Editor's Note: As this issue of STAN Bulletin is being published, the vote on California's tobacco tax hike, Proposition 29, appears too close to call. Some sources have the Yes side winning, meaning the desired $1 a pack tax hike will take effect, but at least one source claiming 100% of the vote tallied shows a very narrow victory for the No, which would be unfortunate proof of the tobacco industry's continuing power to buy results. More details in Friday's bulletin. Separately, the Wall Street Journal is routinely tobacco-friendly, but some of its articles, like the one linked below, are of interest, with full text available upon request for personal use.

Stan Shatenstein

In the News:

- **Australia**: Nicola Roxon: The Protector: Fighting Tobacco Industry Bullying Tactics
- **Canada**: Quebec: Imperial Tobacco CEO testifies in class-action lawsuit: All tobacco dangerous
  - EU: EC: In-Flight Stop Smoking 'Flying to Freedom' Campaign Takes Off
- **Norway**: Philip Morris sues over tobacco display ban claiming European competition rules violation
- **UK**: BLF: One joint equivalent to smoking 20 cigarettes; Huge health danger; Report: Lung impact of cannabis
- **UK**: Investors Chronicle: Have tobacco stocks run out of puff?
- **US**: CA: Prop 29: Cigarette tax vote too close to call; Voters appear reluctant; No: 50.8%; Yes: 49.2%
  - **US**: FDA: Republican & Democratic Lawmakers Unite to Fight Cigar Regulations
- **US**: Illinois: WSJ Opinion: State Blows Smoke at Taxpayers with Cigarette Hike
- **US**: NC: Slashing anti-tobacco programs will cost money, lives

Noteworthy:

"The findings from this study raise important questions about the inclusion of emission information on cigarette packaging. Legislation in the EU currently requires manufacturers to display numerical yields for tar, nicotine and carbon monoxide on the side of cigarette packets. However, this study provides additional evidence that these numbers are misleading to consumers. Given that the scientific consensus is that all conventional cigarette brands are equally hazardous and there are no measureable differences in risk, regulators should not communicate numerical toxicant levels that suggest otherwise. Descriptive statements, such as those currently used in Australia and scheduled for implementation in Canada, were rated as easiest to understand and may be an appropriate replacement for the numerical information." [Hammond D, White CM. Improper disclosure: Tobacco packaging and emission labelling regulations, *Pub Health*]

In this Edition:

- Addiction - Kralikova/Etter: Czech Republic: E-cigarette use & nicotine replacement
- AJPM - Adams: US: Reducing Prenatal Smoking: Role of State Policies
- Ann Surg - Sørensen: Denmark: Wound healing & infection: Smoking, cessation & NRT impact

12.11.2012
EVA KRALIKOVA, SENTA KUBATOVA, KATERINA TRUNECKOVA, ALEXANDRA KMETOVA and PETER HAJEK

We read with interest the article by Wagener et al. [1], which calls for a balanced analysis of the risks and benefits of e-cigarettes (EC). There currently exist very few data on smokers' reactions to EC to help guide relevant policy. Three internet surveys reported that many users consider the product a satisfactory replacement for cigarettes [2–4]. In all surveys, most EC users either stopped smoking conventional cigarettes completely or reduced their consumption substantially. However, user surveys are much more likely to attract EC enthusiasts than smokers who found the product disappointing, and so they do not provide an indication of a typical user reaction and the potential EC uptake by smokers.

We conducted a survey that may add to the available information by establishing the proportion of first-time users who find the product acceptable and satisfying, and continue to use it...

Of the 253 respondents who had tried EC at least once, 245 provided information about their reaction, with 43% disappointed with the experience, 33% finding it as expected, and 24% finding EC better than expected.

The respondents who tried EC but did not continue using them were asked for the reasons for their decision (multiple reasons were allowed). Of the 262 responses, 33% reported lack of satisfaction, 32% did not like the taste, 13% did not continue to use EC because of the cost, 9% found it embarrassing to use and 4% gave other reasons, such as technical difficulties with the product and missing the natural timing of finishing a cigarette...


Also:

Commentary on Wagener et al. (2012): Electronic cigarettes – the Holy Grail of nicotine replacement?
Reducing Prenatal Smoking

The Role of State Policies

Am J Prev Med
Online First June 6 2012.

E. Kathleen Adams, Sara Markowitz, Viji Kannan, Patricia M. Dietz, Van T. Tong, Ann M. Malarcher

Abstract

Background: Maternal smoking causes adverse health outcomes for both mothers and infants and leads to excess healthcare costs at delivery and beyond. Even with substantial declines over the past decade, around 23% of women enter pregnancy as a smoker and though almost half quit during pregnancy, half or more quitters resume smoking soon after delivery.

Purpose: To examine the independent effects of higher cigarette taxes and prices, smokefree policies, and tobacco control spending on maternal smoking prior to, during, and after a pregnancy during a period in which states have made changes in such policies.

Methods: Data from pooled cross-sections of women with live births during 2000–2005 in 29 states plus New York City (n=225,445) were merged with cigarette price data inclusive of federal, state, and local excise taxes, full or partial bans on smoking in public places, and tobacco control spending. Probit regression models using a mixed panel, state fixed effects, and time indicators were used to assess effect of policies on smoking (during 3 months before pregnancy); quitting by last 3 months of pregnancy; and having sustained quitting at the time of completing the postpartum survey.

Results: Multivariate analysis indicated that a $1.00 increase in taxes and prices increases third-trimester quits by between 4 and 5 percentage points after controlling for the other policies and covariates. Implementing a full private worksite smoking ban increases quits by the third trimester by an estimated 5 percentage points. Cumulative spending on tobacco control had no effect on pregnancy smoking rates overall. Association of tobacco control policies with maternal smoking varied by age.

Conclusions: States can use multiple tobacco control policies to reduce maternal smoking. Combining higher taxes with smokefree policies particularly can be effective.

http://www.ajpmonline.org/webfiles/images/journals/amepre/AMEPRE_3422%5B4%5D-stamped.pdf

Note: Open Access. Full text PDF freely available from link immediately above.

