

From: "Stan Shatenstein" <shatensteins@sympatico.ca>

To: [Undisclosed-Recipient:](#)

Date: 8.6.2012 13:04:51

Subject: STAN Bulletin: 4th Edition: 8-June-2012

Smoking & Tobacco Abstracts & News

STAN Bulletin

4th Edition

8-June-2012

Editor's Note: Punctuation is again being used to provide several links on a single line of the 'In the News' section, most notably to indicate coverage of, and PDF links for, the Smoke Free Partnership (SFP) report 'Block, amend, delay: Tobacco industry efforts to influence the European Union's Tobacco Products Directive (2001/37/EC)'. The [Summary](#) and [Full Report](#) are Open Access, available from the links here and below.

Stan Shatenstein

In the News:

- Canada: Quebec: [Big tobacco aided advertising-law coalition, lobbyist tells court](#)
- Canada: Quebec: [New café risking fines over shisha smoking: Tobacco Act violation disputed](#)
- EU: SFP: [Smokescreen lifted on tobacco industry tactics: Block, amend, delay: Summary; Full Report](#)
- EULAR 2012: [Smoking negatively affects anti-TNF response in rheumatoid arthritis: Conference Abstract](#)
- UK: Cancer Research UK: [The answer is plain packaging, next policy achievement](#)

- US: ALF/Legacy: [Comic Web Series Comes With a Quit-Smoking Sponsor](#)

- US: [AUAAM: Second-Hand Smoke Affects Bladder Function in Children](#)
- US: CA: Prop 29: [Voters reject raising tobacco tax; LA Times: Opinion: Higher tax still a no-brainer](#)
- US: CA: Prop 29: [SF Chronicle: Editorial: Facts get smoked on cigarette tax initiative](#)
- US: CA: Prop 29: [Failure of Cigarette Tax Is The Big Money Story This Week](#)

- US: FDA: [LA Times: Editorial: Bills in Congress to remove authority to regulate cigars would be a mistake](#)

In this Edition:

- Acad Med - Hauer: US: Behavior Change Counseling Curricula for Medical Trainees
- Addiction - Black: UK: England: NRT: Smoker perceptions: Beliefs about long-term use harms
- BMC Health Serv Res - McDermott: UK: Practices of stop smoking service commissioners & managers
- Brain Tumor Pathol - Khalil: Nicotine & EGFR: Malignant glioma cells: Proliferation, migration & radioresistance
- Circ - Rodriguez: Disparities in Ideal Cardiovascular Health: Challenge or Opportunity?
- Curr HIV/AIDS Rep - Lifson: Smoking & HIV: Prevalence, Health Risks & Cessation Strategies
- Drug Alc Depend - Sofuoglu: Reinforcement threshold for nicotine as tobacco control target
- Eval Health Prof - Widome: US: PoS Advertising, Neighborhood Characteristics & Underage Tobacco Sales
- Fw: Environ Health Prev Med - Noborisaka: Japan: Smoking & CKD in healthy middle-aged working population
- Fam Commun Health - Quintiliani: US: Dissemination of a cessation program for unionized workers
- Health Econ - Brown: US: Quitlines, taxes & other TC policies: State-level analysis
- Heart Views - Ali: Qatar: Sweka: AMI in a Young Adult Male Associated with ST use
- Intens Care Med - Gillies: UK: NRT in critically ill smokers: retrospective cohort study
- Int Endod J - Walter: Association of tobacco use & periapical pathosis: Systematic review
- IJERPH - Sebr e: LAC: Smokefree Policies in Latin America & the Caribbean: Making Progress
- Int J Eq Health - Dawson: Australia: Aboriginal Health Workers & multilevel barriers to quitting
- Int J Prev Med - Stoner: NZ: Lifestyle Changes & CVD Epidemic Prevention among Indigenous Populations
- J Environ Pub Health - McMillen: US: Use of Emerging Tobacco Products; Young: ITC 4-Country: RYO Trends
- J Muscle Res Cell Motil - Rom: Possible CS constituents responsible for muscle catabolism

- MMWR Surv Summ - Eaton: US: YRBS 2011: High School Smoking Rate Falls to New Low
- Pediatr Blood Cancer - Sansom-Daly: Parental smoking, childhood cancer, environmental & lifestyle costs
- PLoS One - Mahar: NRT & Hippocampal Neuroplasticity during Pregnancy & Breastfeeding
- Popul Stud - Murphy: UK: England/Wales: Age-period-cohort model, CS & 20th Century adult mortality trends
- PNAS - Billen: Varenicline/nAChRs: Molecular actions of smoking cessation drugs
- Sci World J - Sazak: Turkey: Umbilical cord serum erythropoietin levels & smoking in pregnancy
- Trends Endocrinol Metab - Tweed: Endocrine effects of nicotine & cigarette smoke

Abstracts:

Behavior Change Counseling Curricula for Medical Trainees: A Systematic Review

[Acad Med.](#) 2012 May 22. [Epub ahead of print]

[Hauer KE](#), [Carney PA](#), [Chang A](#), [Satterfield J](#).

Abstract

PURPOSE:

Unhealthy behaviors contribute to half of U.S. deaths. However, physicians lack sufficient skill in counseling patients to change behaviors. Characterizing effective published curricular interventions for behavior change counseling for medical trainees would inform educators toward improved training.

METHOD:

The authors conducted a systematic literature search of studies published between 1965 and 2011 evaluating curricula on behavior change counseling for medical trainees. Included studies described (1) behavior change counseling, (2) teaching interventions for medical trainees, and (3) assessment of interventions. The authors extracted eligible articles, rated outcomes for learners and patients using Kirkpatrick's hierarchy, and determined study quality.

RESULTS:

Of 2,788 identified citations, 109 met inclusion criteria. Most studies were performed in the United States (98), 93 at a single institution, and 81 in primary care settings. Curricular topics for counseling included smoking (67 studies), nutrition (30), alcohol/drug use (26), and exercise (22). Although most studies did not include theoretical frameworks, 39 used the Transtheoretical Model of Change. Sixty-two studies involved eight or fewer hours of curricular time, and 51 spanned four or fewer weeks. The studies with highest-level outcomes and quality employed multiple curricular techniques and included practice of counseling techniques in either simulated or actual clinical settings.

