality burden caused by smoking. Copyright 2010, BMJ Publishing.

Early onset alcohol dependence with high density of family history is not "male limited".

Magnusson A; Goransson M; Heilig M. *Alcohol* 44(2): 131-139, 2010. (60 refs.)

Objective: Based on classical adoption studies, early onset type II alcoholism was originally described as "male limited." We examined the possible expression of this subtype in present day alcohol-dependent women. Detailed systematic assessment was obtained from 200 treatment-seeking alcohol-dependent women and 189 healthy population controls. Women fulfilling type II alcoholism criteria had higher alcoholism severity as measured by The Alcohol Use Disorders Identification Test and markedly higher use of illicit drugs. Both alcoholism subtypes scored higher than normal on anxiety and impulsivity traits, but type II women scored markedly higher on aggression subscales than either of the other groups. Importantly, density of family history was markedly higher in type II women, suggesting a higher heritability. Despite its original description as male limited, early onset alcoholism with high density of family history is likely to be a valid construct in women. Its recognition has important implications for diagnosis, treatment, and research. Copyright 2010, Elsevier Science.

Substance use and abuse trajectories across adolescence: A latent trajectory analysis of a community-recruited sample of girls.

Marti CN; Stice E; Springer DW. *Journal of Adolescence* 33(3): 449-461, 2010. (42 refs.)

We used data from a school-based study of 496 adolescent girls to identify qualitatively distinct substance use and substance abuse developmental trajectory groups and tested whether the problematic groups differed from the non-problematic groups on baseline and outcome validation variables. Results identified four substance use groups (late users, normative users, late-heavy users, early-heavy users) and four substance abuse groups (non-abusers,

moderate-escalating abusers, moderate decreasing abusers, adolescent-limited heavy abusers). Problematic substance use and abuse trajectory groups, relative to non-problematic groups, showed elevations in baseline validation variables (age 14 delinquency, depressive symptoms, negative affectivity, parental support deficits, body dissatisfaction) and outcome validation variables (age 20 delinquency, depressive symptoms, social impairment, legal problems, school dropout, and substance abuse diagnosis), providing partial validation of this trajectory model. Copyright 2010, Association for Professionals in Services for Adolescents.

Pubertal timing and smoking initiation in adolescent females: Differences by race.

Negriff S; Dorn LD; Huang B. *Nicotine & Tobacco Research* 12(7): 748-755, 2010. (49 refs.)

The purpose of this study was to examine whether (a) early pubertal timing effects on smoking onset existed for both White and Black girls and (b) whether the association between pubertal timing and smoking onset was moderated by race. Participants included 264 girls (14.9 +/- 2.2 years, 164 White, and 100 Black) at the baseline report of a longitudinal study of whom 153 reported smoking and age at first cigarette. Kaplan-Meier analysis stratified by racial group showed a significant difference between the pubertal timing groups for Black girls only. After accounting for covariates using Cox regression, there was no significant interaction between pubertal timing and racial group. There was a main effect of pubertal timing indicating that late maturers were at significantly lower risk for smoking initiation compared with the early and on-time groups, but the early and on-time groups were not significantly different from each other. Results point to equal risk of early smoking onset for early and on-time maturers of both racial groups, indicating the need for smoking prevention in early adolescence for both White and Black females. Copyright 2010, Oxford University Press.

Female veterans of the OEF/OIF conflict: Concordance of PTSD symptoms and substance misuse.

Nunnink SE; Goldwaser G; Heppner PS; Pittman JOE; Nievergelt CM; Baker DG. *Addictive Behaviors* 35(7): 655-659, 2010. (39 refs.)

This study examined the post-deployment rates of comorbid PTSD and substance abuse in a cohort of female veterans who served in Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF). Female OEF/OIF veterans and reservists (N = 36) completed a battery of assessments as part of a larger study. Of the 36 participants, 11(31%) screened

positive for posttraumatic stress disorder (PTSD), 17(47%) screened positive for high-risk drinking and 2 (6%) screened positive for drug abuse. Higher scores on measures of alcohol and drug use predicted positive PTSD status ($p \leq 0.01$) and alcohol misuse was significant in explaining unique variance of PTSD status ($p \leq 0.05$). Our findings suggest a trend toward increased problematic drinking among female OEF/OIF veterans and reservists and a relationship between substance misuse and PTSD. Future research should investigate needs for gender-specific PTSD and substance-abuse treatment needs. Copyright 2010, Elsevier Science.

Genes and alcohol.

Osby U; Liljenberg J; Kockum I; Gunnar A; Terenius L. *European Psychiatry* 25(5, special issue): 281-283, 2010. (18 refs.)

The negative effects of excessive alcohol use include dependence, psychiatric co-morbidity and increased risk for suicide. A dominating risk factor is heritage. A large number of studies have addressed the genetic basis, either "candidate genes" in the brain reward system, or searched for unknown genes in family studies by linkage analysis. It is clear that no single gene polymorphism is of use in preventive medicine. A consistent finding, however, is that polymorphism in the alcohol dehydrogenase cluster and other metabolic pathways are of some relevance on a population basis, suggesting a link between alcohol toxicity in general and dependence. An emerging concern is potential gender differences as women, who are generally more sensitive, acquire male drinking habits. Copyright 2010, Elsevier Science.

