Library watch on nicotine

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A population study of low-rate smokers: Quitting history and instability over time.

Zhu SH; Sun JC; Hawkins S; Pierce J; Cummins S. *Health Psychology* 22(3): 245-252, 2003. (31 refs.)

This study used 1 longitudinal and 2 cross-sectional population surveys to compare stability of low-rate daily smokers (less than 5 cigarettes per day) with other daily smokers and occasional smokers. Few low-rate smokers maintained consumption level; 36% retained smoking status after 20 months, compared with 82% and 44% for regular daily and occasional smokers, respectively. In a dynamic process, established smokers quit smoking and/or modified (decreased or increased) consumption. Low-rate and occasional smokers quit at higher rates than regu-lar daily smokers (odds ratios 3: 1) but were replenished by new members, many converted from regular daily smokers. The overall trend is an increasing proportion of low-consump-tion smokers while smoking prevalence declines. The dynamic process his implications for tobacco control efforts and for addiction theory.

An examination of the process of relapse prevention therapy designed to aid smoking cessation.

Stoffelmayr B; Wadland WC; Pan W. *Addictive Behaviors* 28(7): 1351-1358, 2003. (15 refs.)

The process of relapse prevention (RP) therapy is examined. Patients' res-ponses were recorded primarily during telephonic, RP counseling designed to facilitate smoking cessation. A compu-ter program that prompted counselor initiatives and provided a framework for the recording of patient responses guided counselor interaction with patients. A total of 437 patients took part in 1650 counseling sessions and reported 2882 urge/lapse situations. The 2531 situations, for which complete data were available, and 4879 coping responses were analyzed. The main findings are (1) the descriptions of urge/lapse situations provided by patients in treatment are similar to those derived by research that aimed to discover the determinants of relapse without specific treatment, (2) number of coping responses rather than number of situations is related to treatment outcome, and (3) the more coping responses discussed during treatment, the better the treatment outcome.

Efficacy of nicotine patch in smokers with a history of alcoholism.

Hughes JR; Novy P; Hatsukami DK; Jensen J; Callas PW. *Alcoholism: Clinical and Experimental Research* 27(6): 946-954, 2003. (49 refs.)

Background: Smokers with a history of alcohol dependence may have more difficulty quitting, might relapse to alcohol use, and might especially benefit from nicotine replacement therapy for smoking cessation. Methods: One hundred fifteen smokers with a history of alcohol dependence (median of 5 years previously) were randomly assigned to either a 21-mg nicotine patch or placebo in a trial designed to be as, similar as possible to a prior study that examined smokers with no history of alcoholism. Both studies were of heavy smokers with similar levels of nicotine dependence; thus, any differences in trials would be due to a history of alcohol problems per se. Results: In the current trial, adjusted prolonged smoking abstinence in those with a history of alcohol dependence was higher in the active than the placebo group at end-of-treatment (28% vs. 11%; odds ratio, 3.2; $p = 0.04$) and at 6-month follow-up (24% vs. 6%; odds ratio, 4.9; $p = 0.02$). Among subjects not lost to follow-up, none reported drinking problems or increases in craving for alcohol. Smoking abstinence was not lower and the odds ratio for nicotine patch therapy was not greater in smokers with a history of alcohol dependence than in smokers with no such history. Conclusions: Heavy smokers with a history of alcoholism benefit from nicotine patch treatment. A history of alcohol problems after a period of stable sobriety does not appear to influence smoking outcomes or response to nicotine replacement. Although no smokers relapsed to alcohol use, a trial that follows up all subjects is needed to verify this.

Environmental tobacco smoke and absenteeism related to respiratory illness in schoolchildren.

Gilliland FD; Berhane K; Islam T; Wenten M; Rappaport E; Avol E et al. *American Journal of Epidemiology* 157(10): 861-869, 2003. (27 refs.)