Related news coverage & PR:

Cigarette Tax Hikes Curb Smoking in Pregnancy - HealthDay News

Higher Taxes, Smoke-Free Policies Are Reducing Smoking in Moms-To-Be
http://www.sciencedaily.com/releases/2012/06/120605075535.htm

Wound healing and infection in surgery: the pathophysiological impact of smoking, smoking cessation, and nicotine replacement therapy: a systematic review
Abstract

OBJECTIVE:
The aim was to clarify how smoking and nicotine affects wound healing processes and to establish if smoking cessation and nicotine replacement therapy reverse the mechanisms involved.

BACKGROUND:
Smoking is a recognized risk factor for healing complications after surgery, but the pathophysiological mechanisms remain largely unknown.

METHODS:
Pathophysiological studies addressing smoking and wound healing were identified through electronic databases (PubMed, EMBASE) and by hand-search of articles' bibliography. Of the 1460 citations identified, 325 articles were retained following title and abstract reviews. In total, 177 articles were included and systematically reviewed.

RESULTS:
Smoking decreases tissue oxygenation and aerobe metabolism temporarily. The inflammatory healing response is attenuated by a reduced inflammatory cell chemotactic responsiveness, migratory function, and oxidative bactericidal mechanisms. In addition, the release of proteolytic enzymes and inhibitors is imbalanced. The proliferative response is impaired by a reduced fibroblast migration and proliferation in addition to a downregulated collagen synthesis and deposition. Smoking cessation restores tissue oxygenation and metabolism rapidly. Inflammatory cell response is reversed in part within 4 weeks, whereas the proliferative response remains impaired. Nicotine does not affect tissue microenvironment, but appears to impair inflammation and stimulate proliferation.

CONCLUSIONS:
Smoking has a transient effect on the tissue microenvironment and a prolonged effect on inflammatory and reparative cell functions leading to delayed healing and complications. Smoking cessation restores the tissue microenvironment rapidly and the inflammatory cellular functions within 4 weeks, but the proliferative response remain impaired. Nicotine and nicotine replacement drugs seem to attenuate inflammation and enhance proliferation but the effect appears to be marginal.


Parental Smoking in Childhood and Brachial Artery Flow-Mediated Dilation in Young Adults: The Cardiovascular Risk in Young Finns Study and the Childhood Determinants of Adult Health Study

Arterioscler Thromb Vasc Biol published 16 February 2012, 10.1161/ATVBAHA.111.243261
Markus Juonala, Costan G. Magnussen, Alison Venn, Seana Gall, Mika Kähönen, Tomi Laitinen, Leena Taltonen, Terho Lehtimäki, Eero Jokinen, Cong Sun, Jorma S.A. Viikari, Terence Dwyer, and Olli T. Raitakari

Abstract
Objective—Passive smoking has been associated with increased cardiovascular morbidity. The present study aimed to examine the long-term effects of childhood exposure to tobacco smoke on endothelium-dependent vasodilation in adults.

Methods and Results—The analyses were based on 2171 participants in the population-based Cardiovascular Risk in Young Finns (N=2067) and Childhood Determinants of Adult Health (N=104) studies who had measures of conventional
risk factors (lipids, blood pressure, adiposity, socioeconomic status) and self-reported parental smoking status when aged 3 to 18 years at baseline. They were re-examined 19 to 27 years later when aged 28 to 45 years. Brachial artery flow-mediated dilatation was measured at follow-up with ultrasound. In analyses adjusting for age, sex, and childhood risk factors, flow-mediated dilatation was reduced among participants who had parents that smoked in youth compared to those whose parents did not smoke (Young Finns: 9.2±0.1% (mean±SEM) versus 8.6±0.1%, \(P=0.001\); Childhood Determinants of Adult Health: 7.4±0.6% versus 4.9±0.9%, \(P=0.04\)). These effects remained after adjustment for adult risk factors including own smoking status (Young Finns, \(P=0.003\); Childhood Determinants of Adult Health, \(P=0.03\)).

**Conclusion**—Parental smoking in youth is associated with reduced flow-mediated dilatation in young adulthood measured over 20 years later. These findings suggest that passive exposure to cigarette smoke among children might cause irreversible impairment in endothelium-dependent vasodilation.

http://atvb.ahajournals.org/cgi/content/abstract/ATVBAHA.111.243261v1

**Related ATVB Editorial:**

Vascular Dysfunction Even After 20 Years in Children Exposed to Passive Smoking

http://atvb.ahajournals.org/content/32/4/841.extract

http://atvb.ahajournals.org/content/32/4/841.full.pdf+html

**Note:** Open Access Editorial, but not the related study. Both publications previously presented in MJU.

**Related PR:**

Evidence of long-term effects of parental smoke on kids


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**Efficacy of a smoking quit line in the military: Baseline design and analysis**

**Contemp Clin Trials.** 2012 Apr 25. [Epub ahead of print]

Richey PA, Klesges RC, Talcott GW, Debon M, Womack C, Thomas F, Hryshko-Mullen A.

**Abstract**

Thirty percent of all military personnel smoke cigarettes. Because of the negative health consequences and their impact on physical fitness, overall health, and military readiness, the Department of Defense has identified the reduction of tobacco use as a priority of US military forces. This study aims to evaluate the one-year efficacy of a proactive versus reactive smoking quit line in the US military with adjunctive nicotine replacement therapy (NRT) in both groups. This paper reports on the baseline variables of the first 1000 participants randomized, the design, and proposed analysis of the randomized two-arm clinical trial "Efficacy of a Tobacco Quit Line in the Military". Participants are adult smokers who are Armed Forces Active Duty personnel, retirees, Reservist, National Guard and family member healthcare beneficiaries. All participants are randomized to either the Counselor Initiated (proactive) group, receiving 6 counseling sessions in addition to an 8-week supply of NRT, or the Self-Paced (reactive) group, in which they may call the quit line themselves to receive the same counseling sessions, in addition to a 2-week supply of NRT. The primary outcome measure of the study is self-reported smoking abstinence at 1-year follow-up. Results from this study will be the first to provide evidence for the efficacy of an intensive Counselor Initiated quit line with provided NRT in military personnel and could lead to dissemination throughout the US Air Force, the armed forces population as a whole and ultimately to civilian personnel that do not have ready access to preventive health services.


