

Library Watch on nicotine

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Winter 2006

Use of cigarettes and alcohol by preschoolers while role-playing as adults: "Honey, have some smokes".

Dalton MA; Bernhardt AM; Gibson JJ; Sargent JD; Beach ML; Adachi-Mejia AM et al. *Archives of Pediatrics & Adolescent Medicine* 159(9): 854-859, 2005. (34 refs.)

Objective: To examine preschoolers' attitudes, expectations, and perceptions of tobacco and alcohol use. **Design:** Structured observational study. Children used props and dolls to act out a social evening for adults. As part of the role play, each child selected items from a miniature grocery store stocked with 73 different products, including beer, wine, and cigarettes, for an evening with friends. **Setting:** A behavioral laboratory at Dartmouth College. **Patients:** One hundred twenty children, 2 to 6 years old, participated individually in the role-playing. **Results:** Children purchased a mean of 17 of the 73 products in the store. Thirty-four children (28.3%) bought cigarettes and 74 (61.7%) bought alcohol. Children were more likely to buy cigarettes if their parents smoked (adjusted odds ratio [OR], 3.90; 95% confidence interval [CI], 1.20-12.63). Children were more likely to buy beer or wine if their parents drank alcohol at least monthly (adjusted OR, 3.04; 95% CI, 1.02-9.10) or if they viewed PG13- or R-rated movies (adjusted OR, 5.10; 95% CI, 1.14-22.90). Children's play behavior suggests that they are highly attentive to the use and enjoyment of alcohol and tobacco and have well-established expectations about how cigarettes and alcohol fit into social settings. **Conclusions:** The data suggest that observation of adult behavior, especially parental behavior, may influence preschool children to view smoking and drinking as appropriate or normative in social situations. These perceptions may relate to behaviors adopted later in life. Copyright 2005, American Medical Association.

Changes in cigarette consumption and drinking outcomes: Findings from Project MATCH.

Friend KB; Pagano ME. *Journal of Substance Abuse Treatment* 29(3): 221-229, 2005. (52 refs.)

Individuals undergoing treatment for alcohol use disorders smoke at rates that exceed those reported in

the general population, and most patients will continue to smoke after treatment completion. A growing body of research indicates that quitting smoking is associated with better alcoholism treatment outcomes. Studies that dichotomize participants into smokers and nonsmokers, however, may be overlooking the possibility that even decreases in cigarette consumption over time among continuing smokers may also be related to improved alcohol use outcomes. The purpose of this article was to examine the relationship between cigarette consumption and alcohol use outcomes using data from Project MATCH. Smokers were divided into three groups according to whether their cigarette consumption decreased, increased, or remained constant from baseline to the 15-month follow-up. Results showed that smokers whose cigarette consumption decreased were significantly less likely to relapse to alcohol use than those whose consumption increased or remained unchanged. These findings suggest that even reductions in tobacco use may be associated with better drinking outcomes in alcoholism treatment. Copyright 2005, Elsevier Science Inc.

Smoking status, cigarettes per day, and their relationship to overweight and obesity among former and current smokers in a national adult general population sample.

John U; Hanke M; Rumpf HJ; Thyrian JR.

International Journal of Obesity 29(10): 1289-1294, 2005. (38 refs.)

BACKGROUND: Weight gain after smoking cessation is perceived to be a barrier against quitting smoking. The goal was to analyze overweight and obesity depending on smoking status and number of cigarettes per day (cpd) among former and current smokers. **METHODS:** The sample included 7124 residents of Germany aged 18-79 y from a national health examination survey (participation rate: 61.4%). Body weight and height were objectively measured; smoking status and cigarettes per day were assessed by a questionnaire administered in a health examination center. **RESULTS:** The number of cigarettes per day was positively related to being overweight and more so to obesity among former smoking men, but not women. The results were adjusted for age, school

education, exercise and alcohol consumption. Men who formerly had smoked more than 30 cigarettes per day had an adjusted odds ratio (OR) of 5.0 for obesity compared to men who had never smoked. CONCLUSION: With an increasing number of cigarettes per day more psychological and physiological processes of compensation of nicotine supply after smoking cessation may be expected. Male smokers should be provided with information on how to prevent weight gain after smoking cessation. To foster smoking cessation, female smokers should be informed that women who stop smoking manage to have no increase in the rates of overweight or obesity when considered at the general population level. Copyright 2005, Nature Publishing Group.

