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Subject: STAN Bulletin: 22nd Edition: 9-August-2012

Smoking & Tobacco Abstracts & News

STAN Bulletin 22nd Edition 9-August-2012

Editor's note: The *Wall Street Journal* <u>article</u> on Japan Tobacco's rebranding of Mild Seven as Mevius is subscriberonly but available upon request. The <u>Environics Research Group</u> <u>report</u> claiming Canadian warning labels do not deter smokers and highlighted in the last edition of the bulletin is freely available and linked below, along with additional coverage.

Stan Shatenstein

In the News:

- Africa: Report Reveals Horror of Tobacco Farming, Harm to the Environment [Tob Control: Lecours]
- Bahrain: Smokers targeted in new health campaign as graphic warnings appear on imported cigarette packs
- Bangladesh: GATS: Bidis: Rising death toll from poor man's cigarette
- Canada: <u>Cigarette warnings don't put out fire</u>: <u>Environics Research Group: Graphic Health Warnings Evaluation</u>, 2012
- Japan: <u>JTI Renames Mild Seven Cigarettes Mevius, Marks Bid for No. 1 Spot in Global Market; Brand alchemy</u>
- S. Korea: Tobacco packs to bear graphic health warnings beginning early next year
- UAE: Grisly warnings will occupy half the space on both sides of cigarette packs
- US: CDC says graphic anti-smoking ads work, more on way next year
- UK: Hands Off Our Packs: 235,000 sign petition against plain tobacco packs

In this Edition:

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- Dermatoendocrinol Grant: Solar UV irradiance, smoking & second cancers after melanoma diagnosis
- Eur J Oral Sci Huang: Effect of nicotine on growth & metabolism of Streptococcus mutans
- Exp Physiol Somborac-Bacura: Cigarette smoke induces ER stress & alveolar epithelial cell proteasomal dysfunction
- Health Commun Kam: US: Mass Media Campaign Exposure, Discussions, Pro-Drug Websites & Youth Use
- J Addict Med Pitts: US: Associations of Functional & Dysfunctional Impulsivity to Smoking Characteristics
- J Behav Med Stipelman: US: NHIS: Smoking, sleep, chronic rheumatic conditions & pain
- J Commun Health Kastirke: Germany: Reaching Families at Home to Reduce Infant Tobacco Smoke Exposure
- JGIM Kruse: US: Electronic Health Record-Based Care Management System to Improve Tobacco Treatment
- J Mol Neurosci Nunes-Alves: Tobacco Nitrosamine N-nitrosonornicotine as Neuronal nAChR Receptor Inhibitor
- J Pediatr Wilson: US: NY: SHS Exposure & Severity of Influenza in Hospitalized Children
- JTO Bracci: US: SFBALCS: Cigarette Smoking Associated With Lung Adenocarcinoma In Situ: Large Case-Control Study
- Lancet Oncol CGESOC: Ovarian cancer & smoking: participant meta-analysis from 51 epidemiological studies
- Medicina Uslu: Turkey: Bupropion SR: Cognitive evaluation in heavy smokers using event-related potentials
- NZ Med J Glover: NZ: No need to ban smoking in cars with children present: it's almost snuffed out
- PLoS One López: EU: SHS exposure in terraces & other hospitality venue outdoor areas in 8 countries
- Scand J Pub Health Tjora: Norway: Late-onset smokers: How many, health behaviours & socioeconomic status
- Tob Control Kurti: US: NYC: S. Bronx: Illegal cigarette market in a socioeconomically deprived inner-city area
- Tob Control Lee: Hookah steam stones: smoking vapour expands from electronic cigarettes to waterpipes

- Tob Control Yarnell: US: Evaluating Tobacco Policy effectiveness: SHS exposure assessment in Navy submariners
- Value Health Heredia-Pi: Mexico: Maximum Willingness to Pay for Cessation Method

Abstracts:

Visual Attention to Health Warnings on Plain Tobacco Packaging in Adolescent Smokers and Non-Smokers

Addiction

Accepted Article. These manuscripts have been accepted, but have not been edited or formatted. They will be published at a future date.

Accepted manuscript online: 8 AUG 2012

Olivia M. Maynard, Marcus R. Munafò and Ute Leonards

Abstract

Aims: Previous research with adults indicates that plain packaging increases visual attention to health warnings in adult non-smokers and weekly smokers, but not daily smokers. The present research extends this study to adolescents aged 14-19 years. **Design**: Mixed-model experimental design, with smoking status as a between subjects factor and pack type (branded or plain pack) and eye gaze location (health warning or branding) as within subjects factors. **Setting**: Three secondary schools in Bristol, UK. **Participants**: A convenience sample of adolescents comprising never-smokers (n = 24), experimenters (n = 34), weekly smokers (n = 13) and daily smokers (n = 14). **Measurements**: Number of eye movements to health warnings and branding on plain and branded packs. **Findings**: Analysis of variance revealed more eye movements to health warnings than branding on plain packs, but an equal number of eye movements to both regions on branded packs [P = 0.002]. This was observed among experimenters [P < 0.001] and weekly smokers (P = 0.047] but not among never-smokers or daily smokers. **Conclusion**: Among experimenters and weekly smokers, plain packaging increases visual attention to health warnings and away from branding. Daily smokers, even relatively early in their smoking careers, seem to avoid the health warnings on cigarette packs. Adolescent never-smokers attend the health warnings preferentially on both types of packs, a finding which may reflect their decision not to smoke.

http://onlinelibrary.wiley.com/doi/10.1111/j.1360-0443.2012.04028.x/abstract

Related coverage:

Cigarettes With Plain Packaging Encourages Young Smokers To Heed Health Warnings http://www.redorbit.com/news/health/1112672368/cigarettes-with-plain-packaging-encourages-young-smokers-to-heed-health-warnings/

The Effect of the School-Based Unplugged Preventive Intervention on Tobacco Use in the Czech Republic

Adicciones. 2012;24(3):211-217.

[Article in English, Spanish]

Miovsky M, Novak P, Stastna L, Gabrhelik R, Jurystova L, Vopravil J.

