

## **Alcohol consumption and smoking status: The role of smoking cessation.**

Romberger DJ; Grant K. *Biomedicine & Pharmacotherapy* 58(2): 77-83, 2004. (89 refs.)

Cigarette smoking is common among persons with alcohol dependence or abuse with as many as 80% of persons who are alcohol dependent also being smokers. Not only is smoking common in persons with heavy alcohol consumption, but also nicotine dependence appears more severe in smokers with a history of alcohol dependence. This combined exposure to both tobacco smoke and alcohol results in major health consequences including additive risks for some diseases such as head and neck cancers. Although modest alcohol consumption has some positive health benefits, smoking typically negates these benefits. The cellular mechanisms impacted by combined smoking and alcohol exposure are poorly understood, but molecular epidemiology approaches are providing insights regarding the importance of effects on oxidant/antioxidant pathways and on metabolic pathways involving the cytochrome P450 system. Given the prevalence of smoking in the alcohol dependent population, smoking cessation in this group has the potential for tremendous impact. In recent years, smoking cessation approaches have been initiated in this population, but much work remains in order to define the optimal smoking cessation strategies for persons in alcohol treatment programs. Copyright 2004, Editions Scientifiques Medicales Elsevier.

## **Characteristics of persistent smoking among pregnant teenagers followed to young adulthood.**

Cornelius MD; Leech SL; Goldschmidt L. *Nicotine & Tobacco Research* 6(1): 159-169, 2004. (52 refs.)

Pregnant teenagers (N=344) were interviewed during first and third trimesters (average age=16.2 years) and interviewed again as young adults (average age= 23.0 years). Nearly 47% were smokers during the first trimester, 58% smoked during the third trimester, and 61% were smokers in their early adult years. Some 40% (n=137) continued smoking into young adulthood (persistent smokers); 7% quit. Average number of cigarettes per day was 10.0 among persistent smokers and 6.8 among quitters ( $p < .05$ ). Nearly 20% started smoking by young adulthood (late-onset smokers). Persistent smokers and quitters were most similar to one another, and they differed from the late-onset smokers and, persistent nonsmokers on demographic, psychological, and behavioral measures. These variables from the teenage Years included White race, lower maternal education, lower school grades, more aggression and delinquency problems, and earlier and more peer use of substances. Characteristics from the adult years included White race; lower education; and more anxiety, hostility, and alcohol use. Multivariate analyses using discriminant function analyses showed that three characteristics from the teenage years discriminated across the three smoking groups (persistent, late-

onset, quitters): White race, friends' smoking, and lower maternal education. The same analyses using the adult characteristics showed that White race and lower personal educational level discriminated the persistent smokers and quitters from the late-onset smokers. Lower gravidity discriminated the persistent smokers from the quitters. Characteristics of women who are at highest risk of persistent smoking can be identified in both the teenage years and the early adult years, and appropriate interventions can be targeted to those women at highest risk of persistent smoking. Copyright 2004, Carfax Publishing Ltd.

## **Disparities between public health educational materials and the scientific evidence that smokeless tobacco use causes cancer.**

Waterbor JW; Adams RM; Robinson JM; Crabtree FG; Accortt NA; Gilliland MJ. *Journal of Cancer Education* 19(1): 17-28, 2004. (61 refs.)

**Background and Methods.** We reviewed 4 dozen health education brochures on the dangers of smokeless tobacco (ST) use, printed between 1981 and 2001 and available to the public in 2002. Collectively, these brochures state that ST use causes oral leukoplakia, other oral conditions, and cancers of the oral cavity, larynx, pharynx, esophagus, stomach, pancreas, lung, breast, prostate, bladder, and kidney. We then reviewed the scientific literature to determine whether these claims were substantiated. **Results.** Only for oral leukoplakia and several oral conditions is the evidence persuasive for causation by ST. The evidence that ST causes oral cancer is very suggestive, whereas the evidence for causation of other cancers is either absent or contradictory. **Conclusions.** Communication of the health risks of using ST must be done accurately and should be data based. Broadening the message to include additional diseases for which the evidence is inadequate could cause the message about true risks, as well as the messenger, to be discounted. Copyright 2004, American Association for Cancer Education.