Tobacco industry influence on the definition of tobacco related disorders by the American Psychiatric Association.

Neuman MD; Bitton A; Glantz SA. *Tobacco Control* 14(5): 328-337, 2005. (51 refs.)

Objective: The Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III), published by the American Psychiatric Association (APA) in 1980, included the first official definitions by the APA of tobacco dependence and tobacco withdrawal. Tobacco industry efforts to influence the DSM-III were investigated. Method: Searches of previously secret tobacco industry documents, primarily the University of California San Francisco Legacy Tobacco Documents Library and British American Tobacco collections. Additional information was collected through discussions with editors of DSM-III, and library and general internet searches. Results: The tobacco companies regarded the inclusion of tobacco dependence as a diagnosis in DSM-III as an adverse event. It worked to influence the content of the DSM-III and its impact following publication. These efforts included public statements and private lobbying of DSM-III editors and high ranking APA officers by prominent US psychiatrists with undisclosed ties to the tobacco industry. Following publication of DSM-III, tobacco companies contracted with two US professors of psychiatry to organise a conference and publish a monograph detailing controversies surrounding DSM-III. Conclusions: The tobacco industry and its allies lobbied to narrow the definition of tobacco dependence in serial revisions of DSM-III. Following publication of DSM-III, the industry took steps to try to mitigate its impact. These actions mirror industry tactics to influence medical research and policy in various contexts worldwide. Such tactics slow the spread of a professional and public understanding of smoking and health that otherwise would reduce

smoking, smoking induced disease, and tobacco company profits. Copyright 2005, B M J Publishing Group.

How prepared are psychiatry residents for treating nicotine dependence?

Prochaska JJ; Fromont SC; Hall SM. *Academic Psychiatry* 29(3): 256-261, 2005. (36 refs.)

Objective: Nicotine dependence is the most prevalent substance abuse disorder among adult psychiatric patients and a leading cause of death and disability. The authors examined the extent to which psychiatry residents are prepared to treat nicotine dependence in clinical practice. Methods: Residents from five psychiatry residency programs in northern California completed an anonymous survey of their knowledge, attitudes, and behaviors regarding treating nicotine dependence among their patients. Results: Respondents (N = 105, 60% female) represented all 4 years of residency training. Residents' smoking status was 11% current, 17% former, and 72% never. Knowledge scores averaged 54% correct. Confidence ratings averaged 3 (SD = 0.6) on a 5-point scale. Seventy six percent rated their overall ability to help patients quit using tobacco as fair or poor. The percent reporting often or always engaging in the National Cancer Institute's 5-A intervention for smoking cessation was: 58% ask; 29% advise; 17% assess; 18% assist; and 13% arrange follow up. Most residents reported none or inadequate tobacco cessation training during medical school (74%) or residency (79%), and nearly all (94%) reported moderate to high interest in learning more about helping patients quit smoking. Conclusion: Psychiatry residents appear unprepared to treat nicotine dependence, but report considerable interest in this area. The findings demonstrate the need for and interest in tobacco cessation curricula in psychiatry residency training. Copyright 2005, American Psychiatric Publishing, Inc.

Smoking policies in US outpatient drug treatment facilities.

Richter KP; Choi WS; Alford DP. *Nicotine & Tobacco Research* 7(3): 475-480, 2005. (32 refs.)

Most drug treatment patients smoke cigarettes, and some facilities are beginning to help patients quit. Facility smoking policies can help or hinder this effort. The present study describes smoking policies in outpatient drug treatment. It is a secondary analysis of a survey on smoking cessation treatment in outpatient methadone maintenance facilities in the United States. One clinic leader (a medical director, head nurse, or clinic director) from each of the 697 U.S. facilities was invited to participate in the study. Main outcome

measures included whether clinics had a written smoking policy as well as the types of indoor and outdoor policies in place for patients and staff. A total of 408 (59%) of U.S. clinics responded. Most clinics (73%) had a written smoking policy for patients, and more (82%) had written policies for staff. Over 90% banned indoor smoking by staff and patients., Few totally banned outdoor smoking. Approximately half in some way restricted where patients (48%) and staff (55%) smoke outdoors. Compared with clinics that did not treat nicotine dependence, significantly more clinics that treated nicotine dependence had written policies on smoking and restricted outdoor smoking for patients and staff. Likewise, many public clinics and those affiliated with hospitals had outdoor smoking restrictions for patients and staff. Drug treatment facilities routinely ban alcohol use and drug dealing on their grounds. Only 1 in 10 ban smoking. Outpatient facilities should restrict or ban outdoor tobacco use in order to remain consistent with their mission and avoid sabotaging clinic efforts to treat, and patient and staff efforts to stop, smoking. Copyright 2005, Taylor & Francis, Ltd.