CONCLUSIONS:

Existing literature suggests that trainees learn behavior change counseling through active, realistic practice and implementation of reminder and feedback systems within actual clinical practice settings. Multiinstitutional medical education research on methods of teaching behavior change counseling that influence patients' health outcomes are needed to ensure trainees' clinical competence and improve patient care.

http://journals.lww.com/academicmedicine/Abstract/publishahead/Behavior_Change_Counseling_Curricula_for_Medical.99623.aspx

Beliefs about the harms of long-term use of nicotine replacement therapy: perceptions of smokers in England

Addiction

[Accepted Article](#) (Accepted, unedited articles published online for future issues)

Accepted manuscript online: **28 MAY 2012**

Andrew Black, Emma Beard, Jamie Brown, Jenny Fidler and Robert West

12.11.2012

Abstract

Aims

Previous research has shown that a substantial proportion of smokers believe that nicotine causes serious diseases such as cancer, possibly deterring the use of nicotine replacement therapy (NRT) for smoking cessation or smoking reduction. This study examined beliefs about the harms specifically from long-term use of NRT and associations between these and its use for smoking cessation and smoking reduction.

Design/setting

Data were collected from 1,657 smokers and recent ex-smokers involved in the Smoking Toolkit Study, a series of monthly household surveys of English adults aged 16 and over.

Measurements

Participants were asked if they thought the use of NRT for a year or more was harmful, and if so to volunteer what they believed the harms to be. They were also asked if they were using NRT for smoking reduction and/or if they had used NRT in the past year during a quit attempt

Findings

Thirty-one per cent of smokers believed that the long-term use of NRT was harmful to health and a further 29% reported that they 'didn't know'. The most commonly reported harms were addiction and lung cancer. There was no association between these beliefs and use of NRT for smoking reduction or smoking cessation ($p>0.05$)

Conclusion

A significant minority of smokers in England believe that the use of nicotine replacement therapy for a year or more is harmful. However, belief that long-term nicotine replacement therapy use can cause health harm does not appear to act as a deterrent to using it in a quit attempt or for smoking reduction.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1360-0443.2012.03955.x/abstract>

Also:

The impact of media campaigns on smoking cessation activity: A STRUCTURAL VECTOR AUTOREGRESSION ANALYSIS

<http://onlinelibrary.wiley.com/doi/10.1111/j.1360-0443.2012.03958.x/abstract>

Translating evidence-based guidelines into practice: a survey of practices of commissioners and managers of the English stop smoking services

[BMC Health Serv Res.](#) 2012 May 23;12(1):121. [Epub ahead of print]

[McDermott MS](#), [Thomson H](#), [West R](#), [Kenyon JA](#), [McEwen A](#).

Abstract

BACKGROUND:

The English National Health Service's (NHS) Stop Smoking Services (SSSs) constitute one of the most highly developed behavioural support programmes in the world. However, there is significant variation in success rates across the

approximately 150 services, some of which may be due to variation in practice. This study aimed to assess these differences in practice.

METHODS:

Two online surveys were administered. All commissioners (people who purchase services for the NHS) and managers (those who run the services) of NHS SSSs in England were invited to participate. Items included details of current practices and services provided, what informed the commissioning of SSSs, what targets were included within service specifications and whether the types of treatment model to be delivered were specified.

RESULTS:

Both surveys had a response rate of 35%, with 50 commissioners and 58 managers participating. There were no significant differences between the characteristics of the Primary Care Trusts (PCTs) from which commissioners and managers responded to this survey and those PCTs from which there was no response. Managers reported that the treatment model most frequently offered by SSSs was one-to-one (98%). A total of 16% of managers reported that some approved medications were not available as first-line treatments. Just over one third (38%) of commissioners reported consulting national guidelines or best evidence to inform local commissioning. Almost one third (30%) of commissioners reported that they specified the types of stop smoking interventions to be delivered by the providers.

CONCLUSIONS:

A substantial part of commissioning of Stop Smoking Services in England appears to take place without adequate consultation of evidence-based guidelines or specification of the service to be provided. This may account for at least some of the variation in success rates.

<http://www.biomedcentral.com/1472-6963/12/121/abstract>

<http://www.biomedcentral.com/content/pdf/1472-6963-12-121.pdf>

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

Nicotine enhances proliferation, migration, and radioresistance of human malignant glioma cells through EGFR activation

[Brain Tumor Pathol.](#) 2012 May 22. [Epub ahead of print]

[Khalil AA](#), [Jameson MJ](#), [Broaddus WC](#), [Lin PS](#), [Chung TD](#).

Abstract

It has been suggested that continued tobacco use during radiation therapy contributes to maintenance of neoplastic growth despite treatment with radiation. Nicotine is a cigarette component that is an established risk factor for many diseases, neoplastic and otherwise. The hypothesis of this work is that nicotine promotes the proliferation, migration, and radioresistance of human malignant glioma cells. The effect of nicotine on cellular proliferation, migration, signaling, and radiation sensitivity were evaluated for malignant glioma U87 and GBM12 cells by use of the AlamarBlue, scratch healing, and clonogenic survival assays. Signal transduction was assessed by immunoblotting for activated EGFR, ERK, and AKT. At concentrations comparable with those found in chronic smokers, nicotine induced malignant glioma cell migration, growth, colony formation, and radioresistance. Nicotine increased phosphorylation of EGFR(Tyr992), AKT(Ser473), and ERK. These molecular effects were reduced by pharmacological inhibitors of EGFR, PI3K, and MEK. It was therefore concluded that nicotine stimulates the malignant behavior of glioma cells in vitro by activation of the EGFR and downstream AKT and ERK pathways.

<http://www.springerlink.com/content/j15088525k066h7p/>

Editorial

Disparities in Ideal Cardiovascular Health: A Challenge or an Opportunity?