**Also:**

Rationale and design of a clinical trial investigating resistance training as an aid to smoking cessation in persons with multiple sclerosis


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**Correlates of tobacco dependence and motivation to quit among young people receiving mental health treatment**

12.11.2012
Abstract

BACKGROUND:

Young people with mental health concerns are at high-risk for initiation and continuation of tobacco use. To inform treatment needs, the current study sought to describe tobacco dependence, motivations to quit and associated sociodemographic factors among young people seen in mental health settings.

METHODS:

Sixty adolescent and young adult smokers (age mean=19.5 years, range 13-25) receiving outpatient mental health treatment completed measures of tobacco dependence, motivation to quit smoking, mental health, and social environmental factors.

RESULTS:

Participants averaged 8.0 cigarettes per day (SD=6.6) and moderate nicotine dependence (mFTQ M=4.8, SD=1.6). Participants' mean rating (10-point scales) of perceived difficulty with avoiding relapse during a quit attempt was significantly higher (M=6.7, SD=2.6), than ratings of desire (M=5.1, SD=2.6) and perceived success (M=4.6, SD=2.6) with quitting. Over half (52%) did not intend to quit smoking in the next 6 months, and few (11%) were prepared to quit in the next 30 days. Mental health treatment and symptomatology measures were unrelated to level of dependence or motivation to quit. Among the social environmental factors, having close friends who smoke was associated with greater perceived difficulty with avoiding relapse during a quit attempt (r=0.25, p<0.01).

CONCLUSIONS:

In this sample of adolescent and young adult smokers in mental health treatment, moderate levels of tobacco dependence and motivation to quit were observed and found to be unrelated to mental health measures. Over half of the sample was not intending to quit smoking in the near future, supporting the need for treatment strategies aimed at increasing motivation.


Also:

Differences in time to onset of smoking and nicotine dependence by race/ethnicity in a Midwestern sample of adolescents and young adults from a high risk family study

Anti-tobacco mass media and socially disadvantaged groups: A systematic and methodological review


Guillaumier A, Bonevski B, Paul C.

Abstract

Issues. Only a limited amount of research has been conducted to explore whether there are socioeconomic status differences in responses to mass media. However, the methodological quality of this evidence has not been assessed, limiting confidence in conclusions that can be drawn regarding study outcomes. A systematic review of the effectiveness of anti-tobacco mass media campaigns with socially disadvantaged groups was conducted, and the methodological quality of included studies was assessed. Approach. Medline, The Cochrane Library, PsycInfo, Embase and Web of Science were searched using MeSH and keywords for quantitative studies conducted in Western countries prior to March 2012. A methodological quality assessment and narrative analysis of included studies was undertaken. Key Findings. Seventeen relevant studies (reported in 18 papers) were identified; however, weak study designs and selection bias were common characteristics, limiting strong conclusions about effectiveness. Using
predominantly non-cessation related outcome measures reviewed papers indicated mixed results for mass media tobacco control campaign effectiveness among various social groups. Most studies assessed mass media impact on low socioeconomic status groups rather than highly socially disadvantaged groups. Implications. Methodological rigour of evaluations in this field must be improved to aid understanding regarding the effectiveness of mass media campaigns in driving cessation among disadvantaged groups. Conclusion. The results of this review indicate a gap in methodologically rigorous research into the effectiveness of mass media campaigns among socially disadvantaged groups, particularly the highly disadvantaged.


Also:

An evaluation of a pilot capacity building initiative for smoking cessation in social and community services: The Smoking Care project

Initial Evaluation of a Smoking Cessation Program Incorporating Physical Activity Promotion to Greek Adults in Antismoking Clinics

Eval Health Prof. 2012 May 11. [Epub ahead of print]


Abstract

The purpose of this study was to evaluate an initial application of a smoking cessation program that integrated the promotion of physical activity (PA) as a cessation aid to Greek adults in antismoking clinics. From an initial pool of 50, 12 men and 28 women from Central Greece completed the program, and 18 of them succeeded in quitting for 1 year after the program. Additionally, after the program, they increased their PA. Suggestions for future applications of the program are further discussed.

http://ehp.sagepub.com/content/early/2012/05/07/0163278712445202.abstract

Piperidine alkaloids: Human and food animal teratogens

Food and Chemical Toxicology
Volume 50, Issue 6, June 2012, Pages 2049–2055
Available online 19 March 2012.

Benedict T. Green, Stephen T. Lee, Kip E. Panter, David R. Brown

Abstract

Piperidine alkaloids are acutely toxic to adult livestock species and produce musculoskeletal deformities in neonatal animals. These teratogenic effects include multiple congenital contracture (MCC) deformities and cleft palate in cattle, pigs, sheep, and goats. Poisonous plants containing teratogenic piperidine alkaloids include poison hemlock (Conium maculatum), lupine (Lupinus spp.), and tobacco (Nicotiana tabacum) [including wild tree tobacco (Nicotiana glauca)]. There is abundant epidemiological evidence in humans that link maternal tobacco use with a high incidence of oral clefting in newborns; this association may be partly attributable to the presence of piperidine alkaloids in tobacco products. In this review, we summarize the evidence for piperidine alkaloids that act as teratogens in livestock, piperidine alkaloid structure–activity relationships and their potential implications for human health.


Benefits and Harms of CT Screening for Lung Cancer A Systematic Review


12.11.2012
Peter B. Bach, MD, MAPP; Joshua N. Mirkin, BA; Thomas K. Oliver, BA; Christopher G. Azzoli, MD; Donald A. Berry, PhD; Otis W. Brawley, MD; Tim Byers, MD, MPH; Graham A. Colditz, MD, DrPH; Michael K. Gould, MD, MS; James R. Jett, MD; Anita L. Sabichi, MD; Rebecca Smith-Bindman, MD; Douglas E. Wood, MD; Amir Qaseem, MD, PhD, MHA; Frank C. Detterbeck, MD

Abstract

Context Lung cancer is the leading cause of cancer death. Most patients are diagnosed with advanced disease, resulting in a very low 5-year survival. Screening may reduce the risk of death from lung cancer.