Abstract

Unplugged is a school prevention programme widely implemtend in Europe, with some positive evaluations. This research aims to measure the impact of this program on tobacco use by means of the lifetime and last-30-day tobacco use prevalence indicators and verify the duration of the intervention's measurable effect over time. The study was designed as a randomised controlled prevention trial. The intervention is based on the Comprehensive Social Influence model and consists of 12 lessons delivered to Czech adolescents in the 2007-2008 academic year. The prevalence indicators were calculated to assess the differences between the experimental (N = 914) and control (N = 839) groups on each outcome 1, 3, 12, 15, and 24 months after the end of the intervention. Data were collected using the 2003 version of the ESPAD questionnaire. As regards the 30-day smoking prevalence indicator, the tests performed after the completion of the intervention showed statistically significant differences between both groups in favour of the experimental one. Two years after the completion of the intervention the experimental and control groups showed 30-day prevalence rates of 26.7% and 33.1%, respectively (p = .01). The progression of smoking in the 30-day prevalence among the experimental group was significantly slower than that among the control group over the period of time. The differences in the lifetime prevalence rates were not statistically significant. The implementation of Unplugged resulted in a statistically significant measurable positive effect on tobacco use in Czech adolescents.

http://www.adicciones.es/ficha art new.php?art=761 http://www.adicciones.es/files/211-218%20MIOWSKY.pdf

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

Adult Tobacco Cessation in Cambodia: II. Determinants of Intent to Quit

Asia Pac J Public Health. 2012 Aug 2. [Epub ahead of print]

Tonstad S, Job JS, Batech M, Yel D, Kheam T, Singh PN.

Abstract

Identifying determinants of intent to quit may aid the design of antitobacco programs and promote effective tobacco control policies. In a nationwide survey in Cambodia, two thirds of tobacco smokers and 45% of female smokeless tobacco users planned to stop in the future. Multivariate determinants of intent in 2279 male smokers were age <37 years, age at initiation \geq 18 years, Cham versus Khmer ethnicity (odds ratio [OR] = 6.93; 95% confidence interval [CI] = 1.38-34.89), longer education, and professional occupation. In 1188 female smokeless tobacco users, age <25 years, age at initiation \geq 18 years, and tuberculosis (OR = 3.26; 95% CI = 1.61-6.61) were associated with intent. In female smokers (n = 321), age 18 to 25 years at initiation was associated with intent. In male smokers and female smokeless tobacco users, perceived physical advantages of tobacco were inversely associated with intent. These findings underscore the importance of policies and interventions to delay initiation and promote cessation in young people and counteract perceived physical benefits.

http://aph.sagepub.com/content/early/2012/07/18/1010539512454164.abstract

Related:

Adult Tobacco Cessation in Cambodia: I. Determinants of Quitting Tobacco Use http://aph.sagepub.com/content/early/2012/07/12/1010539512451853.abstract

Increased Genetic Vulnerability to Smoking at CHRNA5 in Early-Onset Smokers

Arch Gen Psychiatry. 2012;69(8):854 doi:10.1001/archgenpsychiatry.2012.124

Sarah M. Hartz, MD, PhD; Susan E. Short, PhD; Nancy L. Saccone, PhD; Robert Culverhouse, PhD; LiShiun Chen, MD, MPH, ScD; Tae-Hwi Schwantes-An, MS; Hilary Coon, PhD; Younghun Han, PhD; Sarah H. Stephens, PhD; Juzhong Sun, MPH, MSc; Xiangning Chen, PhD; Francesca Ducci, MD, PhD; Nicole Dueker, PhD; Nora Franceschini, MD, MPH; Josef Frank, MSc; Frank Geller, MSc; Daniel Gubjartsson, PhD; Nadia N. Hansel, MD, MPH; Chenhui Jiang, MA; Kaisu Keskitalo-Vuokko, PhD; Zhen Liu, PhD; Leo-Pekka Lyytikäinen, MD; Martha Michel, PhD; Rajesh Rawal, Dr Sc Hum; Albert Rosenberger, MS; Paul Scheet, PhD; John R. Shaffer, PhD; Alexander Teumer, PhD; John R. Thompson, PhD; Jacqueline M. Vink, PhD; Nicole Vogelzangs, PhD; Angela S. Wenzlaff, MPH; William Wheeler, PhD; Xiangjun Xiao, MS; Bao-Zhu Yang, PhD; Steven H. Aggen, PhD; Anthony J. Balmforth, PhD; Sebastian E. Baumeister, PhD; Terri Beaty, PhD; Siiri Bennett, MD; Andrew W. Bergen, PhD; Heather A. Boyd, PhD; Ulla Broms, PhD; Harry Campbell, MD; Nilanjan Chatterjee, PhD; Jingchun Chen, MD, PhD; Yu-Ching Cheng, PhD; Sven Cichon, PhD; David Couper, PhD; Francesco Cucca, MD; Danielle M. Dick, PhD; Tatiana Foroud, PhD; Helena Furberg, MSPH, PhD; Ina Giegling, PhD; Fangyi Gu, ScD; Alistair S. Hall, PhD; Jenni Hällfors, MSc; Shizhong Han, PhD; Annette M. Hartmann, PhD; Caroline Hayward, PhD; Kauko Heikkilä, Phil Lic; John K. Hewitt, PhD; Jouke Jan Hottenga, PhD; Majken K. Jensen, PhD; Pekka Jousilahti, MD, PhD; Marika Kaakinen, MSc; Steven J. Kittner, MD, MPH; Bettina Konte, MSc; Tellervo Korhonen, PhD; Maria-Teresa Landi, PhD; Tiina Laatikainen, MD, PhD; Mark Leppert, PhD; Steven M. Levy, DDS, MPH; Rasika A. Mathias, ScD; Daniel W. McNeil, PhD; Sarah E. Medland, PhD; Grant W. Montgomery, PhD; Thomas Muley, PhD; Tanda Murray, PhD; Matthias Nauck, MD; Kari North, PhD; Michele Pergadia, PhD; Ozren Polasek, MD, MPH, PhD; Erin M. Ramos, PhD; Samuli Ripatti, PhD; Angela Risch, PhD; Ingo Ruczinski, PhD; Igor Rudan, MD, MPH, PhD; Veikko Salomaa, MD, PhD; David Schlessinger, PhD; Unnur Styrkársdóttir, PhD; Antonio Terracciano, PhD; Manuela Uda, PhD; Gonneke Willemsen, PhD; Xifeng Wu, MD, PhD; Goncalo Abecasis, DPhil; Kathleen Barnes, PhD; Heike Bickeböller, PhD; Eric Boerwinkle, PhD; Dorret I. Boomsma, PhD; Neil Caporaso, MD; Jubao Duan, PhD; Howard J. Edenberg, PhD; Clyde Francks, DPhil; Pablo V. Geiman, MD; Joel Gelernter, MD; Hans Jörgen Grabe, MD; Hyman Hops, PhD; Marjo-Riitta Jarvelin, MD, MSc, PhD; Jorma Viikari, MD, PhD; Mika Kähönen, MD, PhD; Kenneth S. Kendler, MD; Terho Lehtimäki, MD, PhD; Douglas F. Levinson, MD; Mary L. Marazita, PhD; Jonathan Marchini, BSc, DPhil; Mads Melbye, MD, DMSc; Braxton D. Mitchell, PhD, MPH; Jeffrey C. Murray, MD; Markus M. Nöthen, PhD; Brenda W. Penninx, PhD;

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Abstract

Context Recent studies have shown an association between cigarettes per day (CPD) and a nonsynonymous single-nucleotide polymorphism in *CHRNA5*, rs16969968.