[Circulation](#). 2012 May 22. [Epub ahead of print]

[Rodriguez CJ](#).

Abstract

In 2010, the American Heart Association (AHA) declared 2020 health strategy goals to reduce deaths from cardiovascular disease and stroke by 20% and to improve the cardiovascular health (CVH) of all Americans by 20%.⁽¹⁾ The latter goal is aimed at helping everyone living in the United States (US) to achieve, or at least move toward ideal CVH by focusing on seven key health behaviors and risk factors - smoking, body mass-index, diet (based on the healthy diet score), participation in physical activity, and levels of blood pressure (<120/80 mm Hg), blood glucose (<100 mg/dL), and total cholesterol (<200 mg/dL).⁽²⁾ What must not be forgotten is that this 2020 AHA strategy was instituted against the background of health disparities identified by the Institute of Medicine⁽³⁾ in 2003 that are still present in our society today. In this issue, Dong et al.⁽⁴⁾ describe a strong, graded relationship between the number of ideal CVH metrics and cardiovascular disease (CVD) risk (stroke, MI, and vascular death) among whites, blacks, and Hispanics living in the same community. Furthermore, the authors assessed stroke as a separate outcome event whereas prior studies⁽⁵⁻⁸⁾ on ideal CV health either did not include stroke or treated stroke only as a component of a composite outcome.

<http://circ.ahajournals.org/content/early/2012/05/22/CIRCULATIONAHA.112.112680.abstract>

Referenced *Circ* study:

Ideal Cardiovascular Health Predicts Lower Risks of Myocardial Infarction, Stroke, and Vascular Death across Whites, Blacks and Hispanics: the Northern Manhattan Study

<http://circ.ahajournals.org/content/early/2012/05/21/CIRCULATIONAHA.111.081083.abstract>

Smoking and HIV: Prevalence, Health Risks, and Cessation Strategies

[Curr HIV/AIDS Rep](#). 2012 May 22. [Epub ahead of print]

[Lifson AR](#), [Lando HA](#).

Abstract

Health hazards due to smoking may undermine benefits of HIV treatment on morbidity and mortality. Over 40 % of persons with HIV are current smokers. Health risks of smoking include increases in some HIV-associated infections, cardiovascular disease, some cancers, bacterial pneumonia and other lung disease, and overall mortality. Proven strategies for smoking cessation include various counseling approaches, nicotine replacement therapy and other pharmacotherapy; approaches may need to be individualized to address specific client needs and comorbidities. HIV clinicians and other service providers can have an influential role in screening their patients for smoking and promoting cessation programs to improve health.

<http://www.springerlink.com/content/e237511553477p8w/>

The reinforcement threshold for nicotine as a target for tobacco control

[Drug Alcohol Depend](#). 2012 May 21. [Epub ahead of print]

[Sofuoglu M](#), [Lesage MG](#).

Abstract

BACKGROUND:

Cigarette smoking represents an enormous public health problem worldwide that leads to over 5 million deaths per year. The gradual reduction of the nicotine content of cigarettes below the threshold that is required to develop addiction is one strategy that might substantially reduce the number of addicted smokers and prevent adolescents from becoming

addicted to nicotine (Benowitz and Henningfield, 1994). While the potential public health benefits of this approach are enormous, the guiding concepts and relevant empirical evidence needed to support the implementation of a nicotine reduction policy require a critical examination.

METHODS:

The purpose of this paper is to briefly review the current concepts and research regarding nicotine reduction while also discussing the utility of the addictive threshold for nicotine in this approach. The accurate determination of the nicotine addiction threshold presents some conceptual challenges as there is a lack of consensus on how to best measure nicotine addiction. This difficulty can impede the progress for developing a science-based tobacco control policy. As an alternative, the nicotine reinforcement threshold is a relatively clear concept, and well-accepted methods and criteria are available to measure nicotine reinforcement.

RESULTS:

However, there are many gaps in our current knowledge concerning the nicotine reinforcement threshold in humans. The threshold for nicotine reinforcement remains to be determined in controlled settings using different populations of current or potential tobacco users. In addition, the value of the nicotine reinforcement threshold in predicting tobacco use in real-world settings needs to be examined. The results of such studies will determine the potential utility of the estimated threshold for nicotine reinforcement in developing science-based tobacco control policies.

<http://www.sciencedirect.com/science/article/pii/S0376871612001494>

Also:

Cognitive effects of the acetylcholinesterase inhibitor, donepezil, in healthy, non-treatment seeking smokers: A pilot feasibility study

<http://www.sciencedirect.com/science/article/pii/S0376871612001457>

The effects of continuing and discontinuing smoking on the development of chronic kidney disease (CKD) in the healthy middle-aged working population in Japan

[Environ Health Prev Med.](#) 2012 May 24. [Epub ahead of print]

[Noborisaka Y, Ishizaki M, Yamada Y, Honda R, Yokoyama H, Miyao M, Tabata M.](#)

Abstract

OBJECTIVES:

The strength of the association between smoking and the development of chronic kidney disease (CKD) in the healthy middle-aged working age population has not been established.

METHODS:

This was a retrospective 6-year observational study involving 4,121 male and 2,877 female workers who were free of primary kidney disease, diabetes mellitus, severe hypertension, and the signs and symptoms of CKD. Proteinuria was detected by a dipstick method, and glomerular filtration rate (GFR) was estimated by the equation of the Japan Society of Nephrology.

RESULTS:

Sixty men (1.5 %) and 21 women (0.7 %) developed proteinuria over the 6 years of the study. Irrespective of sex, in comparison with non-smokers, those who continued smoking showed an odds ratio (OR) of 2.52 with a 95 % confidence interval (CI) of 1.50-4.25 for developing proteinuria while those who quit smoking showed an OR of 1.29 (95 % CI 0.48-3.42), following adjustment for confounders. Among the study population, 443 men (10.7 %) and 356 women (12.4 %) developed a GFR of <60 mL/min/1.73 m², corresponding to stage III CKD. Continuing smokers had a low OR (0.74, 95 % CI 0.60-0.90) for developing a low GFR, as well as a higher mean GFR than non-smokers. The reduction in GFR during the 6-year study period was not different between smokers and non-smokers, but it was larger in those who developed proteinuria than in those who did not, irrespective of smoking.