Household environmental tobacco smoke (ETS) exposure accounts for substantial morbidity among young children, but the ETS-associated morbidity burden among school-age children is less well defined. Illness-related school absenteeism is a measure of a broad spectrum of adverse

effects of ETS exposure in school-age children. The authors investigated the relations between ETS exposure, asthma status, and illness-related school absenteeism in a cohort of 1,932 fourth-grade schoolchildren from 12 southern California communities during January-June 1996. Incidence rates and adjusted relative risks of illness-related absences were determined by using an active surveillance system. The effects of ETS exposure on absenteeism were assessed by using stratified incidence rates and Poisson regression to adjust for sociodemographic factors. ETS exposure was associated with an increased risk of respiratory-illness-related school absences (relative risk (RR) = 1.27, 95% confidence interval (CI): 1.04, 1.56). Children living in a household with two or more smokers were at increased risk of such absences (RR = 1.75, 95% CI: 1.33, 2.30). Children's asthma status affected their response to ETS. Compared with unexposed children without asthma, children with asthma were at increased risk of respiratory-illness-related school absences when exposed to one (RR = 2.35, 95% CI: 1.49, 3.71) or two or more (RR = 4.45, 95% CI: 2.80, 7.07) household smokers. Children without asthma also had an increased risk if exposed to two or more smokers (RR = 1.44, 95% CI: 1.04, 2.00). Therefore, ETS exposure is associated with increased respiratory-related school absenteeism among children, especially those with asthma.

Most smokeless tobacco use is not a causal gateway to cigarettes: Using order of product use to evaluate causation in a national US sample.

Kozlowski LT; O'Connor RJ; Edwards BQ; Flaherty BP. *Addiction* 98(8): 1007-1085, 2003. (34 refs.)

Aims To evaluate non-causal and causal patterns of smokeless tobacco (SIT) and cigarette use; to assess the prevalence of 'non-gateway' and possible 'gateway patterns of SIT use. Design and setting Data from the Cancer Control Supplement to the 19 8 7 National Health Interview Survey, a representative survey of non-institutionalized adults in the United States. From reported age at first use, participants were categorized by type and sequence of tobacco product use. SUDAAN 8.0.1 was used for statistical analyses. Participants Males aged 18-34 (n=3454), weighted to provide estimates of the US population. A subsample of males aged 23-34 (n=2614) was analyzed to minimize the possibility of future product switching. Measurements Smoking status, smokeless tobacco (snuff, chewing tobacco, both) use status, age at regular use of cigarettes, age at first use of smokeless tobacco. Findings Of those 23-34-year-olds who had ever used SLT with or without cigarettes. 77.2% (95%, CI: 71.3, 83.3) were classifiable as non-gateway users in that 35.0% (95% CI: 29.9, 40.1) had only used SIX and 42.2% (95%, CI: 36.8, 47.7) had used cigarettes first. Cigarette use in younger cohorts was less common, despite increased SLT use. Those who used cigarettes before moist snuff were 2.1 times more likely to have quit smoking (95% CI 1.21,6.39) than cigarette-only users. Conclusions The large majority of SLT users are non-gateway users. Causal gateway effects should be of minor concern for policy. SLT may be more likely to prevent smoking than cause it.

Shade tobacco and Green Tobacco Sickness in Connecticut.

Trape-Cardoso M; Bracker A; Grey M; Kaliszewski M; Oncken C; Ohannessian C et al. *Journal of Occupational and Environmental Medicine* 45(6): 656-661, 2003. (15 refs.)

The prevalence of Green Tobacco Sick-ness (GTS) among shade tobacco farm-workers in Connecticut is unknown. We conducted a study to determine the prevalence of GTS in farmworkers work-ing in shade tobacco fields who presented for clinical care at medical student-run clinics. A retrospective chart review of the tobacco workers seen at Farmworkers' Clinics during 2001 was instituted in this study. Although GTS was not clinically diagnosed in any of the patients, we found 15 % diagnoses that could be attributed to possible GTS by ICD-9 code review. Using a stricter GTS case definition, the frequency rate decreased to 4 %. Nonsmokers were significantly more likely than smokers to report GTS-like symptoms ($P < 0.01$). Isolated symptoms of headache and dizziness were significantly more frequent among nonsmokers than smokers ($P < 0.05$). In conclusion, cases of possible GTS were found in Connecticut shade tobacco workers. Nonsmokers were more at risk to have possible GTS than smokers.