Objective To determine whether the association between rs16969968 and smoking is modified by age at onset of regular smoking.

Data Sources Primary data.

Study Selection Available genetic studies containing measures of CPD and the genotype of rs16969968 or its proxy.

Data Extraction Uniform statistical analysis scripts were run locally. Starting with 94 050 ever-smokers from 43 studies, we extracted the heavy smokers (CPD >20) and light smokers (CPD ≤10) with age-at-onset information, reducing the sample size to 33 348. Each study was stratified into early-onset smokers (age at onset ≤16 years) and late-onset smokers (age at onset >16 years), and a logistic regression of heavy vs light smoking with the rs16969968 genotype was computed for each stratum. Meta-analysis was performed within each age-at-onset stratum.

Data Synthesis Individuals with 1 risk allele at rs16969968 who were early-onset smokers were significantly more likely to be heavy smokers in adulthood (odds ratio [OR] = 1.45; 95% CI, 1.36-1.55; n = 13 843) than were carriers of the risk allele who were late-onset smokers (OR = 1.27; 95% CI, 1.21-1.33, n = 19 505) (P = .01).

Conclusion These results highlight an increased genetic vulnerability to smoking in early-onset smokers.

http://archpsyc.jamanetwork.com/article.aspx?articleid=1307554

Related coverage:

Heavy Smoking May Be a Genetic Thing http://www.medpagetoday.com/PrimaryCare/Smoking/34080

A Longitudinal Study on the Impact of Income Change and Poverty on Smoking Cessation

Canadian Journal of Public Health

Vol 103, No 3 (2012), 189-94

Kit-Ngan Young-Hoon

Abstract

Objectives: Research on the association between income and smoking cessation has examined income as a static phenomenon, either cross-sectionally or as a predictor variable in longitudinal studies. This study recognizes income as a dynamic entity and examines the relationship between a change in income and subsequent smoking behaviour.

Method: Longitudinal data from the National Population Health Survey (1994/5 to 2008/9) were used to examine the impact of 1) change in income and 2) change in poverty status, on the probability of being a former or current smoker among a sample of Canadians identified as having ever smoked. Covariates include socio-demographic characteristics, number of cigarettes smoked per day, and smoking in the home.

Results: Smoking behaviour was not associated with a change in household income but was associated with a change in household income that moved an individual across the poverty threshold. Canadians whose income increased to above the poverty threshold were less likely to continue smoking than someone who remained in poverty (OR=0.72, 95% CI: 0.62-0.84). Those who remained out of poverty were also less likely to continue smoking than someone who remained in poverty (OR=0.66, 95% CI: 0.57-0.75). There was no significant difference between those who remained in poverty and those whose income decreased to below the poverty level.

Conclusion: This study strengthens the link between smoking and poverty and supports strategies that address income as a socio-economic determinant of health. Policies that increase household incomes above the poverty line may lead to improvements in smoking cessation rates.

http://journal.cpha.ca/index.php/cjph/article/view/3005

On the roles of solar UV irradiance and smoking on the diagnosis of second cancers after diagnosis of melanoma

Dermatoendocrinol. 2012 Jan 1;4(1):12-7.

Grant WB.

Abstract

Several recent papers have reported standardized incidence ratios (SIRs) for second cancers after diagnosis of cutaneous malignant melanoma. This review divides the types of cancer into five types: (1) those for which UV-B (UVB) irradiance and vitamin D reduces risk; (2) those for which UVB/vitamin D reduces risk and smoking increases risk; (3) smoking related; (4) unknown UVB/vitamin D and smoking sensitivity and (5) those for which UV irradiance increases risk. For those in category 1, SIRs were either significantly elevated or not significantly different from 1.0. For those in category 2, the SIR for kidney cancer was significantly elevated, whereas the SIRs for cervical, laryngeal and rectal cancer were significantly reduced. For those in categories 4 and 5, SIRs for all types except lip cancer were significantly elevated. A registry linkage study found significantly reduced SIRs for second cancers after diagnosis of nonmelanoma skin cancer in sunny countries but found increased SIRs in less sunny countries. The SIRs for second cancer for melanoma were elevated in both sunny and less sunny countries. This review concludes that sun exposure without sufficient vitamin D production may explain the elevated SIRs for vitamin D-sensitive cancers, whereas smoking-through production of skin elastosis, thereby reducing the risk of melanoma-probably explains the findings for smoking-related cancers. Thus, guidelines on UV irradiance should emphasize regular moderate UVB irradiance rather than avoidance for those who can tan.

http://www.landesbioscience.com/journals/dermatoendocrinology/article/19831/http://www.landesbioscience.com/journals/dermatoendocrinology/2011DE0159R.pdf

Also:

How do solar UV irradiance and smoking impact the diagnosis of second cancers after diagnosis of melanoma?: No answer yet

http://www.landesbioscience.com/journals/dermatoendocrinology/article/19832/www.landesbioscience.com/journals/dermatoendocrinology/2012DE0178.pdf

Note: Open Access. Full text PDFs freely available from links immediately above.

Effect of nicotine on growth and metabolism of Streptococcus mutans

Eur J Oral Sci. 2012 Aug;120(4):319-25. doi: 10.1111/j.1600-0722.2012.00971.x. Epub 2012 Jun 25.

Huang R, Li M, Gregory RL.

Abstract

Streptococcus mutans is a key contributor to dental caries. Smokers have a higher number of caries-affected teeth than do nonsmokers, but the association among tobacco, nicotine, caries, and S. mutans growth has not been investigated in detail. Seven S. mutans strains - UA159, UA130, 10449, A32-2, NG8, LM7, and OMZ175 - were used in the present study. The minimum inhibitory concentration (MIC), minimum bactericidal concentration (MBC), minimum biofilm inhibitory concentration (MBIC), planktonic cell growth, biofilm formation, metabolism, and structure (determined using scanning electron microscopy) of the seven strains treated with different concentrations of nicotine (0-32 mg ml(-1)) were investigated. The MIC, MBC, and MBIC were 16 mg ml(-1) (0.1 M), 32 mg ml(-1) (0.2 M), and 16 mg ml(-1) (0.1 M), respectively, for most of the S. mutans strains. Growth of planktonic S. mutans cells was significantly repressed by 2.0-8.0 mg ml(-1) of nicotine. Biofilm formation and metabolic activity of S. mutans was increased in a nicotine-dependent manner up to 16.0 mg ml(-1) of nicotine. Scanning electron microscopy revealed that S. mutans treated with a high concentration of nicotine a had thicker biofilm and more spherical bacterial cells. In summary, nicotine enhances S.

mutans biofilm formation and biofilm metabolic activity. These results suggest that smoking can increase the development of caries by fostering increased formation of S. mutans biofilm on tooth surfaces.

http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0722.2012.00971.x/abstract

Cigarette smoke induces ER stress response and proteasomal dysfunction in human alveolar epithelial cells

Exp Physiol. 2012 Jul 30. [Epub ahead of print]

Somborac-Bacura A, van der Toorn M, Franciosi L, Slebos DJ, Zanic-Grubisic T, Bischoff R, van Oosterhout AJ.