CONCLUSIONS:

Continuing smokers showed a twofold or more higher risk of developing proteinuria. Discontinuation of smoking substantially reduced the risk. A longer observational period may be required to detect the smoking-induced risk of developing stage III CKD in the middle-aged working population.

<http://www.springerlink.com/content/4k414wp1781r1633/?MUD=MP>

The Relationship of Point-of-Sale Tobacco Advertising and Neighborhood Characteristics to Underage Sales of Tobacco

[Eval Health Prof.](#) 2012 May 21. [Epub ahead of print]

[Widome R](#), [Brock B](#), [Noble P](#), [Forster JL](#).

Abstract

Our objective was to determine how point-of-sale tobacco marketing may relate to sales to minors. The authors used data from a 2007 cross-sectional study of the retail tobacco marketing environments in the St. Paul, MN metropolitan area matched with a database of age-of-sale compliance checks (random, covert test purchases by a minor, coordinated by law enforcement) of tobacco retailers and U.S. Census data to test whether certain characteristics of advertising or neighborhoods were associated with compliance check failure. The authors found that tobacco stores were the most likely type of store to fail compliance checks (44% failure), supermarkets were least likely (3%). Aside from a marginally significant association with Hispanic population proportion, there was no other association between either store advertising characteristics or neighborhood demographics and stores' compliance check failure. Though our findings were null, the relationship between advertising and real youth sales may be more nuanced as compliance checks do not perfectly simulate the way youth attempt to purchase cigarettes.

<http://ehp.sagepub.com/content/early/2012/05/17/0163278712447624.abstract>

Dissemination of a tobacco cessation program for unionized workers

[Fam Community Health.](#) 2012 Jul;35(3):246-55.

[Quintiliani L](#), [Stoddard A](#), [Lederman R](#), [Harden E](#), [Wallace L](#), [Sorensen G](#).

Abstract

Many multilevel, contextually relevant, evidenced-based health promotion programs are not disseminated widely. The purpose of this study is to describe the adaptation of a published effective tobacco-use cessation intervention, which was implemented and evaluated in a broader population of unionized workers partnering with a health and welfare fund health benefits carrier. 68 tobacco users enrolled. Implementation and effectiveness outcomes indicated that most participants (69%) completed all counseling calls and at 16 weeks' follow-up, 30.9% reported not using tobacco. The intervention had relatively high levels of implementation, effectiveness, and acceptability, but low reach, highlighting issues arising during dissemination.

<http://journals.lww.com/familyandcommunityhealth/pages/articleviewer.aspx?year=2012&issue=07000&article=00008&type=abstract>

CIGARETTE QUITLINES, TAXES, AND OTHER TOBACCO CONTROL POLICIES: A STATE-LEVEL ANALYSIS

[Health Econ.](#) 2012 May 22. doi: 10.1002/hec.2846. [Epub ahead of print]

[Brown HS](#), [Karson S](#).

Abstract

This paper estimates monthly quitline calls using panel data at the state level from January 2005 to June 2010. Calls to state quitline numbers (or 1-800-QUITNOW) were measured per million adult smokers in each state. The policies considered include excise taxes, workplace and public smoking bans, and a Peter Jennings television-based program warning of the health risks of smoking. We found that people anticipating increases in prices begin attempting to quit by calling quitlines. Finally, the Peter Jennings media campaign was highly correlated with quitline calls.

<http://onlinelibrary.wiley.com/doi/10.1002/hec.2846/abstract>

Acute Myocardial Infarction in a Young Adult Male Associated with the use of Smokeless Tobacco (Sweka)

Heart Views. 2011 Oct;12(4):169-72.

[Ali WM](#), [Al-Aqeedi RF](#), [Gehani A](#).

Abstract

Dipping smokeless tobacco (ST) is used worldwide. We report a case of acute myocardial infarction in a young patient, who consumed smokeless tobacco (Sweka) for over one year. ST may be as harmful as smoking and carries adverse cardiac complications. A prompt call for restriction and prohibition is advised and its alternative use to quit smoking must be abandoned.

<http://www.heartviews.org/article.asp?issn=1995-705X;year=2011;volume=12;issue=4;spage=169;epage=172;aulast=Ali:type=0>

Safety of nicotine replacement therapy in critically ill smokers: a retrospective cohort study

Intensive Care Med. 2012 May 23. [Epub ahead of print]

[Gillies MA](#), [McKenzie CA](#), [Whiteley C](#), [Beale RJ](#), [Tibby SM](#).

Abstract

PURPOSE:

Nicotine replacement therapy (NRT) has been used to ameliorate nicotine withdrawal in the intensive care unit (ICU). Previous cohort studies have suggested an increased mortality with NRT use: methodological problems may call into question the validity of these findings. We undertook a retrospective cohort study to determine if NRT use was associated with adverse outcomes.

METHODS:

This retrospective cohort study was conducted in a 30-bed, university affiliated, teaching hospital ICU.

RESULTS:

We identified 423 smokers admitted over 2 years, of whom 73 received transdermal NRT. Cox proportional hazard regression models, with NRT modelled as a time-varying covariate, were used to test the hypothesis that NRT was associated with an altered ICU or hospital mortality. A second analysis utilized propensity scores. The unadjusted ICU and hospital mortalities were lower for the NRT group; although both differences were non-significant. The Cox models showed that, after adjustment for APACHE risk, age, sex and alcohol use, risk associated with NRT administration was not statistically different than non-administration for both ICU (hazard ratio 0.50, [95 % CI 0.20-1.24], $p = 0.14$) and hospital (hazard ratio 0.95, [95 % CI 0.52-1.75], $p = 0.88$) mortality. Similar findings occurred with the propensity matched analysis.

CONCLUSION:

We were unable to demonstrate any harm associated with NRT, with the ICU model actually trending towards benefit. We conclude that a randomised, blinded, placebo controlled trial is required to assess adequately the safety and efficacy of NRT as a treatment in critically ill smokers.