## **Designated "no smoking" areas provide from partial to no protection from environmental tobacco smoke.**

Cains T; Cannata S; Poulos R; Ferson MJ; Stewart BW. *Tobacco Control* 13(1): 17-22, 2004. (16 refs.)

designated "no smoking" areas in the hospitality industry as a means of providing protection from environmental tobacco smoke (ETS), and whether certain design features assist in achieving this end. **Methodology:** In the greater metropolitan region of Sydney, a representative group of 17 social and gaming clubs, licensed to serve alcoholic beverages and in which, apart from designated areas, smoking occurs, agreed to participate. In each establishment, simultaneous single measurements of atmospheric nicotine, particulate matter (10  $\mu\text{m}$ ; PM10) and carbon dioxide (CO<sub>2</sub>) levels were measured in a general use area and in a designated "no smoking" area during

times of normal operation, together with the levels in outdoor air (PM10 and CO2 only). Analyses were made of these data to assess the extent to which persons using the "no smoking" areas were protected from exposure to ETS. Results: By comparison with levels in general use areas, nicotine and particulate matter levels were significantly less in the "no smoking" areas, but were still readily detectable at higher than ambient levels. For nicotine, mean (SD) levels were 100.5 (45.3) mug/m(3) in the areas where smoking occurred and 41.3 (16.1) mug/m(3) in the "no smoking" areas. Corresponding PM10 levels were 460 (196) mug/m(3) and 210 (210) mug/m(3), while outdoor levels were 61 (23) mug/m(3). The reduction in pollutants achieved through a separate room being designated "no smoking" was only marginally better than the reduction achieved when a "no smoking" area was contiguous with a smoking area. CO2 levels were relatively uninformative. Conclusion: Provision of designated "no smoking" areas in licensed ( gaming) clubs in New South Wales, Australia, provides, at best, partial protection from ETS - typically about a 50% reduction in exposure. The protection afforded is less than users might reasonably have understood and is not comparable with protection afforded by prohibiting smoking on the premises. Copyright 2004, British Medical Journal Publishing Group.

**Effect of pre-treatment with nicotine patch on withdrawal symptoms and abstinence rates in smokers subsequently quitting with the nicotine patch: A randomized controlled trial.**

Schuurmans MM; Diacon AH; van Biljon X; Bolliger CT. *Addiction* 99(5): 634 -640, 2004. (14 refs.)

**Aims** To determine whether 2-week pre-treatment with transdermal nicotine influences withdrawal symptoms or success rate of subsequent smoking cessation using nicotine patches.. **Design** Randomized controlled trial. **Setting** Smoking cessation clinic. **Participants** Healthy smokers (n = 200, 45% female) were allocated randomly to either active nicotine-patch (AP, 15 mg daily, n = 100) or placebo-patch (PP, n = 100) pre-treatment. Baseline characteristics were well balanced except for daily cigarette consumption: mean ( $\pm$  SD) 23.1 (8) and 26.4 (11) for AP and PP groups, respectively (P = 0.021). **Intervention** At the screening visit ( 2 weeks) subjects were counselled and started pre-treatment with daily patches (AP or PP). From the quit date (week 0) onwards all subjects received active nicotine patches for 12 weeks (15 mg daily for 8 weeks, 10 and 5 mg daily for 2 weeks each) and counselling. **Measurements** Follow-up visits included measurement of exhaled carbon monoxide at the quit date, 2, 6, 10 and 26 weeks. Subjects documented daily cigarette consumption and severity of withdrawal symptoms (Wisconsin scale) from 2 weeks to week 2. **Outcome measures** were withdrawal symptoms composite score and abstinence rates. **Findings** There was no significant difference in withdrawal symptoms, but more subjects in the AP group were smoke-free during the 6-month study period. Overall sustained abstinence was documented in 17% of subjects at 6 months; 22% and 12% for AP and PP, respectively (P = 0.03). Retrospective subgroup analysis showed for subjects smoking >16 cigarettes/day sustained cessation rates were 22% and 9% for AP and PP, respectively (P = 0.01). No difference in adverse event rates was observed. **Conclusions** Nicotine patch pre-

treatment before cessation did not reduce early withdrawal symptoms but increased sustained abstinence rates at 6 months. The nicotine pre-treatment was equally effective in light and heavy smokers. Copyright 2004, Society for the Study of Addiction to Alcohol and Other Drugs.

**Effectiveness of smoking cessation self-help materials in a lung cancer screening population.**

Clark MM; Cox LS; Jett JR; Patten CA; Schroeder DR; Nirelli LM et al. *Lung Cancer* 44(1): 13-21, 2004. (30 refs.)

Randomized controlled trials of smoking interventions have not been well-documented for lung cancer screening populations. In this study, we randomly assigned 171 current smokers who were undergoing low-dose fast spiral chest CT (SCTS) for lung cancer screening to receive either standard written self-help materials or a written List of Internet resources for smoking cessation. At the 1-year follow-up, more of the subjects receiving Internet-based resources reported making a stop attempt (68% versus 48%, P = 0.011). However, there were no statistically significant differences in 7-day point prevalence quit rates (5% versus 10%) or advancement in motivational readiness to stop smoking (27% versus 30%), respectively, between the groups. Clearly, more investigation is warranted into how to tailor smoking interventions for cancer screening participants. Copyright 2004, Elsevier Science.