Abstract

Cigarette smoking is the major risk factor for chronic obstructive pulmonary disease (COPD). Cigarette smoke (CS) causes oxidative stress and severe damage to proteins in the lungs. One of the main systems to protect cells from the accumulation of damaged proteins is the ubiquitin-proteasome pathway. In the present study, we were interested whether CS exposure of alveolar epithelial cells induces endoplasmic reticulum (ER) stress response by accumulation of damaged proteins that are inefficiently degraded by the proteasomes. The hypothesis was tested in human alveolar epithelial cell line (A549) exposed to gas-phase CS. Exposure to gas-phase CS for 5 min caused an increase in the amount of ubiquitin-protein conjugates within 4 h. CS exposure also induced the ER stress response marker elF2alpha, followed by a significant reduction of nascent protein synthesis and increase in the level of free intracellular amino acids. Moreover, CS exposure significantly reduced all three proteasomal activities (caspase-, trypsin- and chymotrypsin-like activity) within 4 h, which was still present after 24 h. It can be concluded that gas-phase CS induces ER stress in A549 alveolar epithelial cells leading to inadequate protein turnover caused by an accumulation of damaged proteins, reduction in nascent protein synthesis and inhibition of the proteasome. We suggest that prolonged ER stress may lead to an excessive cell death with disruption of the epithelial barrier, contributing to COPD development.

http://onlinelibrary.wiley.com/doi/10.1113/expphysiol.2012.067249/abstract

Examining the Effects of Mass Media Campaign Exposure and Interpersonal Discussions on Youth's Drug Use: The Mediating Role of Visiting Pro-Drug Websites

Health Commun. 2012 Jul 20. [Epub ahead of print]

Kam JA, Lee CJ.

Abstract

To extend past research on interpersonal communication and campaign effects, we hypothesized that anti-drug mass media campaign message exposure indirectly affects visiting anti- and pro-drug websites through targeted parent-child and friend-to-friend communication against drugs, as well as through having drug-related discussions during organized group activities. Second, we posited that engaging in anti-drug interpersonal communication indirectly affects adolescents' drug use through two intervening variables: visiting anti-drug websites and visiting pro-drug websites. Using self-reported longitudinal data from 2,749 youth, we found that as youth reported higher levels of anti-drug mass media campaign message exposure, they were more likely to talk to friends about the bad consequences of drugs, how to avoid drugs, and anti-drug ads. In turn, however, they were more likely to visit pro-drug websites, and subsequently, to smoke cigarettes.

http://www.tandfonline.com/doi/abs/10.1080/10410236.2012.699873

Associations of Functional and Dysfunctional Impulsivity to Smoking Characteristics

J Addict Med. 2012 Aug 2. [Epub ahead of print]

Pitts SR, Leventhal AM.

Abstract

OBJECTIVES:

Although the relation between impulsivity and smoking is well-documented, one model of impulsivity that has received little attention in the addiction literature separates impulsivity into 2 dimensions: functional impulsivity (tendency to make quick effective decisions) and dysfunctional impulsivity (tendency to make quick ineffective decisions).

METHODS:

This cross-sectional study examined relations of functional and dysfunctional impulsivity to smoking characteristics in 212 non-treatment-seeking daily smokers (M = 15 cigarettes per day, M age = 24 years, 53% women).

RESULTS:

Dysfunctional impulsivity exhibited small- to medium-sized positive associations with difficulty refraining from smoking in forbidden places, craving, and smoking without awareness. Functional impulsivity was inversely associated with a measure of cigarette craving. Other suggestive associations were found; however, these were not statistically significant after type I error correction.

CONCLUSIONS:

Although the overall predictive validity of these impulsivity constructs for explaining variance in smoking characteristics was relatively modest, the results suggest that conceptualizing impulsivity as a unitary construct indicative of a tendency to make quick decisions may mask heterogeneity within the impulsivity-smoking relationship. These findings suggest that high-dysfunctional impulsivity smokers may perhaps require more intensive interventions to dampen motivation to smoke. They also highlight the possibility that certain manifestations of impulsivity are not related with increased smoking behavior and may actually associate with reduced drive to smoke.

http://journals.lww.com/journaladdictionmedicine/pages/articleviewer.aspx?year=9000&issue=00000&article=99856&type=abstract

The relationship among smoking, sleep, and chronic rheumatic conditions commonly associated with pain in the National Health Interview Survey

J Behav Med. 2012 Aug 5. [Epub ahead of print]

Stipelman BA, Augustson E, McNeel T.

Abstract

Chronic rheumatic conditions are typically characterized by chronic pain and are uniquely associated with increased rates of cigarette smoking and poor sleep quality. However, no study has examined the possible additive or interactive effects of these two health behaviors in individuals diagnosed with a chronic rheumatic condition. The goal of this study is to examine the relationship between cigarette smoking and sleep in a population sample of individuals diagnosed with a chronic rheumatic condition and related functional impairment. Cross sectional survey data was obtained from the 2007 National Health Interview Survey. Individuals diagnosed with a chronic rheumatic condition were more likely to be a former or current smoker compared to non-diagnosed individuals. Individuals with a chronic rheumatic condition were more likely to report <6 h of sleep per night and endorsed significantly more insomnia and daytime sleepiness. There was no interaction between diagnosis of a chronic rheumatic condition and smoking status on any of the sleep outcomes assessed. Finally, an interaction was observed suggesting individuals with a chronic rheumatic condition who currently smoke are more likely to report averaging <6 h of sleep per night and frequent insomnia compared to individuals with a chronic rheumatic condition who never smoked. These results suggest both a unique and additive relationship between smoking and sleep in individuals with a chronic rheumatic condition. Findings can likely be generalized to other conditions commonly associated with chronic pain.

http://www.springerlink.com/content/nq7p84688812p718/

Reaching Families at Their Homes for an Intervention to Reduce Tobacco Smoke Exposure Among Infants

J Community Health. 2012 Aug 3. [Epub ahead of print]

Kastirke N. John U. Goeze C. Sannemann J. Ulbricht S.