Objective To conduct a systematic review of the evidence regarding the benefits and harms of lung cancer screening using low-dose computed tomography (LDCT). A multisociety collaborative initiative (involving the American Cancer Society, American College of Chest Physicians, American Society of Clinical Oncology, and National Comprehensive Cancer Network) was undertaken to create the foundation for development of an evidence-based clinical guideline.

Data Sources MEDLINE (Ovid: January 1996 to April 2012), EMBASE (Ovid: January 1996 to April 2012), and the Cochrane Library (April 2012).

Study Selection Of 591 citations identified and reviewed, 8 randomized trials and 13 cohort studies of LDCT screening met criteria for inclusion. Primary outcomes were lung cancer mortality and all-cause mortality, and secondary outcomes included nodule detection, invasive procedures, follow-up tests, and smoking cessation.

Data Extraction Critical appraisal using predefined criteria was conducted on individual studies and the overall body of evidence. Differences in data extracted by reviewers were adjudicated by consensus.

Results Three randomized studies provided evidence on the effect of LDCT screening on lung cancer mortality, of which the National Lung Screening Trial was the most informative, demonstrating that among 53 454 participants enrolled, screening resulted in significantly fewer lung cancer deaths (356 vs 443 deaths; lung cancer−specific mortality, 274 vs 309 events per 100 000 person-years for LDCT and control groups, respectively; relative risk, 0.80; 95% CI, 0.73-0.93; absolute risk reduction, 0.33%; P = .004). The other 2 smaller studies showed no such benefit. In terms of potential harms of LDCT screening, across all trials and cohorts, approximately 20% of individuals in each round of screening had positive results requiring some degree of follow-up, while approximately 1% had lung cancer. There was marked heterogeneity in this finding and in the frequency of follow-up investigations, biopsies, and percentage of surgical procedures performed in patients with benign lesions. Major complications in those with benign conditions were rare.

Conclusion Low-dose computed tomography screening may benefit individuals at an increased risk for lung cancer, but uncertainty exists about the potential harms of screening and the generalizability of results.


Note: Open Access. Full text PDF freely available from link immediately above.

Related coverage:

Tobacco Smoking and Increased Risk of Death and Progression for Patients With p16-Positive and p16-Negative Oropharyngeal Cancer

J Clin Oncol. 2012 May 7. [Epub ahead of print]


Abstract

PURPOSE Tobacco smoking is associated with oropharynx cancer survival, but to what extent cancer progression or death increases with increasing tobacco exposure is unknown. Patients and methods Patients with oropharynx cancer enrolled onto a phase III trial of radiotherapy from 1991 to 1997 (Radiation Therapy Oncology Group [RTOG] 9003) or of chemoradiotherapy from 2002 to 2005 (RTOG 0129) were evaluated for tumor human papillomavirus status by a
surrogate, p16 immunohistochemistry, and for tobacco exposure by a standardized questionnaire. Associations between tobacco exposure and overall survival (OS) and progression-free survival (PFS) were estimated by Cox proportional hazards models. RESULTS: 29 v 45.9 pack-years; P = .02; RTOG 0129: 10 v 40 pack-years; P < .001). After adjustment for p16 and other factors, risk of progression (PFS) or death (OS) increased by 1% per pack-year (for both, hazard ratio [HR], 1.01; 95% CI, 1.00 to 1.01; P = .002) or 2% per year of smoking (for both, HR, 1.02; 95% CI, 1.01 to 1.03; P < .001) in both trials. In RTOG 9003, risk of death doubled (HR, 2.19; 95% CI, 1.46 to 3.28) among those who smoked during radiotherapy after accounting for pack-years and other factors, and risk of second primary tumors increased by 1.5% per pack-year (HR, 1.015; 95% CI, 1.005 to 1.026). CONCLUSION Risk of oropharyngeal cancer progression and death increases directly as a function of tobacco exposure at diagnosis and during therapy and is independent of tumor p16 status and treatment.

http://jco.ascopubs.org/content/early/2012/05/03/JCO.2011.38.4099.abstract

**Related JCO Editorial:**

Methodologic Barriers to Addressing Critical Questions About Tobacco and Cancer Prognosis

http://jco.ascopubs.org/content/early/2012/05/03/JCO.2012.41.7402.long

**Note:** Open Access. Full text PDF of editorial freely available from link immediately above.

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**Measuring Interactivity on Tobacco Control Websites**


Freeman B, Chapman S.

**Abstract**

With the increased reach of Web 2.0, Internet users expect webpages to be interactive. No studies have been conducted to assess whether tobacco control-relevant sites have implemented these features. The authors conducted an analysis of an international sample of tobacco control-relevant websites to determine their level of interactivity. The sample included 68 unique websites selected from Google searches in 5 countries, on each country’s Google site, using the term smoking. The 68 sites were analyzed for 10 categories of interactive tools. The most common type of interactive content found on 46 (68%) of sites was for multimedia featuring content that was not primarily text based, such as photo galleries, videos, or podcasts. Only 11 (16%) websites-outside of media sites-allowed people to interact and engage with the site owners and other users by allowing posting comments on content and/or hosting forums/discussions. Linkages to social networking sites were low: 17 pages (25%) linked to Twitter, 15 (22%) to Facebook, and 11 (16%) to YouTube. Interactivity and connectedness to online social media appears to still be in its infancy among tobacco control-relevant sites.

http://www.tandfonline.com/doi/abs/10.1080/10810730.2011.650827

Also:

Text2Quit: Results From a Pilot Test of a Personalized, Interactive Mobile Health Smoking Cessation Program


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**Attitudes towards nicotine, alcohol and drug dependence among physicians in Israel**

**J Subst Abuse Treat**, 2012 May 9. [Epub ahead of print]

Lev-Ran S, Adler L, Nitzan U, Fennig S.

