

Library Watch on nicotine

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Nicotine use in suicides: A case-control study.

Schneider B; Schnabel A; Weber B; Frolich L; Maurer K; Wetterling T. *European Psychiatry* 20(2): 129-136, 2005. (75 refs.)

Purpose. - Despite of higher rates of substance-related disorders in psychiatric patients and suicides than in the general population, there is no clear specificity to the relationship between nicotine use and other psychiatric disorders for suicide risk. **Methods.** - One hundred and sixty-three suicides (mean age 49.8 +/- 19.3 years; 64.4% males; using psychological autopsy method) and 396 control persons (mean age 51.6 +/- 17.0 years; 55.8% males) were assessed with a standardised semi-structured interview including SCID-I and SCID-II (for DSM-IV). Suicides and controls were compared in terms of nicotine consumption and psychiatric disorders. Logistic regression was used to evaluate the interactions of tobacco consumption with psychiatric disorders. **Results.** - Suicides were significantly more often current smokers and heavy users of cigarettes (> 20 cigarettes per day; $P < 0.001$, each). Alcohol dependence, other axis I disorders than substance-related disorders, and cluster B personality disorder(s) remained independent predictors for suicide in both genders, current nicotine consumption only in men (OR = 2.6, 95% CI 1.3-5.2). **Discussion and conclusions.** - In males, but not in females, nicotine consumption contributed to risk of completed suicide after control for psychiatric disorders and has to be considered as independent risk factor for suicide. Copyright 2005, Elsevier, Paris.

Child health care clinicians' use of medications to help parents quit smoking: A national parent survey.

Winickoff JP; Tanski SE; McMillen RC; Klein JD; Rigotti NA; Weitzman M. *Pediatrics* 115(4): 1013-1017, 2005. (48 refs.)

Background. Smokers who use cessation medications when they attempt to quit double their likelihood of success. No prior survey has assessed the acceptability to parents of receiving smoking cessation medication prescriptions in the context of their child's primary care visits. **Objective.** To assess acceptability to parents of receiving smoking cessation medication prescriptions and to compare that with the reported rate of actually receiving smoking cessation medica-

tion prescriptions in the context of the child's health care visit. **Methods.** Data were collected through a national random-digit dial telephone survey of households from July to September 2003. The sample was weighted according to race and gender, on the basis of the 2002 US Census, to be representative of the US population. **Results.** Of 3990 eligible respondents contacted, 3010 (75%) completed surveys; 1027 (34%) of those were parents. Of those parents, 211 (21%) were self-identified smokers. One half would consider using a smoking cessation medication and, of those, 85% said that it would be acceptable if the child's doctor prescribed or recommended it to them. In contrast, of the 143 smoking parents who accompanied their child to the doctor, only 15% had pharmacotherapy recommended and only 8% received a prescription for a smoking cessation medication. These results did not vary according to parent age, gender, race, or child age. **Conclusions.** Child health care clinicians have low rates of recommending and prescribing cessation therapies that have proved effective in other settings. The recommendation or provision of cessation medications would be acceptable to the majority of parents in the context of their child's health care visit. Copyright 2005, American Academy of Pediatrics.

Effects of medicinal herb tea on the smoking cessation and reducing smoking withdrawal symptoms.

Lee HJ; Lee JH. *American Journal of Chinese Medicine* 33(1): 127-138, 2005. (28 refs.)

Medicinal herbs (21 species) were screened for the antioxidant activity and nicotine degradation activity (NDA) in vitro. Eleven of them with higher antioxidant activity and NDA were selected for preparation of the medicinal herb tea (MHT) and the effects of MHT on smoking cessation and reducing smoking withdrawal symptoms were evaluated in 100 male human smokers. Among these medicinal herbs, *Eugenia aromaticum* and *Astragalus membranaceus* Bunge showed the highest antioxidant activity (IC₅₀ of 30.0 μ g/mL) and NDA (1.81), respectively. MHT showed relatively high antioxidant activity (IC₅₀ of 50.6 μ g/mL) and NDA (1.23). The urinary cotinine level, a metabolite of nicotine, increased in the first 2 weeks and greatly decreased from the 2nd to 4th week

in the MHT taking group, which indicates that MHT accelerates the conversion of nicotine into cotinine. Human groups taking MHT for 4 weeks underwent reduced smoking withdrawal symptoms compared to the non-MHT taking subjects, and 38% of subjects taking MHT succeeded in smoking cessation, while only 12% of non-MHT taking subjects succeeded in quitting smoking. Copyright 2005, Institute for Advanced Research in Asian Science and Medicine.