Health risks of smoking compared to Swedish snus.

Roth HD; Roth AB; Liu X. *Inhalation Toxicology* 17(13): 741-748, 2005. (21 refs.)

Interest in tobacco harm reduction strategies has raised the question of the comparative health risks of cigarette smoking and use of other tobacco products. Although there appears to be a general belief that a unique smokeless tobacco product called Swedish snus has fewer health risks than cigarettes, no one has systematically reviewed the literature and compared the data on health risks in a quantitative manner. We reviewed the literature to identify all analytic epidemiologic studies that provided quantitative risk estimates associated with Swedish snus and cigarette smoking in a single population, using a common reference group. Seven studies were identified that addressed eight health outcomes. Although few in number, these seven studies do provide quantitative evidence that, for certain health outcomes, the health risks associated with snus are lower than those associated with smoking. Specifically, this is true for lung cancer (based on one study), for oral cancer (based on one study), for gastric cancer (based on one study), for cardiovascular disease (based on three of four studies), and for all-cause mortality (based on one study). This review has likely omitted many of the adverse effects of cigarettes, but probably few of the potential health effects of snus. Continued investigation of the reduced health risks of Swedish

snus compared to cigarette smoking is warranted. Copyright 2005, Taylor & Francis Inc.

Methylphenidate increases cigarette smoking.

Rush CR; Higgins ST; Vansickel AR; Stoops WW; Lile JA; Glaser PEA. *Psychopharmacology* 181(4): 781-789, 2005. (69 refs.)

Rationale: Methylphenidate (Ritalin) and d-amphetamine (Dexedrine), stimulants commonly prescribed for behavioral problems associated with attention deficit hyperactivity disorder (ADHD), produce a similar constellation of behavioral effects. The results of previous studies suggest that d-amphetamine increases rates of smoking and the reinforcing effects of smoking. The effects of methylphenidate on smoking have not been assessed although it is the most commonly prescribed pharmacotherapy for ADHD and individuals with ADHD are at increased risk for smoking. Objective: In this experiment the acute effects of a range of doses of methylphenidate (5, 10, 20, and 40 mg) and placebo were assessed in ten cigarette smokers who were not attempting to quit and were without ADHD or other Axis I psychiatric disorders. Methods: Each dose of methylphenidate was tested once, whereas placebo was tested twice. One hour after ingesting drug, participants were allowed to smoke ad libitum for 4 h. Measures of smoking included total cigarettes smoked, total puffs, latency to the first cigarette, and carbon monoxide levels. Snacks and decaffeinated drinks were available ad libitum, and caloric intake during the 4-h smoking session was calculated. Results: Methylphenidate dose dependently increased the total number of cigarettes smoked, number of puffs, and carbon monoxide levels. As expected, methylphenidate dose dependently decreased the number of food items consumed and caloric intake. Conclusions: The results of this experiment suggest that methylphenidate, like d-amphetamine, increases rates of cigarette smoking. Copyright 2005, Springer.

Respiratory symptom relief related to reduction in cigarette use.

Stein MD; Weinstock MC; Herman DS; Anderson BJ. *Journal of General Internal Medicine* 20(10): 889-894, 2005. (23 refs.)

INTRODUCTION: Many smokers reduce their cigarette consumption during failed attempts to quit. We report the impact of changes in consumption on smoking-related respiratory symptom severity (SRRSS). METHODS: Between February 2002 and May 2004 we recruited 383 smokers from 5 methadone maintenance programs for a randomized trial of nicotine replacement plus behavioral treatment