**Abstract**

Prevalence of substance use and substance use disorders in Israel is similar to those in other developed countries. The aim of this study was to examine attitudes of physicians in Israel towards nicotine, alcohol and drug use and dependence. A national sample of physicians from different fields of medical specialty (n=208, response rate 26%) responded to a 50-item questionnaire. Questions included general questions regarding substance use and addictions,
as well as specific questions focusing on nicotine, alcohol, cannabis and heroin use. The poor response rate in this survey dictates caution in interpreting the results. However, they suggest that among medical specialties, psychiatrists had higher levels of self-reported competency in treating addictions and lower rates of moralism towards addictions. Across substances, the highest rates of moralism and lowest ratings of treatment efficacy were directed towards individuals with alcohol dependence. Physicians generally reported experiencing lower levels of satisfaction and higher levels of aggression when treating individuals with alcohol or drug dependence compared with other patients. Physicians’ attitudes towards addictions have a significant role in the care that clients with addictions receive. Medical education programs in Israel should devote provisions towards educating physicians about addictions.


Sustained-Release Bupropion for Smoking Cessation in a Chinese Sample: A Double-Blind, Placebo-Controlled Randomized Trial

Nicotine Tob Res first published online May 21, 2012

Li-xia Sheng, Yi-lang Tang, Zuo-ning Jiang, Chong-hua Yao, Jun-yu Gao, Guo-Zhu Xu, and Xin-yuan Tong

Abstract

Introduction: Bupropion is a first-line pharmacological aid for smoking cessation; however, no clinical trials have been conducted in a Chinese population.

Methods: We enrolled 248 smokers in a hospital-based, randomized, smoking cessation trial conducted at four outpatient centers in Beijing. A total of 123 participants received an 8-week course of sustained-release bupropion (Bup-SR) and 125 participants received 8 weeks of placebo. All participants received brief education and counseling on smoking cessation. We determined rates of abstinence and smoking reduction based on chemical verification and self-report at 8 and 12 weeks.

Results: At the end of the medication treatment (8 weeks) and at the end of the trial (12 weeks), the abstinence rates for Bup-SR were 29.3% and 39.8%, respectively, and 10.4% and 8.0% for placebo, respectively (both \( p < .001 \)). Bup-SR was also superior to placebo in reducing cigarettes per day and urinary cotinine levels.

Conclusion: Bup-SR is efficacious for smoking cessation in healthy Chinese patients treated in the outpatient setting. It is well tolerated with a few mild side effects.

http://ntr.oxfordjournals.org/content/early/2012/05/20/ntr.nts124.abstract

Also:

A Review of Culturally Targeted/Tailored Tobacco Prevention and Cessation Interventions for Minority Adolescents

http://ntr.oxfordjournals.org/content/early/2012/05/20/ntr.nts118.abstract

A Longitudinal Evaluation of Fruit and Vegetable Consumption and Cigarette Smoking

http://ntr.oxfordjournals.org/content/early/2012/05/20/ntr.nts130.abstract

Pharmacological Differences Between Rat Frontal Cortex and Hippocampus in the Nicotinic Modulation of Noradrenaline Release Implicate Distinct Receptor Subtypes

http://ntr.oxfordjournals.org/content/early/2012/05/20/ntr.nts128.abstract

Risky Music-Listening Behaviors and Associated Health-Risk Behaviors

Pediatrics published 21 May 2012, 10.1542/peds.2011-1948

Ineke Vogel, Petra M. van de Looij-Jansen, Cathelijne L. Mieloo, Alex Burdorf, and Frouwkje de Waart

Abstract

OBJECTIVE: To examine, among adolescents and emerging adults attending inner-city lower education, associations between risky music-listening behaviors (from MP3 players and in discotheques and at pop concerts) and more traditional health-risk behaviors: substance use (cigarettes, alcohol, cannabis, and hard drugs) and unsafe sexual intercourse.

METHODS: A total of 944 students in Dutch inner-city senior-secondary vocational schools completed questionnaires about their music-listening and traditional health-risk behaviors. Multiple logistic regression analyses were used to
examine associations between music-listening and traditional health-risk behaviors.

RESULTS: Risky MP3-player listeners used cannabis more often during the past 4 weeks. Students exposed to risky sound levels during discotheque and pop concert attendance used cannabis less often during the past 4 weeks, were more often binge drinkers, and reported inconsistent condom use during sexual intercourse.

CONCLUSIONS: The coexistence of risky music-listening behaviors with other health-risk behaviors provides evidence in support of the integration of risky music-listening behaviors within research on and programs aimed at reducing more traditional health-risk behaviors, such as substance abuse and unsafe sexual intercourse.

http://pediatrics.aappublications.org/cgi/content/abstract/peds.2011-1948v1

Fiscal and policy implications of selling pipe tobacco for roll-your-own cigarettes in the United States


Morris DS, Tynan MA.

Abstract

BACKGROUND:
The Federal excise tax was increased for tobacco products on April 1, 2009. While excise tax rates prior to the increase were the same for roll-your-own (RYO) and pipe tobacco, the tax on pipe tobacco was $21.95 per pound less than the tax on RYO tobacco after the increase. Subsequently, tobacco manufacturers began labeling loose tobacco as pipe tobacco and marketing these products to RYO consumers at a lower price. Retailers refer to these products as "dual purpose" or "dual use" pipe tobacco.

METHODS:
Data on tobacco tax collections comes from the Alcohol and Tobacco Tax and Trade Bureau. Joinpoint software was used to identify changes in sales trends. Estimates were generated for the amount of pipe tobacco sold for RYO use and for Federal and state tax revenue lost through August 2011.

RESULTS:
Approximately 45 million pounds of pipe tobacco has been sold for RYO use from April 2009 to August 2011, lowering state and Federal revenue by over $1.3 billion.

CONCLUSIONS:
Marketing pipe tobacco as "dual purpose" and selling it for RYO use provides an opportunity to avoid paying higher cigarette prices. This blunts the public health impact excise tax increases would otherwise have on reducing tobacco use through higher prices. Selling pipe tobacco for RYO use decreases state and Federal revenue and also avoids regulations on flavored tobacco, banned descriptors, prohibitions on shipping, and reporting requirements.

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0036487
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3342269/?tool=pubmed

Note: Open Access. Full text PDF freely available from link immediately above.