Seven year follow-up of smoking cessation with smokeless tobacco.

Tilashalski K; Rodu B; Cole P. *Journal of Psychoactive Drugs* 37(1): 105-108, 2005. (15 refs.)

This study evaluated the tobacco use status of 63 subjects seven years after enrollment in a single-intervention smoking cessation study employing smokeless tobacco (SLT) as a nicotine substitute. Information about tobacco use and cessation attempts was obtained in interviews. The duration of follow-up and of smoke-free periods were derived from the date of the subject's enrollment and were expressed as person-years (p-y). Because the study focused on the use of SLT for smoking cessation, subjects who used SLT to quit were invited to return for verification (less than 10 parts per million of carbon monoxide in expired air). Follow-up was completed on 62 of 63 original subjects, classified according to tobacco use status at the end of the initial study. Of the 16 subjects who had quit smoking using SLT at one year, 12 were smoke-free at seven years. For all 16 subjects there was 106 p-y of follow-up, 97 (92%) of which were smoke-free. Of six subjects who had quit smoking at one year by a means other than SLT, four were smoke-free at seven years. This entire group had 42 p-y of follow-up, 34 (81 %) of which were smoke free. Of the 41 subjects who were smoking at one year, 12 had quit smoking by the seven-year mark, three of these subjects by using SLT. Total follow-up for this group was 284 py, of which 26 (9%) were smoke-free. Although the study is small, the long-term success rate of this pilot trial compares favorably with other cessation studies. Copyright 2005, Haight-Ashbury Publishing.

Estimate of deaths attributable to passive smoking among UK adults: Database analysis.

Jamrozik K. *British Medical Journal* 330(7495): 812+, 2005. (32 refs.)

Objective: To estimate deaths from passive smoking in employees of the hospitality industry as well as in the general workforce and general population of the United Kingdom. Design: Calculation, using the formula for population attributable proportion, of

deaths likely to have been caused by passive smoking at home and at work in the UK according to occupation. Sensitivity analyses to examine impact of varying assumptions regarding prevalence and risks of exposure. Setting National UK databases of causes of death, employment, structure of households, and prevalences of active and passive smoking. Main outcome measures Estimates of deaths due to passive smoking according to age group (< 65 or >= 65) and site of exposure (domestic or workplace). Results: Across the United Kingdom as a whole, passive smoking at work is likely to be responsible for the deaths of more than two employed people per working day (617 deaths per year), including 54 deaths in the hospitality industry each year. Each year passive smoking at home might account for another 2700 deaths in persons aged 20-64 years and 8000 deaths among people aged >= 65. Conclusion: Exposure at work might contribute up to one fifth of all deaths from passive smoking in the general population aged 20-64 years, and up to half of such deaths among employees of the hospitality industry. Adoption of smoke free policies in all workplaces and reductions in the general prevalence of active smoking would lead to substantial reductions in these avoidable deaths. Copyright 2005, BRJ Publishing Group.

Nicotine replacement therapy use among a cohort of smokers.

Alberg AJ; Patnaik JL; May JW; Hoffman SC; Gitchell J; Comstock GW; Helzlsouer KJ. *Journal of Addictive Diseases* 24(1): 101-113, 2005. (25 refs.)

Background: Nicotine replacement therapy (NRT) has been shown to assist smokers to stop smoking in randomized trials, but little is known about its use in the general Population. Methods: As part of ongoing follow-up of a cohort established in 1989 in Washington County, Maryland, a questionnaire mailed in 1998 included a question about ever use of the two NRT products then available over-the-counter: nicotine gum and nicotine patch. This study reports on ever use of NRT among the 1,954 respondents who were Current smokers in 1989 and subsequently provided data on NRT use and smoking habits in 1998. Results: Overall, 36 % of the smokers in 1989 had ever used NRT in some form by 1998; 10 % used gum only, 16 % used patch only, and 10 % used both gum and patch. Number of cigarettes smoked per day at baseline was the strongest predictor of ever use of NRT (P-trend < 0.001). Compared to nonusers, ever users of NRT were more likely to have more than 12 years of education (p < 0.01) and be 25-54 years old at baseline (p < 0.001). When NRT use was assessed in relation to smoking status in 1998, 30 % of NRT ever users