<http://www.springerlink.com/content/0058g8l128207548/>

Association of tobacco use and periapical pathosis - a systematic review

[Int Endod J.](#) 2012 Apr 24. doi: 10.1111/j.1365-2591.2012.02072.x. [Epub ahead of print]

[Walter C.](#), [Rodriguez FR.](#), [Taner B.](#), [Hecker H.](#), [Weiger R.](#)

Abstract

The aim was to review the current evidence regarding an association between tobacco use, that is, cigarette smoking, and periapical pathosis. A systematic MEDLINE search of articles published prior to October 2011 (4th) was conducted using the keywords 'smoking and endodontics OR smoking and periapical index'. The study selection, data preparation and validity assessment were conducted by two reviewers. Nine studies fulfilled the inclusion criteria and represented data from 3008 individuals. The studies differed with respect to (i) study design, (ii) radiographic techniques, (iii) assessment of periapical pathosis, (iv) classification of smoking characteristics and/or (v) potential confounders accounted for in the analyses. Five of six cross-sectional studies revealed a significant positive association (OR 1.35-16.8) between periapical pathosis and current cigarette smoking. One of three longitudinal studies indicated an increased risk (OR 1.7) of root treated teeth for current smokers. The substantial heterogeneity of the included studies limited their interpretation. Further, well-designed studies are required to investigate the association between tobacco use and periapical pathosis.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2591.2012.02072.x/abstract>

Review: Smokefree Policies in Latin America and the Caribbean: Making Progress

[Int. J. Environ. Res. Public Health](#) 2012, 9(5), 1954-1970; doi:10.3390/ijerph9051954

Ernesto M. Sebríe, Verónica Schoj, Mark J. Travers, Barbara McGaw and Stanton A. Glantz

Abstract

We reviewed the adoption and implementation of smokefree policies in all Latin American and the Caribbean (LAC) countries. Significant progress has been achieved among LAC countries since the WHO Framework Convention on Tobacco Control (FCTC) was adopted in 2005. Both national and sub-national legislation have provided effective mechanisms to increase the fraction of the population protected from secondhand tobacco smoke. Civil society has actively promoted these policies and played a main role in enacting them and monitoring their enforcement. The tobacco industry, while continuing to oppose the approval and regulation of the laws at legislative and executive levels, has gone a step further by litigating against them in the Courts. As in the US and elsewhere, this litigation has failed to stop the legislation.

<http://www.mdpi.com/1660-4601/9/5/1954/>

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

Aboriginal Health Workers experience multilevel barriers to quitting smoking: a qualitative study

[Int J Equity Health.](#) 2012 May 23;11(1):27. [Epub ahead of print]

[Dawson AP.](#), [Cargo M.](#), [Stewart H.](#), [Chong A.](#), [Daniel M.](#)

Abstract

INTRODUCTION:

Long-term measures to reduce tobacco consumption in Australia have had differential effects in the population. The prevalence of smoking in Aboriginal peoples is currently more than double that of the non-Aboriginal population. Aboriginal Health Workers are responsible for providing primary health care to Aboriginal clients including smoking cessation programs. However, Aboriginal Health Workers are frequently smokers themselves, and their smoking undermines the smoking cessation services they deliver to Aboriginal clients. An understanding of the barriers to quitting smoking experienced by Aboriginal Health Workers is needed to design culturally relevant smoking cessation programs. Once smoking is reduced in Aboriginal Health Workers, they may then be able to support Aboriginal clients to quit smoking.

METHODS:

We undertook a fundamental qualitative description study underpinned by social ecological theory. The research was participatory, and academic researchers worked in partnership with personnel from the local Aboriginal health council. The barriers Aboriginal Health Workers experience in relation to quitting smoking were explored in 34 semi-structured interviews (with 23 Aboriginal Health Workers and 11 other health staff) and 3 focus groups (n = 17 participants) with key informants. Content analysis was performed on transcribed text and interview notes.

RESULTS:

Aboriginal Health Workers spoke of burdensome stress and grief which made them unable to prioritise quitting smoking. They lacked knowledge about quitting and access to culturally relevant quitting resources. Interpersonal obstacles included a social pressure to smoke, social exclusion when quitting, and few role models. In many workplaces, smoking was part of organisational culture and there were challenges to implementation of Smokefree policy. Respondents identified inadequate funding of tobacco programs and a lack of Smokefree public spaces as policy level barriers. The normalisation of smoking in Aboriginal society was an overarching challenge to quitting.

CONCLUSIONS:

Aboriginal Health Workers experience multilevel barriers to quitting smoking that include personal, social, cultural and environmental factors. Multidimensional smoking cessation programs are needed that reduce the stress and burden for Aboriginal Health Workers; provide access to culturally relevant quitting resources; and address the prevailing normalisation of smoking in the family, workplace and community.

<http://www.equityhealthj.com/content/11/1/27/abstract>
<http://www.equityhealthj.com/content/pdf/1475-9276-11-27.pdf>

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

Preventing a Cardiovascular Disease Epidemic among Indigenous Populations through Lifestyle Changes

[Int J Prev Med.](#) 2012 Apr;3(4):230-40.

[Stoner L](#), [Stoner KR](#), [Young JM](#), [Fryer S](#).

Abstract

Cardiovascular disease (CVD) is the driving force behind the discrepancy in life expectancy between indigenous and non-indigenous groups in many countries. Preceding CVD many indigenous groups exhibit a cluster of cardiometabolic risk factors, including overweight-obesity, diabetes, high cholesterol, and high blood pressure. In turn, modifiable lifestyle risk factors contribute to the development of this cluster of cardiometabolic conditions. Modifiable lifestyle risk factors include, but are not limited to, physical inactivity, poor nutrition, excessive alcohol consumption, and cigarette smoking. Notably, these metabolic and lifestyle risk factors are relatively simple to monitor and track. The current review will look at modifiable cardiometabolic (overweight-obesity, diabetes mellitus, high cholesterol, and high blood pressure) and lifestyle (physical inactivity, poor nutrition, risky alcohol behavior, and cigarette smoking) risk factors among indigenous populations from Australia (Aboriginal Australians and Torres Strait Islanders), New Zealand (Māori) and the United States (Native Americans). Discussion will focus on the causal relationship between modifiable lifestyle risk factors and cardiometabolic outcomes, as well as, simple measurements for tracking these risk factors.