Health behaviors among short- and long- term ex-smokers: Results from the Thai National Health Examination Survey IV, 2009

Abstract

BACKGROUND:

Although numerous studies have shown the health behaviors of ex-smokers to be better than those in regular smokers, the differences in health behaviors among ex-smokers at varying durations of cessation have not been investigated. This study aims to examine the relationship between different durations of smoking cessation and health behaviors.

METHODS:

Data on dietary intake, alcohol consumption, physical activity, and smoking behavior from the Thai National Health Examination Survey IV for subjects aged 15-98 years (n=19 371) were included in the analysis. Trends between health behaviors among regular smokers, ex-smokers with different durations of smoking (<1 year, 1-10 years, >10 years), and never smokers were tested. Logistic regression models adjusted for sex, age, and economic status were used.

RESULTS:

The prevalences of regular smoking, ex-smoking, and never smoking were 22.3%, 12%, and 65.7%, respectively. A trend was found for consumption of fruit, beans and meats, dairy and soy milk, whole-grain products, nutritional supplements, and eating habits. Average daily alcohol consumption (g) was lowest among ex-smokers who had quit for >10 years (16.4) followed by 1-10 years ex-smokers (27.2), and <1 year ex-smokers (33.7).


Also:

Healthy lifestyle behaviors and all-cause mortality among adults in the United States

Predictors of Initiation of Hookah Tobacco Smoking: A One-Year Prospective Study of First-Year College Women

Psychol Addict Behav, 2012 May 7. [Epub ahead of print]

Fielder RL, Carey KB, Carey MP.

Abstract

Hookah tobacco smoking has become increasingly prevalent among American college students over the past decade. Hookah smoking is associated with poor health outcomes and exposes users to high levels of nicotine, carbon monoxide, and smoke. Research on the correlates of hookah use has begun to emerge, but all studies thus far have been cross-sectional. Little is known about hookah use during the transition to college, psychosocial factors related to hookah smoking, or prospective predictors of hookah initiation and frequency of use. This longitudinal cohort study examined risk and protective factors predicting initiation of hookah tobacco smoking during the first year of college. First-year female college students (n=483; 64% White) provided data on demographic, behavioral, and psychosocial variables and precollege hookah use at baseline; they then completed 12 monthly online surveys about their hookah use from September 2009 to August, 2010. Among the 343 participants who did not report precollege use, 79 (23%) initiated hookah tobacco smoking during the year after college entry. Zero-inflated negative binomial regression showed that alcohol use predicted the likelihood of initiating hookah use; impulsivity, social comparison orientation, and marijuana use predicted the frequency of hookah use. These findings suggest that hookah prevention and intervention efforts may need to address other forms of substance use as well as hookah use.

http://psycnet.apa.org/psycinfo/2012-11652-001

Also:
Isolating the Role of Psychological Dysfunction in Smoking Cessation: Relations of Personality and Psychopathology to Attaining Cessation Milestones

Psychology of Addictive Behaviors, May 28, 2012

Leventhal, Adam M.; Japuntich, Sandra J.; Piper, Megan E.; Jorenby, Douglas E.; Schlam, Tanya R.; Baker, Timothy B.

Abstract

Research exploring psychological dysfunction as a predictor of smoking cessation success may be limited by nonoptimal predictor variables (i.e., categorical psychodiagnostic measures vs. continuous personality-based manifestations of dysfunction) and imprecise outcomes (i.e., summative point-prevalence abstinence vs. constituent cessation milestone measures). Accordingly, this study evaluated the unique and overlapping relations of broad-spectrum personality traits (positive emotionality, negative emotionality, and constraint) and past-year psychopathology (anxiety, mood, and substance use disorder) to point-prevalence abstinence and three smoking cessation milestones: (a) initiating abstinence, (b) first lapse, and (c) transition from lapse to relapse. Participants were daily smokers (N = 1365) enrolled in a smoking cessation treatment study. In single-predictor regression models, each manifestation of internalizing dysfunction (lower positive emotionality, higher negative emotionality, and anxiety and mood disorder) predicted failure at one or more cessation milestone(s). In simultaneous predictor models, lower positive and higher negative emotionality significantly predicted failure to achieve milestones after controlling for psychopathology. Psychopathology did not predict any outcome when controlling for personality. Negative emotionality showed the most robust and consistent effects, significantly predicting failure to initiate abstinence, earlier lapse, and lower point-prevalence abstinence rates. Substance use disorder and constraint did not predict cessation outcomes, and no single variable predicted lapse-to-relapse transition. These findings suggest that personality-related manifestations of internalizing dysfunction are more accurate markers of affective sources of relapse risk than mood and anxiety disorders. Further, individuals with high trait-negative emotionality may require intensive intervention to promote the initiation and early maintenance of abstinence.

http://psycnet.apa.org/psycinfo/2012-13793-001/

Also:

Survey of Providers' Attitudes Toward Integrating Smoking Cessation Treatment Into Posttraumatic Stress Disorder Care
http://psycnet.apa.org/psycinfo/2012-13794-001/
Task Persistence Predicts Smoking Cessation in Smokers With and Without Schizophrenia
http://psycnet.apa.org/psycinfo/2012-13668-001/

Related:

Lower task persistence in smokers with schizophrenia as compared to non-psychiatric control smokers (2010)
http://psycnet.apa.org/journals/adb/24/4/724/

Improper disclosure: Tobacco packaging and emission labelling regulations

Public Health, 2012 May 18. [Epub ahead of print]

Hammond D, White CM.

Abstract

OBJECTIVES:
Cigarette packets in many countries display emission numbers such as tar. These numbers may be misleading as they do not represent the amount of toxins delivered to human smokers. This study examined how consumers interpret and understand numerical and descriptive emission information.

STUDY DESIGN:

A discrete choice study was conducted among adult smokers (n = 312) and non-smokers (n = 291) in Ontario, Canada.

METHODS:

Participants viewed groups of cigarette packets with emission labels from the European Union (EU), Canada and Australia. Participants completed ratings on perceived tar delivery, health risks, and usefulness and understandability of the information.