compared to 39 % of nonusers had quit smoking ($p < 0.01$). Among persistent smokers, the likelihood of reducing the number of cigarettes smoked per day was similar between NRT ever users (40 %) and nonusers (41 %). Conclusions: Ever use of NRT was common among this cohort of smokers, particularly among heavy smokers. Compared to nonusers, ever users of NRT were less likely to have stopped smoking and equally likely to cut down the frequency of smoking. This may reflect a tendency to turn to NRT for help after failing to quit by other means. Copyright 2005, The Haworth Press, Inc.

Smokeless tobacco use among professional baseball players: Survey results, 1998 to 2003.

Severson HH; Klein K; Lichtensein E; Kaufman N; Orleans CT. *Tobacco Control* 14(1): 31-36, 2005. (24 refs.)

Objective: The use of smokeless tobacco (ST) (snuff and chewing tobacco) has long been associated with baseball in the USA. This article reviews six years of survey data from major and minor league baseball players to evaluate trends in tobacco use and quitting patterns over time in order to gain insight into the effects of past interventions and to document continued intervention needs. Method: Surveys were distributed by athletic trainers to major and minor league professional baseball players during spring training session in the six years from 1998 to 2003. The surveys were anonymous and identified only by team, level of league, and other self reported demographic data. Results: ST use among professional baseball players remains much higher than among young males in the general population, and use is most prevalent among white non-Hispanic players. There was a significant decrease in ST use among minor league players from 1998 to 2003, with seven day self reported use declining from 31.7% in 1998 to 24.8% in 2003. No significant year to year changes were observed for major league players. Major league players' self reported past week use rates, estimated at 35.9% in 1998 and at 36% in 2003, were consistently higher than those of minor league players. Self reported prevalence of past month cigarette and cigar smoking was much lower than ST use for both major and minor league players. Conclusions: Six years of survey data confirm a continuing high use of ST among professional baseball players. Results suggest that the effects of the broad spectrum ST control efforts launched over the past decade may have been stronger among minor than major league players. Stronger policy interventions at the major league level and multi-level efforts, including programmes to increase the use of effective quitting aids and

assistance, at both levels of play are needed. Future research is needed to further clarify changes in ST practices among professional players and set policy intervention directions. Copyright 2005, BMJ Publishing Group.

Smokers' unrealistic optimism about their risk.

Weinstein ND; Marcus SE; Moser RP. *Tobacco Control* 14(1): 55-59, 2005. (34 refs.)

Objective: Past studies have produced ambiguous or inconsistent results when testing whether smokers actually underestimate their own risks of experiencing tobacco related illness. Whereas smokers claim that they are less at risk than the average smoker on self administered questionnaires, this unrealistic optimism has not been found in telephone or face-to-face interviews. We avoided the measurement problems of past studies and examined responses to a number of new questions to assess different aspects of smokers' perceptions. Methodology: A US national telephone survey (n = 6369; 1245 current smokers) posed a variety of questions designed to examine beliefs about the risks of smoking. For key questions, separate samples of smokers were asked either about their own risk or about the risk of the average smoker. Results: Smokers underestimated their relative risk compared to non-smokers and, contrary to previous interview surveys, believed they have a lower risk of developing lung cancer than the average smoker. Furthermore, their perceived risk of lung cancer and of cancer in general barely increases with the number of cigarettes smoked per day, and their estimates of their risk of cancer are actually slightly lower than their estimates of their risk of lung cancer. Substantial proportions of smokers and former smokers agree with several myths, more than half agreeing that exercise undoes most smoking effects. Conclusion: Smokers underestimate their risk of lung cancer both relative to other smokers and to nonsmokers and demonstrate other misunderstandings of smoking risks. Smoking cannot be interpreted as a choice made in the presence of full information about the potential harm. Copyright 2005, BMJ Publishing Group.