Abstract

The methods of reaching families for a home intervention trial (HIT) were analyzed in this study. The study aimed to reduce environmental tobacco smoke exposure among infants in one region of Germany. The systematic screening data of smoking among families in their homes were compared with reference data of a representative household sample of the state in which the study was conducted. The characteristics of participating and non-participating families were analyzed. All households (N = 3,570) containing at least one infant age 3 years or younger were selected using the residents' registration files and invited to participate in a screening assessment. Among these families, 3,293 (92.2 %) were contacted and from that group, 2,641 families participated in the screening. Compared with the reference sample, the screened sample included a higher proportion of families with employment and with more than 10 years of education. Participation in the HIT was recommended if at least one parent reported smoking one or more cigarettes per day during the previous 4 weeks. Among the 1,282 families that met the inclusion criteria, 71.5 % took part in the screening. Participating families, compared with non-participating families, were older, included more families with two parents living in the household, and had higher rates of employment. The effect size of the final regression model was small (Cohen's f (2) = 0.01). In conclusion, proactive approaches that are delivered at home may yield a high reach of the target population and particularly of socioeconomically disadvantaged populations.

http://www.springerlink.com/content/wj212133q8037618/

Implementation of an Electronic Health Record-Based Care Management System to Improve Tobacco Treatment

J Gen Intern Med. 2012 Aug 4. [Epub ahead of print]

Kruse GR, Kelley JH, Linder JA, Park ER, Rigotti NA.

Abstract

BACKGROUND:

Tobacco treatment is underused in primary care. We designed a Tobacco Care Management system to increase the delivery of treatment and reduce the burden on primary care providers (PCPs). A one-click functionality added to the electronic health record (EHR) allowed PCPs to refer smokers to a centralized tobacco treatment coordinator (TTC) who called smokers, provided brief counseling, connected them to ongoing treatment and gave feedback to PCPs.

OBJECTIVE:

To study the system's feasibility and acceptability among PCPs, and its utilization by smokers.

DESIGN:

Using a mixed methods design, we documented system utilization quantitatively from February 1, 2010 to July 31, 2011, and conducted two focus groups with PCPs in June 2011.

PARTICIPANTS:

Thirty-six PCPs and 2,894 smokers from two community health centers in Massachusetts.

MAIN MEASURES:

Quantitative: One-click referral utilization by PCPs, proportion of smokers referred and connected to treatment. Qualitative: PCPs' reasons for use, barriers to use, and experiences with feedback.

KEY RESULTS:

Twenty-nine PCPs (81 %) used the functionality more than once, generating 466 referrals for 15 % of known smokers seen during the study. The TTC reached 260 (56 %) of the referrals and connected 135 (29 %) to additional treatment. The director of one center sent PCPs monthly feedback about their utilization compared to peers. These PCPs referred a

greater proportion of their known smokers (18 % vs. 9 %, p < 0.0001) and reported that monthly feedback motivated referrals. PCPs attending focus groups (n = 24) appreciated the system's simplicity, access to updated resources, and time-efficient way to address smoking, and wanted more feedback about cessation outcomes. They collectively supported the system's continuation.

CONCLUSIONS:

A novel EHR-based Tobacco Care Management system was adopted by PCPs, especially those receiving performance feedback, and connected one-third of referred smokers to treatment. The model has the potential to improve the delivery and outcomes of evidence-based tobacco treatment in primary care.

http://www.springerlink.com/content/7m5374q5583127j0/

Tobacco Nitrosamine N-nitrosonornicotine as Inhibitor of Neuronal Nicotinic Acetylcholine Receptors

J Mol Neurosci. 2012 Jul 31. [Epub ahead of print]

Nunes-Alves A, Nery AA, Ulrich H.

Abstract

Nitrosamines are well known for their carcinogenic potential. Recently, it was found that some of them may also interact with human nicotinic acetylcholine receptor (nAChR) subtypes. This work studied the effects of N-nitrosonornicotine (NNN) on recombinant rat $\alpha3\beta4$ nAChR in HEK cells as well as on nAChR endogenously expressed in PC12 pheochromocytoma cells and in BC3H1 muscle-type cells. Whole-cell recording in combination with the cell-flow technique for agonist and inhibitor application in the millisecond time region revealed that NNN inhibits the activity of neuronal nAChR expressed in HEK or PC12, whereas weak inhibitory effects on muscle-type nAChR were observed at NNN concentrations up to 3 mM. Pharmacological actions of NNN and the inhibition mechanism were studied in detail using recombinant $\alpha3\beta4$ nAChR expressed in HEK cells as a model. NNN-induced inhibition of nicotine-evoked $\alpha3\beta4$ nAChR activity was dose-dependent with an inhibitory constant (IC(50)) of 0.92 ± 0.05 mM. Analysis based on mathematical models indicated a noncompetitive inhibition mechanism of the rat $\alpha3\beta4$ nAChR by NNN. NNN's mechanism of action involves acceleration of conversion of the receptor from active to desensitized forms. In summary, this work shows that NNN inhibits rat $\alpha3\beta4$ nAChR in a noncompetitive way and interacts weakly with muscular nAChR.

http://www.springerlink.com/content/lw46x17455502770/

Second-Hand Tobacco Smoke Exposure and Severity of Influenza in Hospitalized Children

J Pediatr. 2012 Aug 3. [Epub ahead of print]

Wilson KM, Pier JC, Wesgate SC, Cohen JM, Blumkin AK.

Abstract

OBJECTIVE:

To assess whether children with influenza who are exposed to secondhand tobacco smoke (SHS) would have more severe illness than those not exposed.

STUDY DESIGN:

We abstracted charts from pediatric inpatients with confirmed influenza from 2002-2009 for demographics, medical history, and smoke exposure. Severity indicators included intensive care, intubation, and length of stay (LOS) in the hospital; potential confounding factors included demographics and the presence of asthma or chronic conditions. All $\chi(2)$, t tests, and regression analyses were run using SPSS v. 18.0.

RESULTS:

Of 117 children, 40% were exposed to SHS, who had increased need for intensive care (30% vs 10%, P < .01) and intubation (13% vs 1%, P < .05), and had longer LOS (4.0 vs 2.4 days, P < .01). Children with chronic conditions and

SHS exposure required more intensive care (53% vs 18%, P < .05) and had longer LOS (10.0 vs 3.5 days, P < .01) than children not exposed to SHS with chronic conditions. In multivariate analyses controlling for potential confounding factors, children with SHS exposure were 4.7 times more likely to be admitted to intensive care (95% CI 1.4-18.5) and had a 70% longer LOS (95% CI 12%-230%).

CONCLUSIONS:

Children with SHS exposure who are hospitalized with influenza have more severe illness. Efforts are needed to immunize this population against influenza, and eliminate children's exposure to SHS.

http://www.sciencedirect.com/science/article/pii/S0022347612007317

Also:

Do Stimulants Reduce the Risk for Cigarette Smoking in Youth with Attention-Deficit Hyperactivity Disorder? A Prospective, Long-Term, Open-Label Study of Extended-Release Methylphenidate http://www.sciencedirect.com/science/article/pii/S0022347612007342

Cigarette Smoking Associated With Lung Adenocarcinoma In Situ in a Large Case-Control Study (SFBALCS)

J Thorac Oncol. 2012 Jul 18. [Epub ahead of print]

Bracci PM, Sison J, Hansen H, Walsh KM, Quesenberry CP, Raz DJ, Wrensch M, Wiencke JK.

