From: "Stan Shatenstein" <shatensteins@sympatico.ca>
To: Undisclosed-Recipient:;
Date: 9.7.2012 12:50:21
Subject: STAN Bulletin: 13th Edition: 9-July-2012

Smoking & Tobacco Abstracts & News
STAN Bulletin
13th Edition
9-July-2012

Editor's note: Several papers included in the Table of Contents of the *Drug Alc Rev* 'Special Issue: Tackling Tobacco Use in Socially Disadvantaged Groups: A Time for Action' and referenced in the Editorial highlighted below have been featured previously in this bulletin or in GLOBALink MJU. If you are interested in any individual paper not shown below, please provide a full reference including title, journal and author names, as well as the relevant link.

Stan Shatenstein

In the News:

- India: Supreme Court set to examine conflicting tobacco product & food regulation laws
    - Israel: Health Ministry warns electronic cigarettes could be dangerous, cessation contribution not proven
- Nepal: Drive against public smoking goes unabated, full ban in force
- Nigeria: One marijuana joint a day is as bad as 20 cigarettes [Eur Child Adol Psych - Famuyiwa]
- UK: JTI: Japan Tobacco feels decision has been made on plain packs despite extension of consultation period
- UK: Electronic cigarette causes M6 terror alert; Brings M16 to grinding halt; E-cig etiquette [Video]
    - UK: Wales: Booming trade in fake cigarettes hampering bid to cut smoking [Report]
- UK/Nigeria/S. Africa: Documents reveal tobacco giant caught in intensive smuggling, corporate espionage
    - US: RYO: Roll-your-own cigarette stores may be going up in smoke under new law
- US: Design, Development, Promotion & Fables of Cigarette Filters

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In this Edition:

- Prev Chron Dis - van Meijgaard: US: Estimating Benefits of Past, Current & Future Reductions in Smoking Rates
- Prev Med - Samet: What was the first epidemiological study of smoking & lung cancer?
- Rev Environ Health - Au: China: FCTC/MPOWER: Cigarette smoking: public health, science & policy
- World J Cardiol - Wong: Singapore: AMI: Acute myocardial infarction: Clinical features & outcomes in young adults

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Abstracts:

Letter to the Editor

Effectiveness of smoking cessation services in Tan Tock Seng Hospital, Singapore

Ann Acad Med Singapore. 2012 May;41(5):230-2.

Kng KK, Lauw XT, Tan AS, Earnest A.
Dear Editor,

Hospitalisation, especially for a tobacco-related illness, may render patients to be more receptive to smoking cessation efforts by increasing their perceived vulnerability. The hospital setting also increases the contact time that patients have with the healthcare professionals. In addition, hospitals are generally smoke-free to protect patients and staff from passive smoking. Patients who smoke have no choice but to abstain from smoking during the period of hospitalisation. Such an environment may therefore promote permanent tobacco abstinence.

We would like to share our experience with smoking cessation in a hospital setting—comparing the quit rates of the inpatient smoking cessation programme and the outpatient smoking cessation clinic service available in Tan Tock Seng Hospital (TTSH) and the significant predictors affecting smoking cessation outcomes...

Conclusion

The quit rates were comparable to those reported in other studies. With the known signifi cant predictors affecting smoking cessation outcomes, smoking cessation counselling can be individualised and tailored according to the smoker's profile. Our results support the continuation of the inpatient smoking cessation programme and may also support the implementation of dedicated counsellors in the wards.

http://www.annals.edu.sg/pdf/41VolNo5May2012/V41N5p230.pdf

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

Cigarette smoke and ozone effect on murine inflammatory responses

Ann N Y Acad Sci. 2012 Jul;1259(1):104-11. doi: 10.1111/j.1749-6632.2012.06605.x.

Gardi C, Valacchi G.