RESULTS:

Participants were significantly more likely to believe that Canadian and EU packets with lower emission numbers would have lower tar delivery (92.2% and 89.9%, respectively) and lower health risks (89.5% and 82.9%, respectively) than packets with higher numbers. Approximately 74% of participants rated the numerical Canadian label as providing the most useful information; however, 62% also rated this label as most difficult to understand. Most participants rated the descriptive Australian label as easiest to understand.

CONCLUSIONS:

Labels featuring quantitative emission values are associated with false beliefs regarding lower tar delivery and health risks. Descriptive statements about emissions are easier to understand and associated with more accurate beliefs.

http://www.publichealthjrn.com/article/S0033-3506%2812%2900136-9/abstract

Also:

Age-associated changes in nicotine dependence
Changes in teachers’ smoking behaviour following enforcement of a total smoke-free school policy

Maternal smoking and the retinoid pathway in the developing lung

Published: 1 June 2012

Sara E Manoli, Lacey A Smith, Carrie A Vyhlidal, Chang Hyeok An, Yolanda Porrata, Wellington V Cardoso, Rebecca M Baron and Kathleen J Haley

Abstract

Background

Maternal smoking is a risk factor for pediatric lung disease, including asthma. Animal models suggest that maternal smoking causes defective alveolarization in the offspring. Retinoic acid signaling modulates both lung development and postnatal immune function. Thus, abnormalities in this pathway could mediate maternal smoking effects. We tested whether maternal smoking disruptions retinoic acid pathway expression and functioning in a murine model.

Methods

Female C57Bl/6 mice with/without mainstream cigarette smoke exposure (3 research cigarettes a day, 5 days a week) were mated to nonsmoking males. Cigarette smoke exposure continued throughout the pregnancy and after parturition. Lung tissue from the offspring was examined by mean linear intercept analysis and by quantitative PCR.
Cell culture experiments using the type II cell-like cell line, A549, tested whether lipid-soluble cigarette smoke components affected binding and activation of retinoic acid response elements in vitro.

Results

Compared to tobacco-naive mice, juvenile mice with tobacco toxin exposure had significantly (P < 0.05) increased mean linear intercepts, consistent with an alveolarization defect. Tobacco toxin exposure significantly (P < 0.05) decreased mRNA and protein expression of retinoic acid signaling pathway elements, including retinoic acid receptor alpha and retinoic acid receptor beta, with the greatest number of changes observed between postnatal days 3-5. Lipid-soluble cigarette smoke components significantly (P < 0.05) decreased retinoic acid-induced binding and activation of the retinoic acid receptor response element in A549 cells.

Conclusions

A murine model of maternal cigarette smoking causes abnormal alveolarization in association with altered retinoic acid pathway element expression in the offspring. An in vitro cell culture model shows that lipid-soluble components of cigarette smoke decrease retinoic acid response element activation. It is feasible that disruption of retinoic acid signaling contributes to the pediatric lung dysfunction caused by maternal smoking.

Note: Open Access. Full text PDF freely available from link immediately above.

Related PR:

Retinoid Pathways In The Developing Fetal Lung Disrupted By Maternal Smoking
http://www.medicalnewstoday.com/releases/246078.php

Clinical characteristics of heavy and non-heavy smokers with schizophrenia

Schizophr Res. 2012 May 10. [Epub ahead of print]

Wehring HJ, Liu F, McMahon RP, Mackowick KM, Love RC, Dixon L, Kelly DL.

Abstract

Up to 50-90% of persons with schizophrenia smoke cigarettes. Limited data and theories suggest persons with schizophrenia may smoke for different reasons than persons without schizophrenia, making smoking cessation interventions particularly challenging in this population. Although health consequences of smoking are widely known, less information is available regarding characteristics of different amounts of smoking exposure in this population. This study was performed to investigate differences between heavy (≥1 pack per day) and non-heavy (<1 pack per day) smoking in patients with schizophrenia. Data from 745 patients, mean age 41.3±12.6 years, were drawn from a population of smokers admitted to State of Maryland inpatient mental health facilities (1994-2000). Records were reviewed to obtain demographic information, diagnosis, medication, smoking and substance use. 43% of patients were characterized as heavy smokers. Heavy and non-heavy groups did not differ in age, GAF, weight, or BMI. No differences were found in race, gender or antipsychotic treatments. However, patients smoking ≥1 packs per day were more likely to use other substances such as alcohol (χ²=6.67, df=1, p=0.01), cocaine (χ²=6.66, df=1, p=0.01), and other substances (χ²=9.95, df=1, p=0.003) compared to non-heavy smokers. No differences in cannabis or heroin use were found by smoking category. Controlling for age, race, sex and BMI, heavy smokers had higher total cholesterol (190.7(51.6)mg/dL) compared to non-heavy smokers (178.2 (43.0)mg/dL, p=0.03), but no differences were found in glucose or blood pressure. Heavy smoking may be a particular health risk in schizophrenia and significant efforts for smoking cessation or reduction are needed.

Related PR:

Heavy smoking linked to high cholesterol in schizophrenia patients
http://www.medwire-news.md/47/99580/Psychiatry/Heavy smoking linked to high cholesterol in schizophrenia patients.html
Support for a tobacco endgame and increased regulation of the tobacco industry among New Zealand smokers: results from a National Survey

Tob Control doi:10.1136/tobaccocontrol-2011-050324
Published Online First 25 April 2012

Richard Edwards, Nick Wilson, Jo Peace, Deepa Weerasekera, George W Thomson, Heather Gifford

Abstract

Aim To examine the prevalence of smoker support for a ban on cigarette sales in 10 years time and increased regulation of the tobacco industry and to investigate the independent associations of support for these measures.

Methods The authors surveyed opinions among adult smokers in two survey waves (N=1376 and N=923) from the New Zealand arm of the International Tobacco Control Policy Evaluation Survey during 2007–2009. The authors report prevalence of support stratified by age, gender and ethnicity. The authors carried out multivariate analyses to identify significant associations among potential determinants (demographics, socioeconomic status, mental health and smoking-related beliefs and behaviours) of support.