Abstract

INTRODUCTION:

Adenocarcinoma in situ (AIS), formerly bronchioloalveolar carcinoma, is an uncommon subtype of lung adenocarcinoma and accounts for approximately 3% to 4% of lung cancers. Compared with other lung cancer histologies, AIS patients are less likely to be smokers, yet associations with other lung cancer risk factors and differences by sex have not been determined.

METHODS:

A total of 338 AIS patients and frequency-matched controls from the parent study (cases = 6039, controls = 2073) were included in these analyses. Odds ratios and 95% confidence intervals as estimates of the relative risk were obtained from multivariable unconditional logistic regression analyses.

RESULTS:

Risk of AIS was associated with ever smoking (OR = 2.7, 95% confidence intervals: 2.1, 3.6), increased 20% to 30% for each 10-year increase in pack-years of smoking and decreased with increased years since quitting (p for trend <0.0001). There was no evidence that risk differed by sex but there was some suggestion that risk may differ by exposure to asbestos and by second-hand tobacco smoke exposure in whites.

CONCLUSION:

There is an association between AIS and smoking, which is smaller in magnitude than the association between other subtypes of non-small-cell lung cancer and smoking. Our findings suggesting that effects may differ by exposure to asbestos and second-hand tobacco smoke should be interpreted conservatively and warrant validation and further evaluation in larger studies of AIS.

http://journals.lww.com/jto/pages/articleviewer.aspx?year=9000&issue=00000&article=99281&type=abstract

cancer from 51 epidemiological studies

Lancet Oncol. 2012 Aug 2. [Epub ahead of print]

Collaborative Group on Epidemiological Studies of Ovarian Cancer.

Abstract

BACKGROUND:

Smoking has been linked to mucinous ovarian cancer, but its effects on other ovarian cancer subtypes and on overall ovarian cancer risk are unclear, and the findings from most studies with relevant data are unpublished. To assess these associations, we review the published and unpublished evidence.

METHODS:

Eligible epidemiological studies were identified by electronic searches, review articles, and discussions with colleagues. Individual participant data for 28 114 women with and 94 942 without ovarian cancer from 51 epidemiological studies were analysed centrally, yielding adjusted relative risks (RRs) of ovarian cancer in smokers compared with never smokers.

FINDINGS:

After exclusion of studies with hospital controls, in which smoking could have affected recruitment, overall ovarian cancer incidence was only slightly increased in current smokers compared with women who had never smoked (RR 1·06, 95% CI 1·01-1·11, p=0·01). Of 17 641 epithelial cancers with specified histology, 2314 (13%) were mucinous, 2360 (13%) endometrioid, 969 (5%) clear-cell, and 9086 (52%) serous. Smoking-related risks varied substantially across these subtypes (p(heterogeneity)<0·0001). For mucinous cancers, incidence was increased in current versus never smokers (1·79, 95% CI 1·60-2·00, p<0·0001), but the increase was mainly in borderline malignant rather than in fully malignant tumours (2·25, 95% CI 1·91-2·65 vs 1·49, 1·28-1·73; p(heterogeneity)=0·01; almost half the mucinous tumours were only borderline malignant). Both endometrioid (0·81, 95% CI 0·72-0·92, p=0·001) and clear-cell ovarian cancer risks (0·80, 95% CI 0·65-0·97, p=0·03) were reduced in current smokers, and there was no significant association for serous ovarian cancers (0·99, 95% CI 0·93-1·06, p=0·8). These associations did not vary significantly by 13 sociodemographic and personal characteristics of women including their body-mass index, parity, and use of alcohol, oral contraceptives, and menopausal hormone therapy.

INTERPRETATION:

The excess of mucinous ovarian cancers in smokers, which is mainly of tumours of borderline malignancy, is roughly counterbalanced by the deficit of endometrioid and clear-cell ovarian cancers. The substantial variation in smoking-related risks by tumour subtype is important for understanding ovarian carcinogenesis.

http://linkinghub.elsevier.com/retrieve/pii/S1470-2045%2812%2970322-4

Cognitive evaluation of bupropion sustained release in heavy tobacco smokers using event-related potentials

Medicina (Kaunas). 2012;48(5):235-43.

Uslu A, Erdem O, Ergen M, Ozdemir O, Cuhadaroglu C, Demiralp T.

Abstract

OBJECTIVE. The aim of this study was to investigate the effects of bupropion sustained release (SR) on cognitive function, evaluated by event-related potentials (ERPs), in heavy tobacco smokers. MATERIAL AND METHODS. A total of 10 healthy volunteers (6 men and 4 women) were enrolled into the study. P3a and P3b components were evaluated by the novelty P3 paradigm. The ERP recordings were taken after the overnight abstaining and the first dose on the 1st day, on the 7th day, and 45th day of the therapy. RESULTS. The analysis of electrophysiological data in response to the standard stimuli in the parietal area after 7-day bupropion SR treatment revealed a significant increase in the P2 latency (P<0.05). With respect to the drug use × topography effect, an increasing trend of borderline signi-fi-cance in the P3b and P2

amplitudes against target events in the parietal area was observed (P=0.08 for both). A significant increase in the P3a amplitude in the parietocentral area was also observed on the seventh day of treatment (P<0.05). CONCLUSIONS. The reduction of P3a in the frontal area may be due to the decreased distractibility of task-irrelevant novel events, which may mean an augmentation of focused attention to task-relevant target events. The increases in the P3b and P2 amplitudes for target events in the parietal area are very suggestive of this hypothesis, since these components reflect the response to task-relevant target events. Meanwhile, the increased P2 latency for standard events may reflect reduced attention resources for the processing of standard events due to increased attention resources allocated for task-relevant target events. Decreased distractibility and increased attention are believed to be caused by bupropion.

http://medicina.kmu.lt/1205/1205-e.htm http://medicina.kmu.lt/1205/1205-02e.pdf

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

No need to ban smoking in cars with children present--it's almost snuffed out

NZ Med J. 2012 Jul 29;125(1358):84-8.

Glover M, Maifeleni T, Yeh CJ, Lee A, Gentles D.

Smokefree environments are widespread in New Zealand with legislation banning smoking in workplaces, bars, casinos and restaurants, school grounds and on public transport. Many local government councils are expanding smokefree environments to include parks, playgrounds, sports grounds, beaches and particular streets.1 Private places like marae, homes and cars have largely been exempted—except where that place is also a workplace, such as a residential care facility or a prison.

Recently there has been a call to ban smoking in cars when children are present with strong public support claimed for such a move.2 This would help to reduce infant and child exposure to secondhand smoke (SHS), moves to denormalise smoking 3 and potentially could reduce the risk of children taking up smoking.4 However, little is known about the prevalence of smoking in cars when children are passengers...