Abstract

Air pollution has been associated with many different diseases, such as cancer, and respiratory, cardiovascular, and cutaneous chronic diseases. These effects are enhanced in people exposed to combined air pollutants, such as ozone and cigarette smoke. Chronic exposure to these pollutants causes an increase in oxidative stress and inflammation and has been associated with an increase in pulmonary diseases and mortality. Clinical and epidemiological studies reported interindividual variability in the adverse health effects of air pollutants, suggesting a genetic predisposition. The identification of subgroups of the population who are particularly vulnerable to air pollution is, therefore, of importance. Mouse models are a useful tool for studying the mechanisms underlying different susceptibility, as they show differences in strain responses to both ozone and cigarette smoke. This review analyses the role of inflammation and the influence of genetic factors on the mechanisms of lung injury caused by ozone and cigarette smoke.

http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2012.06605.x/abstract

Also:

Sarcopenia and smoking: a possible cellular model of cigarette smoke effects on muscle protein breakdown
http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2012.06532.x/abstract
Acrolein effects in pulmonary cells: relevance to chronic obstructive pulmonary disease

http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2012.06531.x/abstract
Molecular medicine and the development of cancer chemopreventive agents
http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2012.06646.x/abstract

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Reaching out, inviting back: using Interactive voice response (IVR) technology to recycle relapsed smokers back to Quitline treatment - a randomized controlled trial

***BMC Public Health* 2012, 12:507**
Published: **6 July 2012**
Beatriz H Carlini, Anna M McDaniel, Michael T Weaver, Ross M Kauffman, Barbara Cerutti, Renée M Stratton and Susan M Zbikowski

Abstract

Background

Tobacco dependence is a chronic, relapsing condition that typically requires multiple quit attempts and extended treatment. When offered the opportunity, relapsed smokers are interested in recycling back into treatment for a new, assisted quit attempt. This manuscript presents the results of a randomized controlled trial testing the efficacy of interactive voice response (IVR) in recycling low income smokers who had previously used quitline (QL) support back to a QL for a new quit attempt.

Methods

A sample of 2985 previous QL callers were randomized to either receive IVR screening for current smoking (control group) or IVR screening plus an IVR intervention. The IVR intervention consists of automated questions to identify and address barriers to re-cycling in QL support, followed by an offer to be transferred to the QL and reinitiate treatment. Re-enrollment in QL services for both groups was documented.

Results

The IVR system successfully reached 715 (23.9%) former QL participants. Of those, 27% (194/715) reported to the IVR system that they had quit smoking and were therefore excluded from the study and analysis. The trial's final sample was composed of 521 current smokers. The re-enrollment rate was 3.3% for the control group and 28.2% for the intervention group ($p<.001$). Logistic regression results indicated an 11.2 times higher odds for re-enrollment of the intervention group than the control group ($p<.001$). Results did not vary by gender, race, ethnicity, or level of education, however recycled smokers were older (Mean =45.2; SD=11.7) than smokers who declined a new treatment cycle (Mean= 41.8; SD=13.2); ($p=0.013$). The main barriers reported for not engaging in a new treatment cycle were low self-efficacy and lack of interest in quitting. After delivering IVR messages targeting these reported barriers, 32% of the smokers reported low self-efficacy and 4.8% of those reporting lack of interest in quitting re-engaged in a new QL treatment cycle.

Conclusion

Proactive IVR outreach is a promising tool to engage low income, relapsed smokers back into a new cycle of treatment. Integration of IVR intervention for recycling smokers with previous QL treatment has the potential to decrease tobacco-related disparities. ClinicalTrials.gov Identifier: NCT01260597

http://www.biomedcentral.com/1471-2458/12/507/abstract
http://www.biomedcentral.com/content/pdf/1471-2458-12-507.pdf

Also:

Eating the elephant in slices or in one go: views of participants in a smoking cessation intervention trial on multiple behaviour changes as sequential or concurrent tasks
http://www.biomedcentral.com/1471-2458/12/500/abstract
http://www.biomedcentral.com/content/pdf/1471-2458-12-500.pdf

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

Coaches' knowledge and awareness of spit tobacco use among youth athletes: results of a 2009 Ontario survey

Chronic Dis Inj Can. 2012 Jun;32(3):149-55.