<http://ijpm.mui.ac.ir/index.php/ijpm/article/view/588>

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

Use of Emerging Tobacco Products in the United States

Journal of Environmental and Public Health
Volume 2012 (2012), Article ID 989474, 8 pages
Accepted 1 March 2012

Robert McMillen, Jeomi Maduka, and Jonathan Winickoff

Abstract

This paper provides the first nationally representative estimates for use of four emerging products. Addressing the issue of land-line substitution with cell phones, we used a mixed-mode survey to obtain two representative samples of US adults. Of 3,240 eligible respondents contacted, 74% completed surveys. In the weighted analysis, 13.6% have tried at least one emerging tobacco product; 5.1% snus; 8.8% waterpipe; 0.6% dissolvable tobacco products; 1.8% electronic nicotine delivery systems (ENDS) products. Daily smokers (25.1%) and nondaily smokers (34.9%) were the most likely to have tried at least one of these products, compared to former smokers (17.2%) and never smokers (7.7%), $P < .001$. 18.2% of young adults 18–24 and 12.8% of those >24 have tried one of these products, $P < .01$. In multivariable analysis, current daily (5.5, 4.3–7.6), nondaily (6.1, 4.0–9.3), and former smoking status (2.7, 2.1–3.6) remained significant, as did young adults (2.2, 1.6–3.0); males (3.5, 2.8–4.5); higher educational attainment; some college (2.7, 1.7–4.2); college degree (2.0, 1.3–3.3). Use of these products raises concerns about nonsmokers being at risk for nicotine dependence and current smokers maintaining their dependence. Greater awareness of emerging tobacco product prevalence and the high risk demographic user groups might inform efforts to determine appropriate public health policy and regulatory action.

<http://www.hindawi.com/journals/jeph/2012/989474/>

Also:

Trends in Roll-Your-Own Smoking: Findings from the ITC Four-Country Survey (2002–2008)

<http://www.hindawi.com/journals/jeph/2012/406283/>

Reshuffling and relocating: the gendered and income-related differential effects of restricting smoking locations

<http://www.hindawi.com/journals/jeph/2012/907832/>

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

Identification of possible cigarette smoke constituents responsible for muscle catabolism

[J Muscle Res Cell Motil.](#) 2012 May 22. [Epub ahead of print]

[Rom O](#), [Kaisari S](#), [Aizenbud D](#), [Reznick AZ](#).

Abstract

The age-related loss of muscle mass and strength also known as sarcopenia is significantly influenced by life style factors such as physical inactivity and impaired nutrition. Cigarette smoking is another life style habit that has been shown to be associated with sarcopenia and to affect skeletal muscle. Even today, smoking is still prevalent worldwide and is probably the most significant source of toxic chemicals exposure to humans. Cigarette smoke (CS) is a complex aerosol consisting of thousands of various constituents including reactive oxygen and nitrogen free radicals, toxic aldehydes and more. Previous epidemiological studies have identified tobacco smoking as a risk factor for sarcopenia. Clinical, in vivo and in vitro studies have revealed CS-induced skeletal muscle damage due to impaired muscle metabolism, increased inflammation and oxidative stress, over-expression of atrophy related genes and activation of various intracellular signaling pathways. This review aims to discuss and identify the components of CS that may promote catabolism of skeletal muscle.

<http://www.springerlink.com/content/9239464x12630524/>

Youth Risk Behavior Surveillance — United States, 2011

[Morbidity and Mortality Weekly Report \(MMWR\)](#)

Surveillance Summaries

June 8, 2012 / 61(SS04);1-162

Danice K. Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, Katherine H. Flint, Joseph Hawkins, William A. Harris, Richard Lowry, Tim McManus, David Chyen, Lisa Whittle, Connie Lim, Howell Wechsler

Abstract

Problem: Priority health-risk behaviors, which are behaviors that contribute to the leading causes of morbidity and mortality among youth and adults, often are established during childhood and adolescence, extend into adulthood, and are interrelated and preventable.

Reporting Period Covered: September 2010–December 2011.

Description of the System: The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of priority health-risk behaviors among youth and young adults: 1) behaviors that contribute to unintentional injuries and violence; 2) tobacco use; 3) alcohol and other drug use; 4) sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infection; 5) unhealthy dietary behaviors; and 6) physical inactivity. In addition, YRBSS monitors the prevalence of obesity and asthma. YRBSS includes a national school-based Youth Risk Behavior Survey (YRBS) conducted by CDC and state and large urban school district school-based YRBSSs conducted by state and local education and health agencies. This report summarizes results from the 2011 national survey, 43 state surveys, and 21 large urban school district surveys conducted among students in grades 9–12.

Results: Results from the 2011 national YRBS indicated that many high school students are engaged in priority health-risk behaviors associated with the leading causes of death among persons aged 10–24 years in the United States. During the 30 days before the survey, 32.8% of high school students nationwide had texted or e-mailed while driving, 38.7% had drunk alcohol, and 23.1% had used marijuana. During the 12 months before the survey, 32.8% of students had been in a physical fight, 20.1% had ever been bullied on school property, and 7.8% had attempted suicide. Many high school students nationwide are engaged in sexual risk behaviors associated with unintended pregnancies and STDs, including HIV infection. Nearly half (47.4%) of students had ever had sexual intercourse, 33.7% had had sexual intercourse during the 3 months before the survey (i.e., currently sexually active), and 15.3% had had sexual intercourse with four or more people during their life. Among currently sexually active students, 60.2% had used a condom during their last sexual intercourse. Results from the 2011 national YRBS also indicate many high school students are engaged in behaviors associated with the leading causes of death among adults aged ≥ 25 years in the United States. During the 30 days before the survey, 18.1% of high school students had smoked cigarettes and 7.7% had used smokeless tobacco. During the 7 days before the survey, 4.8% of high school students had not eaten fruit or drunk 100% fruit juices and 5.7% had not eaten vegetables. Nearly one-third (31.1%) had played video or computer games for 3 or more hours on an average school day.