**Daily smoking and the subsequent onset of psychiatric disorders.**

Breslau N; Novak SP; Kessler RC. *Psychological Medicine* 34(2): 323-333, 2004. (46 refs.)

**Background.** Recent research has demonstrated that smokers are at an elevated risk for psychiatric disorders. This study extends the enquiry by examining: (1) the specificity of the psychiatric sequelae of smoking; and (2) the variability in the likelihood of these sequelae by proximity and intensity of smoking. **Method.** Data come from the National Comorbidity Survey (NCS), a representative sample of the US population 15-54 years of age. The Smoking Supplement was administered to a representative subset of 4414 respondents. A modified World Health Organization-Composite International Diagnostic Interview was used to measure DSM-III-R disorders. Survival analysis with smoking variables as time-dependent covariates was used to predict the subsequent onset of specific psychiatric disorders. **Results.** The estimated effects of daily smoking varied across disorders. In the case of mood disorders, daily smoking predicted subsequent onset, with no variation between current versus past smokers or by smoking intensity. In the case of panic disorder and agoraphobia, Current but not past smoking predicted subsequent onset; furthermore, the risk of these disorders in past smokers decreased with increasing time since quitting. In the case of substance use disorders, current but not past smoking predicted subsequent onset, with no variation by time since quitting or smoking intensity. **Conclusions.** The data suggest that smoking cessation programmes would not prevent the onset of mood disorder, as ex-smokers do not differ from current smokers in their risk for these disorders. In comparison, daily smoking might be a causal factor in panic disorder and agoraphobia, conditions that might be preventable by smoking cessation. Additionally, current smoking might serve as a marker

for targeting interventions to prevent alcohol and drug disorders. Copyright 2004, Cambridge University Press.

### **Misuse of and dependence on over-the-counter nicotine gum in a volunteer sample.**

Hughes JR; Pillitteri JL; Callas PW; Callahan R; Kenny M.

*Nicotine & Tobacco Research* 6(1): 79-84, 2004. (22 refs.)

To estimate the amount of misuse of and dependence on nicotine gum in an over-the-counter (OTC) setting, we conducted two telephone surveys of smokers recruited by newspaper ads. Study 1 surveyed 266 U.S. ever-smokers using OTC gum to determine the percentage who used the gum for noncessation reasons or used gum and cigarettes concurrently. In Study 1, 6% initially purchased nicotine gum to reduce smoking and 1% to avoid smoking restrictions. At the time of interview, 35% chewed gum and smoked cigarettes concurrently with a mean of six cigarettes per day and 15 mg/day of nicotine from gum. Among long-term users (> 90 days), 20% attributed their use to addiction. To determine what proportion of those reporting addiction would meet DSM-IV or ICD-10 criteria for dependence, Study 2 surveyed 100 current and ex-smokers who reported addiction to OTC nicotine gum. In these gum users, 66% met DSM-IV and 74% met ICD-10 criteria for dependence. Combining the results of Studies 1 and 2 with other data suggests very few gum users develop dependence on the gum. We conclude (a) very few people use nicotine gum for noncessation reasons, (b) concurrent use of gum and cigarettes is common but involves a small number of cigarettes and pieces of gum per day, and (c) the incidence of dependence on OTC nicotine gum is very small. Copyright 2004, Carfax Publishing Ltd.

### **Postintervention effect of nicotine replacement therapy on randomized reduction in smokers who are unwilling to quit: Randomized trial.**

Etter JF; Laszlo E; Perneger TV. *Journal of Clinical*

*Psychopharmacology* 24(2): 174-179, 2004. (32 refs.)