Skinner JH, Bobbili SJ.

Abstract

INTRODUCTION:

Public health professionals have become concerned that spit tobacco (ST) use among athletes is increasing. However, little is known about the issue in Canada, particularly among youth.

METHODS:

The Not to Kids Coalition and the Coaches Association of Ontario surveyed coaches regarding ST knowledge and awareness and their perceived roles as coaches in influencing ST use among their athletes. Surveys were distributed electronically to individuals who coached male and female youth aged 9 to 18 years in baseball, basketball, football, soccer, and track and field, in Ontario.

RESULTS:

Almost all of the surveyed coaches responded correctly to questions about the health effects of ST use, and about 80% of respondents answered correctly to the question about legislation associated with ST and youth.

CONCLUSION:

Most coaches are interested in receiving information about ST, particularly the health effects of ST use and how to prevent ST use among athletes. Multiple formats should be used to provide information to coaches, including both electronic and hard copy materials.

http://www.phac-aspc.gc.ca/publicat/cdic-mcbc/32-3/ar-05-eng.php
http://www.phac-aspc.gc.ca/publicat/cdic-mcbc/32-3/assets/pdf/vol32n3-ar05-eng.pdf

Also:

Unhealthy behaviours among Canadian adolescents: prevalence, trends and correlates
http://www.phac-aspc.gc.ca/publicat/cdic-mcbc/32-3/ar-06-eng.php
http://www.phac-aspc.gc.ca/publicat/cdic-mcbc/32-3/assets/pdf/vol32n3-ar06-eng.pdf

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

Evaluation of a smoke-free forensic hospital: Patients' perspectives on issues and benefits

Drug and Alcohol Review
Special Issue: Tackling Tobacco Use in Socially Disadvantaged Groups: A Time for Action. Guest Editors: Billie Bonevski and Amanda Baker
Volume 31, Issue 5, pages 672–677, July 2012
Article first published online: **24 APR 2012**

ANGELA M. HEHIR, DEVON INDIG, SHANI PROSSER, VICKI A. ARCHER

Abstract

Introduction and Aims. In 2008, a new high secure forensic mental health inpatient hospital was opened in New South Wales as a smoke-free facility. This study describes the experience of patients and the impact of the smoke-free policy on smoking intentions and practice.

Design and Methods. The study methods included: (1) four semi-structured focus groups with 21 current patients; (2) patient surveys collected from 45 current patients; and (3) follow-up survey from 15 discharged patients. All methods included questions related to smoking history, experience of moving to and living in the smoke-free environment and

smoking intentions or status post discharge.

Results. Many focus group participants indicated that they were now off cigarettes for life while some were angry about the policy. Nearly all (80%) patients surveyed smoked prior to admission. Over one-third (39%) of patients were angry at being forced to stop smoking, while 42% wanted to give up when they were admitted. Most (62%) felt they had gained weight since they stopped smoking; however, 75% indicated that living in a smoke-free environment had a positive effect on their health. Over a third (36%) of patients indicated that they intended to smoke when discharged. Post discharge, of the 12 who smoked prior to admission, seven (58%) remained non-smokers at follow up.

Discussion and Conclusions. This study describes promising findings about the experience of patients moving to a smoke-free mental health inpatient facility, including improved health and potential for sustained smoking cessation post discharge.

http://onlinelibrary.wiley.com/doi/10.1111/j.1465-3362.2012.00456.x/abstract

Also:

'Do more, smoke less!' Harm reduction in action for smokers with mental health/substance use problems who cannot or will not quit
http://onlinelibrary.wiley.com/doi/10.1111/j.1465-3362.2012.00461.x/abstract

***Drug Alc Rev* Commentary & Editorial**:

What has fairness got to do with it? Tackling tobacco among Australia's disadvantaged
http://onlinelibrary.wiley.com/doi/10.1111/j.1465-3362.2012.00460.x/abstract
Tobacco smoking as a social justice issue: Advances in research
http://onlinelibrary.wiley.com/doi/10.1111/j.1465-3362.2012.00478.x/abstract

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Smoking habits and attitudes among university students in Palestine: a cross-sectional study

East Mediterr Health J. 2012 May;18(5):454-60.