Interpretation: Since 1991, the prevalence of many priority health-risk behaviors among high school students nationwide has decreased. However, many high school students continue to engage in behaviors that place them at risk for the leading causes of morbidity and mortality. Variations were observed in many health-risk behaviors by sex, race/ethnicity, and grade. The prevalence of some health-risk behaviors varied substantially among states and large urban school districts.

Public Health Action: YRBS data are used to measure progress toward achieving 20 national health objectives for *Healthy People 2020* and one of the 26 leading health indicators; to assess trends in priority health-risk behaviors among high school students; and to evaluate the impact of broad school and community interventions at the national, state, and local levels. More effective school health programs and other policy and programmatic interventions are needed to reduce risk and improve health outcomes among youth.

Tobacco Use

Ever Smoked Cigarettes

Nationwide, 44.7% of students had ever tried cigarette smoking (even one or two puffs) (i.e., ever smoked cigarettes) ([Table 27](#)). Overall, the prevalence of having ever smoked cigarettes was higher among male (46.3%) than female (42.9%) students; higher among Hispanic male (51.5%) than Hispanic female (45.5%) students; and higher among 11th-grade male (50.2%) than 11th-grade female (43.9%) students. Overall, the prevalence of having ever smoked cigarettes was higher among white (44.2%) and Hispanic (48.6%) than black (39.1%) students; higher among Hispanic female (45.5%) than black female (38.0%) students; higher among white male (45.6%) than black male (40.0%) students; and higher among Hispanic male (51.5%) than white male (45.6%) and black male (40.0%) students. Overall, the prevalence of

having ever smoked cigarettes was higher among 11th-grade (47.1%) and 12th-grade (54.5%) than 9th-grade (37.6%) and 10th-grade (41.0%) students; higher among 12th-grade (54.5%) than 11th-grade (47.1%) students; higher among 10th-grade female (40.8%), 11th-grade female (43.9%), and 12th-grade female (53.6%) than 9th-grade female (35.0%) students; higher among 12th-grade female (53.6%) than 10th-grade female (40.8%) and 11th-grade female (43.9%) students; and higher among 11th-grade male (50.2%) and 12th-grade male (55.3%) than 9th-grade male (40.0%) and 10th-grade male (41.1%) students. The prevalence of having ever smoked cigarettes ranged from 23.1% to 59.5% across state surveys (median: 46.4%) and from 28.9% to 51.1% across large urban school district surveys (median: 41.0%)

<http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6104a1.htm>

<http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf>

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

Related coverage & PR:

Number of high school students who smoke continues to drop

<http://www2.journalnow.com/news/2012/jun/07/number-of-high-school-students-who-smoke-continues-ar-2341108/>

CDC Survey Shows U.S. High School Smoking Rate Fell to New Low in 2011

<http://www.marketwatch.com/story/cdc-survey-shows-us-high-school-smoking-rate-fell-to-new-low-in-2011-2012-06-07>

Letter to the Editor

Parental smoking may confer negligible environmental, but significant lifestyle costs to childhood cancer survivors

***Pediatr Blood Cancer*. 2012 May 23. doi: 10.1002/pbc.24209. [Epub ahead of print]**

[Sansom-Daly UM](#), [Wilson CL](#), [Ashton LJ](#), [Wakefield CE](#), [Johnston K](#), [Cohn RJ](#).

To the Editor: We read with interest the recent meta-analysis by Klimentopoulou et al., which concluded that no substantive support exists to suggest that prenatal maternal smoking contributes to childhood leukemia risk...

Although our data cannot speak to the environmental risks posed by prenatal PSE in the etiology of cancer, the responses from our sample illuminated another aspect of the risks posed by childhood PSE. Consistent with recent international reports, our findings indicated that childhood PSE confers a significant risk for survivors' later health-related behaviors...

In light of this, early, family-level interventions targeting a reduction of PSE in this population appear critical. Consequently, we recommend that educational and behavioral interventions targeting parental smoking be incorporated from diagnosis, using "teachable moments," as part of a coordinated effort to ensure the long-term health of the child with cancer.

<http://onlinelibrary.wiley.com/doi/10.1002/pbc.24209/abstract>

Referenced *Pediatr Blood Cancer* study:

Maternal smoking during pregnancy and risk for childhood leukemia: A nationwide case-control study in Greece and meta-analysis

<http://onlinelibrary.wiley.com/doi/10.1002/pbc.23347/abstract>

Developmental Hippocampal Neuroplasticity in a Model of Nicotine Replacement Therapy during Pregnancy and Breastfeeding

***PLoS One*. 2012;7(5):e37219. Epub 2012 May 15.**

[Mahar I](#), [Bagot RC](#), [Davoli MA](#), [Miksys S](#), [Tyndale RF](#), [Walker CD](#), [Maheu M](#), [Huang SH](#), [Wong TP](#), [Mechawar N](#).

Abstract**RATIONALE:**

The influence of developmental nicotine exposure on the brain represents an important health topic in light of the popularity of nicotine replacement therapy (NRT) as a smoking cessation method during pregnancy.

OBJECTIVES:

In this study, we used a model of NRT during pregnancy and breastfeeding to explore the consequences of chronic developmental nicotine exposure on cerebral neuroplasticity in the offspring. We focused on two dynamic lifelong phenomena in the dentate gyrus (DG) of the hippocampus that are highly sensitive to the environment: granule cell neurogenesis and long-term potentiation (LTP).

METHODS:

Pregnant rats were implanted with osmotic mini-pumps delivering either nicotine or saline solutions. Plasma nicotine and metabolite levels were measured in dams and offspring. Corticosterone levels, DG neurogenesis (cell proliferation, survival and differentiation) and glutamatergic electrophysiological activity were measured in pups.