The objective of this study was to assess the post-intervention effect of nicotine replacement therapy on reduction of cigarette consumption 1.5 years after the end of a 6-month treatment. Heavy smokers who had no intention of quitting smoking were recruited from the general population and were randomly assigned to a treatment of nicotine (choice of a 15-mg nicotine patch, a 4-mg nicotine gum, and/or a 10-mg nicotine inhaler, n = 265), matching placebo products (n = 269), or no intervention (n = 389). Products were sent to participants by mail. Education was limited to a booklet. Of 923 participants, 879 (95%) were followed 6 months after randomization and 846 (92%) were followed after 26 months. Mean baseline consumption was 30 cigarettes/day in all groups. After 6 months, cigarette consumption had decreased by a mean of 10.9 cigarettes/day in the nicotine group, 8.7 in the placebo group, and 4.9 among controls (P less than or equal to 0.02 for all pairwise comparisons). After 26 months, compared with baseline, cigarette consumption had decreased by a mean of 9.8 cigarettes/day in the nicotine group, 7.7 in the placebo group, and 7.7 among controls (nicotine vs. placebo or control: P less than or equal to 0.03). After 2 years, smoking cessation rates did not differ significantly among groups (nicotine 11.7%, placebo 9.3%, control, 10.0%; P = 0.6). Thus, a slight effect of nicotine

replacement therapy on reduction of cigarette consumption was maintained 1.5 years after the end of the 6-month treatment, but the initially observed placebo effect was not maintained. Nicotine replacement therapy for smoking reduction had no deleterious impact on smoking cessation. Copyright 2004, Lippincott, Williams & Wilkins.

### **Role of pharmacological aids and social supports in smoking cessation associated with Quebec's 2000 Quit and Win campaign.**

Gomez-Zamudio M; Renaud L; Labrie L; Masse R; Pineau G;

Gagnon L. *Preventive Medicine* 38(5): 662-667, 2004. (17 refs.)

Background. This evaluation of the 2000 Quit and Win campaign in the province of Quebec, Canada, assessed the use and effectiveness of pharmacological aids, social support, and support resources (clinic program, support groups, books, telephone support) among contest participants. The reach of the contest was 1.3% of adult smokers: 20,400 participants. Methods. Six months after the contest ended, 3,033 randomly selected participants completed telephone interviews about their smoking status and their use of nonform aids, social support, support resources, and pharmacological aids during their cessation attempt. Those who were abstinent from smoking were then reinterviewed 6 months later, that is, 12 months after the contest. Results. Cessation rates were 66% at contest end, 36% at 6 months, and 22% at 12 months. Heavier smokers were somewhat more likely to have quit. Overall, 41% of respondents used any form of aid (support resources and pharmacological aids) in the first 6 months; among these, 42% used bupropion and 38% used nicotine patches. Those using bupropion were more likely to successfully quit smoking. Successful quitters rated the social support received from their buddy as more useful than did relapsers, and social support was unrelated to the use of pharmacological aids. Conclusions. The results suggest that adequate investment in population-wide Quit and Win programs that provide a variety of appropriate aids to smokers, including social support and pharmacological products, can improve the reach of smokers. Copyright 2004, Institute for Cancer Prevention.

### **Stillbirths and infant deaths associated with maternal smoking among mothers aged not greater than or equal to 40 years: A population study.**

Salihu HM; Shumpert MN; Aliyu MH; Alexander MR; Kirby

RS; Alexander GR. *American Journal of Perinatology* 21(3):

121-129, 2004. (36 refs.)

We set out to estimate the association between smoking among pregnant women aged at least 40 years and pregnancy outcome by analyzing singleton live births in the United States between 1995 and 1997. The study group consisted of deliveries to mothers aged 40 years and older with two maternal age categories (20 to 29 and 30 to 39 years) as control. Although risks varied with maternal age, smoking was associated with a higher-than-expected risk for infant mortality in all maternal age categories. The highest rate of infant mortality associated with smoking after adjusting for confounding was among mothers aged 20 to 29 (hazard ratio [HR], 1.49; 95% confidence interval [CI], 1.28 to 1.75), while the lowest was among pregnant mothers in the 40 and above age category (HR, 1.03; 95% CI, 0.87 to 1.23). In utero fetal demise was highest among older

smoking mothers (greater than or equal to 40 years) and declined with decreasing age ( $p$  for trend  $<0.0001$ ). In conclusion, the relationship between maternal smoking and pregnancy outcomes is modified by the age of the mother. Copyright 2004, Thieme Medical Publishing Inc.

#### **Subjective effects of an initial dose of nicotine nasal spray predict treatment outcome.**

Kaufmann V; Jepson C; Rukstalis M; Perkins K; Audrain-McGovern J; Lerman C. *Psychopharmacology* 172(3): 271-276, 2004. (20 refs.)