versus nicotine replacement alone for smoking cessation. Cigarette use in the 28 days prior to the interview, and severity of SRRSS using a 7-item respiratory index, were assessed at baseline and at 3-month follow-up. **OUTCOME:** Baseline minus 3-month assessment difference in SRRSS score. **RESULTS:** Follow-up of 319 participants (83.3%), mean age 40.4 years, 51.4% male, who smoked 26.4 cigarettes per day, demonstrated a mean reduction of 16.7 cigarettes per day. A reduction in cigarette use was positively and significantly ($b=0.29$, $t=5.16$, $P < .001$) associated with a reduction in smoking-related symptom severity after adjusting for age, gender, race, years of regular smoking, baseline nicotine dependence, and history of treatment for asthma or emphysema. A 1 standard deviation reduction in average daily smoking (about 14.1 cigarettes) was associated with a 0.28 standard deviation decrease in smoking-related symptom severity. **CONCLUSION:** Reduction in symptom severity increases as absolute reduction in daily smoking increases. This is the first study to demonstrate an association between subjective short-term health changes and reduction in smoking. Copyright 2005, Blackwell Publishing.

Effect of maternal smoking on breast milk interleukin-1 alpha, beta-endorphin, and leptin concentrations.

Zanardo V; Nicolussi S; Cavallin S; Trevisanuto D; Barbato A; Faggian D et al. *Environmental Health Perspectives* 113(10): 1410-1413, 2005. (33 refs.) Tobacco smoke is immunotoxic, but the effect of smoking on the immunologic function of the mammary gland of mothers who smoke cigarettes has not been studied. Our objective was to test, in smoker mothers, the colostrum and transitional milk concentrations of interleukin-(IL)1 alpha. The immunomodulators beta-endorphin and leptin were also tested. Pregnant women who self-identified as smokers (≥ 5 cigarettes per day through pregnancy) or nonsmokers were recruited for study participation. The study population included 42 smoker and 40 nonsmoker nursing mothers, with otherwise uncomplicated gestation, delivery, and puerperium, who were breast-feeding ad libitum their healthy neonates. Colostrum was obtained on the third postpartum day at 0900 hr and transitional milk on the 10th postpartum day at 0900 hr. IL-1 alpha concentrations were significantly reduced in the colostrum of smoker mothers compared with nonsmoker mothers ($p < 0.01$). Colostrum P-endorphin and leptin concentrations were comparable. No significant differences were found between smoker and nonsmoker lactating mothers in transitional milk

concentrations of IL-1 alpha, beta-endorphin, and leptin. Moreover, P-endorphin and leptin concentrations were significantly reduced in transitional milk samples compared with colostrum of both smoker and nonsmoker mothers ($p < 0.05$); also, IL-1 alpha transitional milk concentrations were reduced compared with colostrum, but without any significance. This analysis shows that maternal smoking alters the colostrum milk levels of the proinflammatory cytokine IL-1 alpha. The altered postnatal provision of alternative source of the proinflammatory cytokine IL-1 alpha adds understanding to how breast-feeding could be nonprotective against infections among the neonates nursed by smoker mothers. Public Domain.

Correlates of regular cigarette smoking in a population-based sample of Australian twins.

Agrawal A; Madden PAF; Heath AC; Buchholz KK; Martin NG. *Addiction* 100(11): 1709-1719, 2005. (53 refs.)

To investigate the role of measured risk factors and the influence of genetic and environmental factors on regular cigarette smoking. Members of monozygotic and dizygotic, including unlike-sex twin pairs ($n = 6257$) from a young adult cohort from the Australian Twin Registry. Cox proportional hazards models were used to determine whether putative risk factors were significantly associated with regular cigarette smoking. Risk factors were classified into four tiers: tier 1 (parental history, including parental education, alcoholism and cigarette smoking), tier 2 (early home and family influences), tier 3 (early life events, e.g. trauma) and tier 4 (psychiatric symptoms/disorders with onset prior to 14 years), after controlling for gender, zygosity and their interactions. Genetic models were fitted to examine the heritability of smoking behavior before and after controlling for significant covariates from the four tiers. Parental history of cigarette smoking and alcoholism, parental closeness and home environment, as well as incidence of childhood sexual abuse or other trauma, a history of early onset panic attacks and conduct problems were associated with regular cigarette smoking. Important age interactions were found, particularly for family background risk factors. Regular cigarette smoking was moderately heritable, even after accounting for significant covariates. Several measured risk factors are associated with regular smoking. While some of the genetic influences on regular smoking may be shared with these risk factors, a significant proportion of the genetic vulnerability to regular smoking is phenotype-specific. Copyright 2005, Society for the Study of Addiction to Alcohol and Other Drugs.