An earlier New Zealand study (n=16,055 vehicles) found the smoking prevalence in cars was 4.1% and of these 23.7% had other occupants (not just children) exposed to SHS.8 This works out to be approximately 1% of occupants being exposed to SHS within a car. Thus, the prevalence of smoking in cars with children inside was at most 1.0% in 2005 and drifted downwards to 0.13% in 2012.

In the current study (2012) some student nurses set out to determine the frequency of adults smoking in cars with children present in Auckland...

Results—Of the 2857 eligible vehicles observed (combining the three suburbs) only 63 (2%) carried adults smoking while children were present (Table 1). Of these the ethnic breakdown was: Maori 57%, Pacific 27%, European 11%, and Indian 5%.

Over the three suburbs, the prevalence of cars with adults smoking while children were present ranged from zero in Newmarket and Mangere to 7% for Manurewa. There was a definite SES gradient with more adults smoking in cars while children were present in the highest deprivation area...

Conclusion—Our study confirms that some adults who smoke still do so in the relatively small and enclosed confines of a vehicle when children are present. There is no doubt that this is harmful to the children and contributes to their higher morbidity from smoking related illness than children of non-smoking parents. That this is more likely to occur in areas of high deprivation is consistent with previous studies7, 8 and with higher smoking prevalence in populations in these areas.15,16

But we argue that the time for a ban on smoking in cars when children are present has passed. The practice is already declining and is largely confined to more deprived groups who have not benefited from the same level of public health education campaigns that has driven the behaviour down.

The risk of alienating Maori and Pacific with such a policy change is high. A more helpful approach directed at the small population still smoking in cars should suffice to snuff out children's exposure to smoke in cars for good.

http://journal.nzma.org.nz/journal/125-1358/5272

Exposure to secondhand smoke in terraces and other outdoor areas of hospitality venues in eight European countries

PLoS One. 2012;7(8):e42130. Epub 2012 Aug 1.

López MJ, Fernández E, Gorini G, Moshammer H, Polanska K, Clancy L, Dautzenberg B, Delrieu A, Invernizzi G, Muñoz G, Precioso J, Ruprecht A, Stansty P, Hanke W, Nebot M.

Abstract

BACKGROUND:

Outdoor secondhand smoke (SHS) concentrations are usually lower than indoor concentrations, yet some studies have shown that outdoor SHS levels could be comparable to indoor levels under specific conditions. The main objectives of this study were to assess levels of SHS exposure in terraces and other outdoor areas of hospitality venues and to evaluate their potential displacement to adjacent indoor areas.

METHODS:

Nicotine and respirable particles (PM2.5) were measured in outdoor and indoor areas of hospitality venues of 8 European countries. Hospitality venues of the study included night bars, restaurants and bars. The fieldwork was carried out between March 2009 and March 2011.

RESULTS:

We gathered 170 nicotine and 142 PM2.5 measurements during the study. The median indoor SHS concentration was significantly higher in venues where smoking was allowed (nicotine 3.69 μ g/m3, PM2.5: 120.51 μ g/m3) than in those where smoking was banned (nicotine: 0.48 μ g/m3, PM2.5: 36.90 μ g/m3). The median outdoor nicotine concentration was higher in places where indoor smoking was banned (1.56 μ g/m3) than in venues where smoking was allowed (0.31 μ g/m3). Among the different types of outdoor areas, the highest median outdoor SHS levels (nicotine: 4.23 μ g/m3, PM2.5: 43.64 μ g/m3) were found in the semi-closed outdoor areas of venues where indoor smoking was banned.

CONCLUSIONS:

Banning indoor smoking seems to displace SHS exposure to adjacent outdoor areas. Furthermore, indoor settings where smoking is banned but which have a semi-closed outdoor area have higher levels of SHS than those with open outdoor areas, possibly indicating that SHS also drifts from outdoors to indoors. Current legislation restricting indoor SHS levels seems to be insufficient to protect hospitality workers - and patrons - from SHS exposure. Tobacco-free legislation should take these results into account and consider restrictions in the terraces of some hospitality venues to ensure effective protection.

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0042130

Also:

Adolescent expectations of early death predict adult risk behaviors http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0041905

Note: Open Access. Full text PDFs freely available from links immediately above.

Late-onset smokers: How many, and associations with health behaviours and socioeconomic status

Scand J Public Health. 2012 Aug 6. [Epub ahead of print]

Tjora T, Hetland J, Aarø LE, Wold B, Overland S.

Abstract

AIMS: Adolescence is considered a critical phase for smoking initiation, while smoking initiation in adulthood has received less attention. In the present study, we investigated smoking initiation in early adulthood, with an additional focus on how socioeconomic status (SES) relates to late-onset smoking. Methods: The Norwegian Longitudinal Health Behaviour Study followed a representative sample of adolescents (n=530) from age 13 (7th grade) to age 30 (years 1990-

2007) through 9 waves of data collection. Information was collected on the adolescents' gender, smoking, alcohol use, cannabis use, physical activity, and SES. Those reporting to be smokers at age 30, but not at age 18, were defined as "late-onset smokers". Results: At age 30, 21% were daily smokers, of which 45% met our definition of late-onset smoking. Participants with a low SES had a higher odds ratio for late-onset smoking (OR=3.42) and a lower odds ratio for quitting smoking (OR=0.40) after adjusting for confounders. CONCLUSIONS: Early adulthood is an additional critical phase for daily smoking initiation. The clear and consistent negative association between SES and late-onset smoking, as well as the positive association between SES and smoking cessation, contribute to the association between SES and smoking in the general adult population.

http://sip.sagepub.com/content/early/2012/08/02/1403494812454233.abstract

The illegal cigarette market in a socioeconomically deprived inner-city area: the case of the South Bronx

Tob Control Published Online First: 4 August 2012

Marin K Kurti, Klaus von Lampe, Douglas E Thompkins

Abstract

Objective To determine the scope of the cigarette black market in a socioeconomically deprived inner-city area in the US, taking the South Bronx in New York City as a case study.

Design The South Bronx Litter Pack Survey collected discarded cigarette packs (n=497) along 30 randomised census tracts to quantify the prevalence of counterfeit, legal and out-of-state tax stamps.

Results It was found that 76.2% of cigarette packs collected avoided the combined New York City and State tax. More specifically, 57.9% were untaxed (counterfeit or bearing no tax stamp), for 15.8% taxes were paid outside of New York City (including other states and New York State only). Only 19.4% of tax stamps collected indicated that New York City and New York State taxes were paid. 4.4% of the cigarette packs could not be analysed because the tax stamps were not discernible. The finding that the majority of cigarettes did not have a tax stamp or bore a counterfeit tax stamp suggests that these cigarettes were being bootlegged, most likely from Native American Reservations.