Results Most New Zealand smokers supported greater regulation of the tobacco industry (65%) and more government action on tobacco (59%). Around half (46%) supported banning sales of cigarettes in 10 years time, provided effective nicotine substitutes were available. In a fully adjusted model, significant associations with support for greater tobacco company regulation included Māori ethnicity, experience of financial stress and greater awareness about the harms of smoking. Significant associations with support for a ban on tobacco sales in 10 years time included increasing area-based deprivation level, increasing intention to quit and greater concern about the health effects of smoking.

Conclusions The findings suggest that most smokers will support stronger government action to control the tobacco industry and that many support radical ‘endgame’ approaches. Greater support among Māori, more deprived and possibly Pacific smokers, is an important finding, which could inform the design and implementation of new policies given the very high smoking prevalence among these groups and hence high priority for targeted tobacco control interventions. Perceived difficulties in gaining public support should not impede the introduction of rigorous tobacco control measures needed to achieve a tobacco-free New Zealand.

http://tobaccocontrol.bmj.com/content/early/2012/04/24/tobaccocontrol-2011-050324.abstract

Note: Study previously highlighted in MJU.

Related coverage:

Smokers support tighter regulation and eventual ban - New Zealand Herald/APNZ

REFRESH—reducing families' exposure to secondhand smoke in the home: a feasibility study

Tob Control Published Online First: 21 May 2012

Inga Wilson, Sean Semple, Lynsey M Mills, Deborah Ritchie, April Shaw, Rachel O'Donnell, Philippa Bonella, Stephen Turner, Amanda Amos

Abstract

Objective To study a novel intervention (REFRESH) aimed at reducing children's exposure to secondhand smoke (SHS) in their homes.

Design A randomised feasibility study.

Setting Aberdeen City and Aberdeenshire.

Participants A total of 59 smoking mothers with at least one child younger than 6 years. Participation took place between July 2010 and March 2011.
**Intervention** Four home visits over a 1-month period, which involved two 24-h measurements of home air quality (PM$_{2.5}$) and a motivational interview to encourage changes to smoking behaviour within the home in order to reduce child SHS exposure. The enhanced group received their air quality data as part of their motivational interview at visit 2; the control group received that information at visit 4.

**Main outcome measures** The main outcome measures were comparisons of the data from visits 2 and 4 on the 24-h average concentration of PM$_{2.5}$, the peak concentration of PM$_{2.5}$, the percentage of time when household PM$_{2.5}$ concentrations exceeded a health-based threshold of 35 μg/m$^3$ and child's salivary cotinine (in nanograms per millilitre). The views of the mothers from the enhanced group about their understanding of the intervention and the measures used were also analysed to assess the acceptability and utility of the intervention.

**Results** Of the recruited 54 participants, 48 completed the study: 27 from the control group and 21 from the enhanced group. Both groups experienced reductions in PM$_{2.5}$ concentrations. When testing paired samples for the enhanced group, there was a significant difference ($p<0.05$) between visit 2 and visit 4 values for maximum PM$_{2.5}$ ($p=0.006$) and for percentage of time over 35 μg/m$^3$ ($p=0.017$), with average PM$_{2.5}$ approaching significance ($p=0.056$). There was no significant difference for salivary cotinine. The qualitative findings showed that mothers were able to understand the data they were shown and were shocked by the values measured in their homes despite being aware of the effects of SHS exposure. They appreciated the intervention taking place in their homes as it allowed them to have personalised data. Many mothers described how they had changed their smoking behaviours in their home and in particular were motivated to protect their own children as a result of the knowledge they had gained.

**Conclusions** Providing mothers who smoke with personalised results about the indoor air quality of their homes along with a motivational interview is feasible and has an effect on improving household air quality. Participants found the intervention understandable and acceptable. Taken overall, the results suggest that a future large-scale trial using measurements of indoor air quality as part of a complex intervention to reduce children's SHS exposure should be explored.

http://tobaccocontrol.bmj.com/content/early/2012/05/20/tobaccocontrol-2011-050212.abstract

Also:

Tips for managing a social networking site
http://tobaccocontrol.bmj.com/content/early/2012/05/20/tobaccocontrol-2011-050335.extract

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**Genome-wide meta-analyses of smoking behaviors in African Americans**

*Translational Psychiatry* (2012) 2, e119; doi:10.1038/tp.2012.41
Published online 22 May 2012


**Abstract**

The identification and exploration of genetic loci that influence smoking behaviors have been conducted primarily in populations of the European ancestry. Here we report results of the first genome-wide association study meta-analysis of smoking behavior in African Americans in the Study of Tobacco in Minority Populations Genetics Consortium ($n=32389$). We identified one non-coding single-nucleotide polymorphism (SNP; rs2036527[A]) on chromosome 15q25.1 associated with smoking quantity (cigarettes per day), which exceeded genome-wide significance ($\theta=0.040$, s.e.=$0.007$, $P=1.84 \times 10^{-8}$). This variant is present in the 5′-distal enhancer region of the *CHRNA5* gene and defines the primary index signal reported in studies of the European ancestry. No other SNP reached genome-wide significance for smoking initiation (SI, ever vs never smoking), age of SI, or smoking cessation (SC, former vs current smoking). Informative associations that approached genome-wide significance included three modestly correlated variants, at 15q25.1 within *PSMA4*, *CHRNA5* and *CHRNA3* for smoking quantity, which are associated with a second signal previously reported in studies in European ancestry populations, and a signal represented by three SNPs in the *SPCK2* gene on chr10q22.1. The association at 15q25.1 confirms this region as an important susceptibility locus for smoking quantity in men and women of African ancestry populations.
ancestry. Larger studies will be needed to validate the suggestive loci that did not reach genome-wide significance and further elucidate the contribution of genetic variation to disparities in cigarette consumption, SC and smoking-attributable disease between African Americans and European Americans.

http://www.nature.com/tp/journal/v2/n5/full/tp201241a.html

Note: Open Access. Full text PDF freely available from link immediately above.

Related coverage:

Smoking Gene May Reveal Why Some People Smoke More

Stan Shatenstein
Editor & Publisher, STAN Bulletin
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shatensteins@sympatico.ca

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