**Rationale.** Nicotine nasal spray (NS) is recommended as one of five first-line smoking cessation products. A clinically convenient tool to identify smokers most likely to benefit from NS could assist healthcare practitioners in selecting the optimal treatment for individual patients. **Objectives.** To evaluate whether the subjective effects of an initial pre-treatment dose of NS predict 6 month abstinence rates following NS treatment for tobacco dependence. **Methods.** One hundred and seventy-five smokers received an initial 1 mg pre-treatment dose of NS and completed a new measure of NS subjective effects (initial spray experience, ISE). This measure, together with demographic and smoking history variables, was examined as a predictor of 6-month point-prevalence (biochemically verified) abstinence rates. **Results.** Factor analysis revealed positive and negative effects subscales of the ISE. Smokers with higher ratings of positive effects from the pre-treatment NS dose were significantly more likely to be abstinent at 6-month follow-up. These effects were partially mediated by reduction in urge to smoke. **Conclusions.** Pending additional validation in human laboratory and clinical studies, assessment of the acute positive subjective effects of initial NS delivery may be an efficient way to predict who will be successful with NS treatment for tobacco dependence. Copyright 2004, Springer-Verlag.

#### **Tobacco industry research on smoking cessation: Recapturing young adults and other recent quitters.**

Ling PM; Glantz SA. *Journal of General Internal Medicine* 19(5), 2004. (70 refs.)

**Background:** Smoking rates are declining in the United States, except for young adults (age 18 to 24). Few organized programs target smoking cessation specifically for young adults, except programs for pregnant women. In contrast, the tobacco industry has invested much time and money studying young adult smoking patterns. Some of these data are now available in documents released through litigation. **Objective:** Review tobacco industry marketing research on smoking cessation to guide new interventions and improve clinical practice, particularly to address young adult smokers' needs. **Methods:** Analysis of previously secret tobacco industry documents. **Results:** Compared to their share of the smoking population, young adult smokers have the highest spontaneous quitting rates. About 10% to 30% of smokers want to quit; light smokers and brand switchers are more likely to try. Tobacco companies attempted to deter quitting by developing products that appeared to be less addictive or more socially acceptable. Contrary to consumer expectations, "ultra low tar" cigarette smokers were actually less likely to quit. **Conclusions:** Tobacco industry views

of young adult quitting behavior contrast with clinical practice. Tobacco marketers concentrate on recapturing young quitters, while organized smoking cessation programs are primarily used by older smokers. As young people have both the greatest propensity to quit and the greatest potential benefits from smoking cessation, targeted programs for young adults are needed. Tobacco marketing data suggest that inspirational messages that decrease the social acceptability of smoking and support smoke-free environments resonate best with young adult smokers' motivations. Copyright 2004, Blackwell Publishing Inc.

#### **What perception have smokers of nicotine and tar yields of cigarettes?**

Plantin-Carrenard E; Jacob N; Foglietti MJ; Derenne JP; De L'homme G. *Revue des Maladies Respiratoires* 21(1): 67-73, 2004. (27 refs.)

**Introduction:** Advertising information on cigarette package participate to the reduction of health risks from smoking. Impact on smokers has been poorly studied. This study intended to determine the smoker perception of nicotine and tar yields of cigarettes. **Methods** Consulting in an outpatient smoking cessation clinic, 171 smokers answered freely and spontaneously to a questionnaire evaluating their perception of nicotine and tar yields, cigarette consumption (number and brand), nicotine dependence. Simultaneously, biological tobacco markers were measured. **Results** The number of cigarettes, nicotine dependence and specific tobacco markers were not significantly different according to the cigarette type: "full savour", "light" or "ultra light". Women smoked less than men and 54% preferred "light" cigarettes versus 37% of men. These smokers were entering a tobacco cessation program, it was assumed they had lead a prior reflection about their smoking habits. Only 8% of them gave the correct values of nicotine and tar yields and 14% gave approximate values. Tar levels were highly underestimated. **Conclusions** This study shows that smokers have actually no interest for nicotine and tar yields. As the new decree which modifies manufacture's obligation concerning the legal mentions, is applicable in January 2004 in France; our conclusion may change in the future. Copyright 2004, Masson Editeur

#### **The blind spot in the nicotine replacement therapy literature: Assessment of the double-blind in clinical trials.**

Mooney M; White T; Hatsukami D. *Addictive Behaviors* 29(4): 673-684, 2004. (49 refs.)

While clinical trials of medications often use a double-blind procedure, the integrity of the blind and its relationship to treatment outcome is seldom examined. In this review, 73 double-blind, placebo-controlled clinical trials of the nicotine replacement therapies (NRTs) in smoking cessation were identified. Seventeen articles were found that assessed blindness integrity, demonstrating major variations in the assessment, analysis, and reporting of blindness integrity. Although 12 studies found that subjects accurately judged treatment assignment at a rate significantly above chance, the available literature does not permit definitive conclusions about blindness integrity. Recommendations for the assessment, analysis, and reporting of blindness integrity are made. Copyright 2004, Elsevier