US public universities' compliance with recommended tobacco-control policies.

Halperin AC; Rigotti NA. *Journal of American College Health* 51(5): 181-188, 2003. (26 refs.)

To address the rise in tobacco use among college students, several national health organizations, including the American College Health Association, recommend that colleges enact smoking bans in and around all campus buildings, including student housing, and prohibit the sale, advertisement, and promotion of tobacco products on campus. Key informants at 50 US public universities, one from each state, Were interviewed during the 2001/2002 academic year to assess the prevalence of these recommended policies. More than half (54%) of the colleges banned smoking in all campus buildings and

student residences, 68% had no tobacco sales on campus, and 32% of the schools' newspapers did not accept tobacco advertising. Regional differences in adoption of these campus tobacco-control policies were present. Although this national sample of public universities had implemented some of the recommended policies, they must take further actions to comply fully with campus tobacco-control guidelines.

Modifying exposure to smoking depicted in movies: A novel approach to preventing adolescent smoking.
Sargent JD; Dalton MA; Heatherton T; Beach M. *Archives of Pediatrics & Adolescent Medicine* 157(7): 643-648, 2003. (22 refs.)
Background: Most behavioral approaches to adolescent smoking address the behavior directly. We explore an indirect approach: modifying exposure to portrayals of smoking in movies. Objectives: To describe adolescents' exposure to smoking in movies and to examine factors that could modify such exposure. Design: Occurrences of smoking were counted in each of 601 popular movies. Four thousand nine hundred ten northern New England junior high school students were asked to report which movies they had seen from a randomly generated subsample of 50 films, and responses were used to estimate exposure to the entire sample. Analysis: The outcome variable was exposure to movie smoking, defined as the number of smoking occurrences seen. Risk factors for exposure included access to movies (movie channels, videotape use, and movie theater); parenting (R [restricted]-rated movie restrictions, television restrictions, parenting style); and characteristics of the child (age, sex, school performance, sensation-seeking propensity, rebelliousness, and self-esteem). We used multiple regression to assess the association between risk factors and exposure to movie smoking. Results: Subjects had seen an average of 30% of the movie sample (interquartile range, 20%-44%), from which they were exposed to 1160 (interquartile range, 640-1970) occurrences of smoking. In a multivariate model, exposure to movie smoking increased (all P values <.001) by about 10% for each additional movie channel and for every 2 videos watched per week. Exposure increased by 30% for those going to the movie theater more than once per month compared with those who did not go at all. Parent restriction on viewing R-rated movies resulted in a 50% reduction in exposure to movie smoking. There was no association between parenting style and exposure to movie smoking. Much of the protective effect of parent R-rated movie restriction on adolescent smoking was mediated through lower exposure to movie smoking. Conclusions: Adolescents see thousands of smoking depictions in movies, and this influences their attitudes and behavior. Exposure to movie smoking is reduced when parents limit movie access. Teaching parents to monitor and enforce movie access guidelines could reduce adolescent smoking in an indirect, yet powerful, manner.

Individual differences in nicotine intake per cigarette.
Patterson F; Benowitz N; Shields P; Kaufmann V; Jepson C; Wileyto P et al. *Cancer Epidemiology, Biomarkers & Prevention* 12(5): 468-471, 2003. (26 refs.)
The increase in levels of blood nicotine that occurs from smoking a single cigarette, sometimes referred to as a "nicotine boost," is an individualized measure of how much nicotine has been extracted from smoking a cigarette. This study investigated the demographic, smoking status, and psychological predictors of nicotine boost in a sample of 190 treatment-seeking smokers. Boost was assessed by comparing plasma nicotine levels before and after participants smoked one of their own brand cigar-ettes ad libitum. Positive affect (mood) was a significant positive pre-dictor of nicotine boost, controlling for baseline cotinine levels and cigarette brand (Federal Trade Commission) nicotine delivery. However the proportion of variability accounted for in the model was relatively small (5%). Future research on individual differences in nicotine boost is warranted -- to clarify the role of psychological, physiological, and cigarette-related determinants.