Dissemination of an effective inpatient tobacco use cessation program.

Taylor CB; Miller NH; Cameron RP; Fagans EW; Das S. *Nicotine & Tobacco Research* 7(1): 129-137, 2005. (29 refs.)

The present study aimed to determine whether tobacco use cessation rates observed in controlled trials of a hospital-based tobacco use cessation program could be replicated when the program was disseminated to a wide range of hospitals in a two-stage process

including implementation and institutionalization phases. Using a nonrandomized, observational design, we recruited six hospitals to participate in the study. The research team helped implement the program during the first year of participation (implementation) and then withdrew from active involvement during the second year (institutionalization). The mean 6-month self-reported cessation rates were 26.3% (range=17.6%-52.8%) for the implementation phase and 22.7% (range=12.9%-48.2%) for the institutionalization phase. Hospitals with paid professionals providing the program had the best outcomes. Inpatient tobacco use cessation programs are feasible to implement and should target a 6-month self-reported cessation rate of at least 25%. Copyright 2005, Taylor & Francis Ltd.

Calorie restriction increases cigarette use in adult smokers.

Cheskin LJ; Hess JM; Henningfield J; Gorelick DA. *Psychopharmacology* 179(2): 430-436, 2005. (49 refs.)

Cigarette smokers weigh less than nonsmokers, and smokers often gain weight when they quit. This is a major barrier to smoking cessation, especially among women. However, strict dieting is not recommended during smoking cessation out of concern that it might promote relapse. This concern derives, in part, from the observation that calorie restriction increases self-administration of drugs of abuse in animals. This relationship has never been experimentally demonstrated in humans. To evaluate whether calorie restriction increases cigarette smoking in humans. Seventeen (nine males, eight females) healthy, normal-weight smokers not attempting to quit were cycled in partially counterbalanced order, double-blind, through four diets-normal calorie (2,000-2,800 kcal/day), low calorie (700 kcal/day deficit), low-carbohydrate (CHO)/normal-calorie, and low-CHO/low-calorie-for 6 days per diet in an inpatient research ward. Smoking was assessed by cigarette counts, breath carbon monoxide (CO) levels, and cigarette craving. Compared with the normal-calorie diet, while on the low-calorie diet, subjects smoked 8% more cigarettes ($P < 0.02$) and had 11% higher breath CO levels ($P < 0.01$). The low-CHO/normal-calorie diet showed no signif-

icant effect on either variable, but there was a 15% increase in breath CO levels ($P < 0.05$) on the low-CHO/low-calorie diet. There were no changes in self-reported cigarette craving or mood. Consistent with animal studies, moderate calorie restriction was associated with a small but statistically significant increase in cigarette smoking, with no independent effect of CHO deprivation. These findings suggest that dieting may increase smoking behavior and could impede smoking-cessation attempts. Copyright 2005, Springer Verlag.

Perceived risks and benefits of smoking cessation: Gender-specific predictors of motivation and treatment outcome.

McKee SA; O'Malley SS; Salovey P; Krishnan-Sarin S; Mazure CM. *Addictive Behaviors* 30(3): 423-435, 2005. (32 refs.)

The primary aim of this study was to examine gender differences in perceived risks and benefits of smoking cessation and their relationship to pretreatment motivation and treatment outcome. No validated measures that comprehensively assess perceived risks and benefits associated with smoking cessation were available in the literature; consequently, we developed a self-report instrument [Perceived Risks and Benefits Questionnaire (PRBQ)] for this purpose. A sample of 573 treatment-seeking smokers (48% female) entering smoking cessation trials completed the PRBQ, and its association with treatment outcome was assessed in a subsample of 93 participants. Overall, the PRBQ demonstrated good psychometric properties. Females indicated greater likelihood ratings of perceived risks and benefits than males. For women and men, perceived benefits were positively associated with motivation, and perceived risks were negatively associated with motivation and treatment outcome. Women evidenced stronger associations between perceived risks and pretreatment motivation, and treatment outcome. Knowledge of perceived risks and benefits associated with smoking cessation is critical for public education campaigns and could inform intervention strategies designed to modify sex-specific beliefs associated with lowered behavioral intentions to quit smoking. Copyright 2005, Elsevier Science, Ltd.