Conclusions The present study highlights the importance of examining the illegal cigarette market in socioeconomically deprived regions of the US, where tax avoidance and black market activities appear to far exceed levels found elsewhere in the country including Chicago and New York City at large.

http://tobaccocontrol.bmj.com/content/early/2012/08/04/tobaccocontrol-2011-050412.abstract

Industry watch

Hookah steam stones: smoking vapour expands from electronic cigarettes to waterpipes

Tob Control Published Online First: 4 August 2012

Youn Ok Lee, Arnab Mukherjea, Rachel Grana

A hookah is a waterpipe (also known as narghile or shisha) used to smoke flavoured tobacco. It is estimated that the hookah is used daily by more than 100 million people globally. Further, hookah smoking appears to be increasing both worldwide and in the USA. 2–5

A limited number of studies suggest that health risks associated with hookah smoking are similar to those of cigarette smoking. A single session of hookah smoking can last 30–60 min, with over 100 inhalations. 9.9 Despite data demonstrating potential health risks, smokers perceive hookah use as less harmful than cigarettes 10 because of its sweet smell and taste, and the belief that water 'filters' the smoke, reducing toxicant exposure 5.11,12 and is, therefore, less addictive than cigarettes. Moreover, existing legal protections for non-smokers do not apply to hookah since most public venues for waterpipe use are exempt from clean indoor air legislation. 13

A new product, called 'steam stones,' is being introduced as a tobacco alternative for use in hookahs (see <u>figure 1</u>). These heat-treated porous materials are soaked in fluid—usually glycerin—and heated in hookahs, where the tobacco would normally be placed, to create a smoke-like vapour. A cursory search of sales of steam stones found that distributors largely export these items from Germany and the UK. Steam stones can be found in tobacco outlets—often specialising in niche products—as well as bars and cafes in Europe, Asia and North America

(http://www.shiazo.eu/stores.php). Steam stones have been advertised in other retail environments; for instance, a convenience store in California was observed with an advertisement for a popular brand (see figure 4; photo credit: MariaElena Gonzalez). These tobacco substitutes appear to be garnering popularity as evidenced by their introduction into major retail merchandise tradeshows and their growing presence on mainstream web vendors, such as Amazon and eBay, at prices comparable with those of similarly sized hookah tobacco products (eg, \$10.00 for 100 g) (http://www.toptenwholesale.com/news/new-products-asd-las-vegas-15035.html)...

The introduction of this largely untested product must be countered by an evidence-based public health response. Of particular concern is the fact that steam stones are marketed in an array of candy-like flavours, such as bubble gum and chocolate, that may appeal to youth (<u>figure 3</u>). Similar to other emerging products claiming reduced harm, independent research on toxicants, youth initiation, impacts on cessation and dual use with tobacco products is paramount to ensuring that public health policies and practices successfully neutralise adverse marketing and promotion strategies.

http://tobaccocontrol.bmj.com/content/early/2012/08/04/tobaccocontrol-2012-050557.extract

Evaluating the effectiveness of the US Navy and Marine Corps Tobacco Policy: an assessment of secondhand smoke exposure in US Navy submariners

Tob Control Published Online First: 7 August 2012

Nicholas J Yarnall, Linda M Hughes, Paul S Turnbull, Mark Michaud

Abstract

Objective To evaluate the effectiveness of the US Navy and Marine Corps tobacco policy in protecting submariners from secondhand smoke (SHS) by determining if non-tobacco users experienced a significant increase in urinary cotinine levels at sea when compared with in port levels.

Methods From February to August 2009, 634 volunteers recruited from nine US Navy submarines completed a survey to collect demographic data, information on tobacco use and pre-deployment exposure to SHS. Non-tobacco users (n=239) were requested to provide two urine samples (pre-deployment and while at sea) to quantify exposure to SHS using urinary cotinine as a biomarker. Matched samples were analysed using liquid chromatography–tandem mass spectrometry.

Results Overall, deployed cotinine levels were 2.1 times the in port levels in non-tobacco using submariners (95% CI 1.8 to 2.4, p<0.001, n=197). A significant increase in deployed urinary cotinine levels was found aboard six of nine submarines (p<0.05). A subgroup of submariners (n=91) who reported no SHS exposure within 10 days prior to in port cotinine sampling had deployed cotinine levels 2.7 times the in port levels (95% CI 2.2 to 3.3, p<0.001). Applying a 4.5:1 urine cotinine to serum cotinine correction factor, submariners' deployed geometric means are similar to recent US male population values at the 75th percentile.

Conclusions This study provides evidence that non-tobacco using submariners were exposed to SHS. Exposure was seen in all submarine classes and was not limited to personnel working in proximity to the smoking area. The existing policy was inadequate to protect non-smokers from exposure to SHS and required revision. As a result of a policy review, informed by this study, smoking below decks was banned aboard all US Navy submarines effective 31 December 2010.

http://tobaccocontrol.bmj.com/content/early/2012/08/06/tobaccocontrol-2012-050488.abstract

The Maximum Willingness to Pay for Smoking Cessation Method among Adult Smokers in Mexico

Value Health. 2012 Jul;15(5):750-8. Epub 2012 Jun 7.

Heredia-Pi IB, Servan-Mori E, Reynales-Shigematsu LM, Bautista-Arredondo S.

Abstract

OBJECTIVES:

To estimate the maximum willingness to pay (WTP) for an effective smoking cessation treatment among smokers in

Mexico and to identify the environmental, demographic, and socioeconomic factors associated with the WTP.

METHODS:

A cross-sectional study was conducted. The sample contained 777 smokers (willingness to quit using a WTP of >0) who had responded to the 2009 Global Adult Tobacco Survey conducted in Mexico. Statistical associations and descriptive analyses were conducted to describe smokers and their WTP by using tobacco-related environmental, socioeconomic, and demographic variables.

RESULTS:

Overall, 74.4% of the smokers were men and 51.4% were daily smokers. On average, the smokers had been consuming tobacco for more than 15 years, 58.6% had made cessation attempts in the past, and around 10.0% knew about the existence of centers to aid in smoking cessation. The average WTP for an effective cessation method was US \$191. Among men, the WTP was US \$152 lower than among women. In all the estimated models, the higher an individual's education and socioeconomic level, the higher his or her WTP.

CONCLUSIONS:

This study suggests that Mexican smokers interested in quitting smoking attribute a high monetary value to an effective cessation method. Male smokers demonstrated less altruistic behavior than did female smokers. Mexico requires the implementation of more policies designed to support smoking cessation and to limit tobacco addiction. Expanding the availability of cessation programs and access to pharmacological treatments may contribute to reaching universal coverage by integrating new pharmacological alternatives into the health sector's medicine formulary.

http://www.sciencedirect.com/science/article/pii/S1098301512014490

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