Musmar SG.

Abstract
Information about the rate of smoking and factors associated with initiating and maintaining the behaviour is scarce in Palestine. The aim of this study was to explore the rate of and attitudes towards smoking among An-Najah National University students. During spring 2010, a questionnaire adopted from the Global Health Professionals Survey and the Global Youth Tobacco Survey was administered to 954 randomly selected full-time students. Overall 34.7% of the study sample were cigarette or waterpipe smokers, and this rate was higher among males than females (52.7% versus 16.5%). In logistic regression analysis, sex (male), type of college (humanities), older age and higher family income were predictors of current smoking status. Smokers had more negative attitudes to banning smoking in public areas on campus and to education about the harmful effects of smoking. Antismoking programmes with special attention to males and students in humanities are badly needed.

http://applications.emro.who.int/emhj/v18/05/18_5_2012_0454_0460.pdf

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

The role of education for current, former and never-smoking among non-western immigrants in Norway. Does the pattern fit the model of the cigarette epidemic?

Ethn Health. 2012 Jul 4. [Epub ahead of print]

Vedøy TF.

Abstract

Objectives. The aim was (1) to investigate the association between education and smoking status (current, former and never-smoking) among non-western immigrants in Norway and (2) examine if these associations fit the pattern predicted by the model of the cigarette epidemic. Design. Data came from the Oslo Health Study and the Oslo Immigrant Health

study (2000-2002). The first included all Oslo citizens from seven selected birth cohorts. The second included all Oslo citizens born in Turkey, Iran, Pakistan, Vietnam and Sri Lanka. 14,768 respondents answered questions on smoking, education and relevant background variables (over-all response rate 43.3%). Two gender specific multinomial logistic regression models with smoking status [current, former or never-smoker (reference)] as dependent variable were computed and predicted probabilities of smoking status among groups with different levels of education were calculated. Results. Smoking prevalence among men ranged from 19% among Sri Lankans to 56% among Turks. Compared to the smoking prevalence among Norwegian men (27%), smoking was widespread among Iranians (42%) and Vietnamese (36%). Higher education was associated with lower probability of current smoking among all male immigrant groups except Sri Lankans. Never having smoked was positively associated with education among Pakistani and Norwegian men. Among women, <5% smoked among Pakistanis, Vietnamese and Sri Lankans. Smoking prevalence among Turkish (28%) and Iranian (23%) women were comparable to Norwegian women (30%). The probability of smoking among Turkish and Iranian women with secondary education was higher than for other levels of education. The probability of being a never-smoker was high among Turkish and Iranian women with primary education. Conclusions. High smoking prevalence among Turkish and Iranian men highlights the importance of addressing smoking behaviour in subgroups of the general population. Smoking was almost non-existent among Pakistani, Vietnamese and Sri Lankan women and indicates strong persistent social norms against smoking.

http://www.tandfonline.com/doi/abs/10.1080/13557858.2012.700917
http://www.tandfonline.com/doi/pdf/10.1080/13557858.2012.700917

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

Reasons for Quitting Smoking in Patients with First-Ever Ischemic Stroke

Eur Addict Res. 2012 Jul 3;18(6):275-278. [Epub ahead of print]

Sienkiewicz-Jarosz H, Zatorski P, Ryglewicz D, Bienkowski P.