RESULTS:

Juvenile (P15) and adolescent (P41) offspring exposed to nicotine throughout prenatal and postnatal development displayed no significant alteration in DG neurogenesis compared to control offspring. However, NRT-like nicotine exposure significantly increased LTP in the DG of juvenile offspring as measured in vitro from hippocampal slices, suggesting that the mechanisms underlying nicotine-induced LTP enhancement previously described in adult rats are already functional in pups.

CONCLUSIONS:

These results indicate that synaptic plasticity is disrupted in offspring breastfed by dams passively exposed to nicotine in an NRT-like fashion.

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0037219>

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

Use of an age-period-cohort model to reveal the impact of cigarette smoking on trends in Twentieth-century adult cohort mortality in England and Wales

[Popul Stud \(Camb\)](#). 2012 May 22. [Epub ahead of print]

[Murphy M](#), [Di Cesare M](#).

Abstract

We use an age-period-cohort (APC) model to estimate the contribution of smoking-related mortality to cohort changes in adult mortality in Britain since 1950. We show that lung cancer and overall mortality can be satisfactorily modelled using cohort relative risk and a fixed age pattern. The results of the model suggest that smoking by itself can account for a substantial fraction of change in cohort mortality for those born around the first half of the twentieth century. In particular, smoking provides an explanation for the higher-than-average improvement in the mortality of both males and females born around 1930. Our confidence in the correctness of the results of the models is strengthened by the fact that they are very similar to those of the Peto-Lopez and Preston-Glei-Wilmoth models that estimate the contribution of smoking-related to overall mortality.

<http://www.tandfonline.com/doi/abs/10.1080/00324728.2012.678881>

Molecular actions of smoking cessation drugs at $\alpha 4\beta 2$ nicotinic receptors defined in crystal structures of a homologous binding protein

[Proc Natl Acad Sci U S A](#). 2012 May 22. [Epub ahead of print]

[Billen B](#), [Spurny R](#), [Brams M](#), [van Elk R](#), [Valera-Kummer S](#), [Yakel JL](#), [Voets T](#), [Bertrand D](#), [Smit AB](#), [Ulens C](#).

Abstract

Partial agonists of the $\alpha 4\beta 2$ nicotinic acetylcholine receptor (nAChR), such as varenicline, are therapeutically used in smoking cessation treatment. These drugs derive their therapeutic effect from fundamental molecular actions, which are to desensitize $\alpha 4\beta 2$ nAChRs and induce channel opening with higher affinity, but lower efficacy than a full agonist at equal receptor occupancy. Here, we report X-ray crystal structures of a unique acetylcholine binding protein (AChBP) from the annelid *Capitella teleta*, Ct-AChBP, in complex with varenicline or lobeline, which are both partial agonists. These structures highlight the architecture for molecular recognition of these ligands, indicating the contact residues that potentially mediate their molecular actions in $\alpha 4\beta 2$ nAChRs. We then used structure-guided mutagenesis and electrophysiological recordings to pinpoint crucial interactions of varenicline with residues on the complementary face of the binding site in $\alpha 4\beta 2$ nAChRs. We observe that residues in loops D and E are molecular determinants of desensitization and channel opening with limited efficacy by the partial agonist varenicline. Together, this study analyzes molecular recognition of smoking cessation drugs by nAChRs in a structural context.

<http://www.pnas.org/content/early/2012/05/21/1116397109.abstract>

<http://www.pnas.org/content/early/2012/05/21/1116397109.long>

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

Umbilical cord serum erythropoietin levels and maternal smoking in pregnancy

[ScientificWorldJournal](#). 2012;2012:420763. Epub 2012 May 1.

[Sazak S](#), [Kayiran SM](#), [Paksoy Y](#).

Abstract

Objective. To evaluate the effect of maternal smoking during pregnancy on levels of umbilical cord erythropoietin. **Methods.** Erythropoietin levels were measured in umbilical cord sera of 60 newborns who were delivered vaginally at term. There were 20 (33%) smoking and 40 (67%) nonsmoking mothers. **Results.** Mean cord serum erythropoietin levels were significantly lower in the nonsmokers (nonsmokers, 24 ± 9 IU/L; smokers, 61 ± 46 IU/L; $P < .001$). There was a significant positive correlation between the number of cigarettes smoked per day and cord serum erythropoietin levels ($r, 0.58$; $P \leq .05$). **Conclusions.** Smoking during pregnancy is associated with increased levels of umbilical cord erythropoietin at birth. This may indicate a risk of fetal hypoxia and growth restriction. Education and encouragement of cessation of smoking during pregnancy are important to avoid associated fetal and maternal morbidity and mortality.

<http://www.tswj.com/2012/420763/>

Also:

Foetal exposure to maternal passive smoking is associated with childhood asthma, allergic rhinitis and eczema

<http://www.tswj.com/aip/542983/>

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

The endocrine effects of nicotine and cigarette smoke

[Trends Endocrinol Metab](#). 2012 May 2. [Epub ahead of print]

[Tweed JO](#), [Hsia SH](#), [Lutfy K](#), [Friedman TC](#).

Abstract

With a current prevalence of approximately 20%, smoking continues to impact negatively upon health. Tobacco or nicotine use influences the endocrine system, with important clinical implications. In this review we critically evaluate the literature concerning the impact of nicotine as well as tobacco use on several parameters of the endocrine system and on glucose and lipid homeostasis. Emphasis is on the effect of smoking on diabetes mellitus and obesity and the consequences of smoking cessation on these disorders. Understanding the effects of nicotine and cigarettes on the endocrine system and how these changes contribute to the pathogenesis of various endocrine diseases will allow for targeted therapies and more effective approaches for smoking cessation.

<http://www.sciencedirect.com/science/article/pii/S1043276012000501>

=====

Stan Shatenstein
Editor & Publisher, STAN Bulletin
Smoking & Tobacco Abstracts & News
5492-B Trans Island
Montreal, QC Canada H3W 3A8
shatensteins@sympatico.ca

=====

STAN Bulletin is supported by
voluntary reader contributions

=====