Efficacy of nicotine patch in smokers with a history of alcoholism.
Hughes JR; Novy P; Hatsukami DK; Jensen J; Callas PW. *Alcoholism: Clinical and Experimental Research* 27(6): 946-954, 2003. (49 refs.)
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Assessment and diagnosis of nicotine dependence in mental health settings.

Peterson AL; Hryshko-Mullen AS; Cortez Y. American *Journal on Addictions* 12(3): 192-197, 2003. (28 refs.)

This study evaluated the frequency of documented assessment of smoking status and the diagnosis of nicotine dependence in a random sample of 153 mental health records and 152 medical records. The results indicated that tobacco use was routinely documented in the mental health records (88%) and medical records (87%). However, a diagnosis of nicotine dependence was given in only 2% of the mental health records (1/49) and 7% of the medical records (2/30) for those patients with documented regular tobacco use. These results suggest that clinicians do not routinely diagnose Nicotine Dependence even when diagnostic criteria are met.

Spit (smokeless) tobacco Intervention for high school athletes: Results after 1 year.

Walsh MM; Hilton JF; Ellison JA; Gee L; Chesney MA; Tomar SL et al. *Addictive Behaviors* 28(6): 1095-1113, 2003. (43 refs.)

Objective: To determine the efficacy of a spit tobacco (ST) intervention designed to promote ST cessation and discourage ST initiation among male high school baseball athletes. Methods: This study was a cluster-randomized controlled trial. Forty-four randomly selected high schools in rural California were randomized within strata (prevalence of ST use and number and size of baseball teams) to either the intervention or the control group. Ninety-three percent of eligible baseball athletes participated, yielding 516 subjects in 22 intervention schools and 568 subjects in 22 control schools. Prevalences of sustained ST cessation and ST use initiation over 1 year were assessed by self-report. Multivariate logistic regression models for clustered responses were used to test the null hypotheses of no association between group and the two outcomes, adjusted for the stratified design and baseline imbalances between groups in significant predictors of ST use. Results: Prevalence of cessation was 27% in intervention high schools and 14% in control high schools (odds ratio (OR)=2.29; 95% confidence interval (CI), 1.36?3.87). The intervention was especially effective in promoting cessation among those who, at baseline, lacked confidence that they could quit (OR=6.4; 95% CI, 1.0?4.3), among freshmen (OR=15; 95% CI, 0.9?260), and among nonsmokers (OR=3.2; 95% CI, 0.9?11). There was no significant difference between groups in the prevalence of ST initiation. Conclusions: This intervention was effective in promoting ST cessation, but was ineffective in preventing initiation of ST use by nonusers.

Effects of nicotine deprivation on urges to drink and smoke in alcoholic smokers.

Cooney JL; Cooney NL; Pilkey DT; Kranzler HR; Oncken CA. *Addiction* 98(7): 913-921, 2003. (33 refs.)

Aim: This study examined the effect of nicotine deprivation on alcohol and smoking urges in a sample of alcohol-dependent smokers in early recovery. Design: Using a within-subjects design, participants underwent two cue-reactivity laboratory sessions in which they rated their urges for alcohol and cigarettes during the following three trials: baseline, neutral cue and mood induction combined with alcohol beverage cue exposure. One session was completed after 34 hours of nicotine deprivation and another in a non-deprived state. Participants: Forty alcohol-dependent heavy smokers recruited from a substance abuse day treatment program. Measurements: Self-reported urge to drink, urge to smoke and salivation. Findings: Results showed that during the non-deprived session, alcohol cue presentations were associated with significant increases in urges to drink and urges to smoke. Acute nicotine deprivation led to increased smoking urges, but was not associated with increased urges to drink alcohol. Conclusions: Findings suggest that the acute effects of smoking cessation are unlikely to increase risk of relapse to alcohol in alcoholic patients who are undergoing treatment.