Gender differences in COPD: Are women more susceptible to smoking effects than men?

Sorheim IC; Johannessen A; Gulsvik A; Bakke PS; Silverman EK; DeMeo DL. *Thorax* 65(6): 480-485, 2010. (30 refs.)

Background: The number of female smokers developing chronic obstructive pulmonary disease (COPD) is rapidly increasing, but whether or not there exists a differential susceptibility by gender remains controversial. Methods: How smoking behaviour and subsequent lung function reduction differed by gender was examined in a study including 954 subjects with COPD and 955 subjects without COPD. The study focused on two subgroups: subjects with COPD <60 years of age (early-onset group, n=316) and subjects with COPD with <20 pack-years of smoking (low exposure group, n=241). Results: In the low exposure group, female subjects with COPD had lower forced expiratory volume in 1 s (FEV1) % predicted (48.7%

vs 55.8%, $p=0.001$) and more severe disease (50.4% vs 35.6%, $p=0.020$, in GOLD (Global Initiative for Chronic Obstructive Lung Disease) stage 3 and 4) than male subjects with COPD. Females also had lower FEV1% predicted (50.6% vs 56.0%, $p=0.006$) and more severe COPD (41.7% vs 31.1% in GOLD stage 3 and 4, $p=0.050$) in the early-onset group. Using multivariate regression, female gender was associated with 5.7% lower FEV1% predicted in the low exposure group ($p=0.012$) and a similar trend was observed in the early-onset group ($p=0.057$). The number of pack-years was not significantly associated with lung function in female subjects with COPD in this study, and the dose-response relationship between smoking and lung function differed by gender at lower levels of smoking exposure. Interaction analysis suggested that the effect of smoking on lung function might be different by gender ($p=0.027$ in all subjects with COPD). Conclusions: Female gender was associated with lung function reduction and more severe disease in subjects with COPD with early onset of disease or low smoking exposure. The findings may suggest a gender difference in susceptibility to the lung-damaging effects of cigarette smoking, but alternative explanations should be considered. Copyright 2010, BMJ Publishing.

Relationship between meaning in life and intensity of smoking: Do gender differences exist?

Thege BK; Stauder A; Kopp MS. *Psychology & Health* 25(5): 589-599, 2010. (51 refs.)

Little is known about the relationship between smoking and meaning in life, although the association of meaninglessness with other addictive behaviours has been widely investigated. The aim of this study is to examine whether a relationship exists between meaning in life and intensity of smoking as measured by cigarettes smoked per day. The study population was 3506 current smokers from the Hungarostudy 2002 Hungarian representative cross-sectional survey. Age, educational level, marital status, subjective financial status, household income, coffee consumption, hazardous alcohol use, general well-being, anxiety, and depressive symptomatology were included in the analyses as covariates. On the bivariate level, life meaning was associated with smoking intensity in the total sample and among women ($p = 0.001$), while for males, only a tendency was found ($p = 0.069$). In the multivariate analyses, life meaning proved to be a significant negative predictor of

smoking intensity for females ($p = 0.005$) even after controlling for the covariates, whereas in men, meaning in life completely lost its significance ($p = 0.852$). In the total sample, both meaning in life ($p = 0.005$) and its interaction with gender ($p = 0.024$) related to the dependent variable. Further research is needed to confirm these explorative findings concerning the protective role of life meaning against more intense smoking among women. Copyright 2010, Taylor & Francis.

History of smoking is associated with younger age at diagnosis of breast cancer.

Abramowitz MC; Li TY; Morrow M; Anderson PR; Bleicher RJ; Goldstein LJ et al. *Breast Cancer* 16(4): 344-349, 2010. (43 refs.)

Smoking tobacco has been associated with incidence, response and outcomes after treatment of some cancers. We hypothesized that tobacco use could result in an observable effect on breast cancer stage and characteristics at diagnosis. There were 6,000 patients with Tis-4, N0-3 breast cancers who presented to a comprehensive cancer center at initial diagnosis between 1970 and 2006. Patients were included who had a known smoking history, and subdivided into any tobacco use 2683 (45%) or never tobacco use 3317 (55%). Analyses were performed to evaluate the association of smoking with clinical, pathologic and treatment-related factors at cancer presentation. Median age at diagnosis for all breast cancers was 55 years, for nonsmokers was 56 years, for any smoking history was 55 years, and the subgroup of current smokers was 52 years. The difference in median age for current smokers versus nonsmokers was statistically significant ($p < 0.0001$). The probability of age <55 years at breast cancer diagnosis for any smoking history compared to nonsmokers was 1.2 for white patients ($p < 0.0003$) but 0.81 for black patients ($p = 0.25$). There was no statistically significant association between smoking and T stage, N stage, ER/PR status, or Her-2/neu status, although smokers were less likely to utilize breast-conserving treatment. Smoking was associated with a younger age at diagnosis and lower utilization of breast conservation, and observed in the subgroup of white patients but not black patients. Further efforts to clarify potential reasons for any racial differences and lower utilization of breast conservation with smoking are warranted. Copyright 2010, Wiley-Blackwell.