Abstract

Ninety-eight cigarette smokers with ischemic stroke were recruited between December 2006 and December 2008 in an urban hospital. Smoking status and reasons for quit attempts after stroke were assessed at 3-month follow-up. 73% of patients (72/98) made at least one quit attempt between stroke onset and the follow-up visit. 47% of quit attempters (34/72) declared that stroke was the major reason for quitting. The patients reporting stroke as the major reason for quitting were more likely to be abstinent at the follow-up as compared to the patients who did not (61.8 vs. 36.8%). The study suggests that some motives for quitting smoking are associated with a higher chance for short-term abstinence in stroke patients.

http://content.karger.com/produktedb/produkte.asp?DOI=10.1159/000338280

Smoking during pregnancy and psychiatric disorders in preschoolers

Eur Child Adolesc Psychiatry. 2012 Jul 6. [Epub ahead of print]

Ellis LC, Berg-Nielsen TS, Lydersen S, Wichstrøm L.

Abstract
The overall objective of this study was to determine whether smoking during pregnancy is related to psychiatric disorders in 4-year-olds while controlling for a wide range of potential confounding variables (i.e. parental anxiety, depression, personality disorders, drug abuse, and socio-economic characteristics). Parents of a community sample of 4-year-olds (N = 995) residing in the city of Trondheim, Norway were interviewed using the Preschool Age Psychiatric Assessment, which includes information on prenatal smoking. After adjusting for potential confounding variables using the propensity score, smoking during pregnancy was found to increase the odds for attention-deficit/hyperactivity disorder (ADHD) OR = 2.59 (CI 1.5-4.34, p < 0.001), oppositional defiant disorder (ODD) OR = 2.69 (CI 1.84-3.91, p = 0.02) and comorbid OR = 2.55 (CI 1.24-5.23, p < 0.001). Prenatal smoking during pregnancy is associated with an increased risk for symptoms of ADHD and ODD independently of each other, in 4-year-olds.

http://www.springerlink.com/content/101490/?MUD=MP

Cigarette smoking and risk of lymphoma in adults: a comprehensive meta-analysis on Hodgkin and non-Hodgkin disease

Eur J Cancer Prev. 2012 Jul 1. [Epub ahead of print]

Sergentanis TN, Kanavidis P, Michelakos T, Petridou ET.

Abstract
The aim of the present meta-analysis was to examine comprehensively the association between smoking and lymphoma [Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL)] in adults. Eligible studies were identified, and pooled-effect estimates (odds ratios and relative risks) were calculated for ever, current and former smoking, separately by lymphoma subtype and gender. Metaregression analysis with percentage of male patients, mean age, duration (years of smoking), intensity (pack-years and cigarettes per day) and years since quitting was carried out. Out of the 50 eligible articles, 41 used a case-control design (20 143 NHL cases, 4340 HL cases and 61 517 controls), whereas nine used a cohort design (5748 incident NHL cases, 334 HL cases, total cohort size comprising 1 530 833 smokers). Ever smoking was associated with increased risk for NHL [pooled-effect estimate=1.05, 95% confidence interval (CI): 1.00-1.09] mainly because of the association with T-NHL (pooled-effect estimate=1.23, 95% CI: 1.09-1.38). Ever smoking was also associated with increased risk for HL (pooled-effect estimate=1.15, 95% CI: 1.02-1.30); sizeable associations were observed regarding both nodular sclerosis and mixed cellularity subtypes. Although male study arms pointed to predominantly increased risk for HL, metaregression did not confirm the male preponderance. Dose-response patterns were particularly evident for HL. Cigarette smoking seems to be associated with increased lymphoma risk, especially HL and T-NHL. Further well-designed studies seem to be needed so as to investigate the risk thoroughly, especially for T-NHL subentities, and the extent to which confounding may interfere with gender-related disparities.

http://journals.lww.com/eurjcancerprev/pages/articleviewer.aspx?year=9000&issue=00000&article=99727&type=abstract

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Smoking increases air pollution levels in city streets: Observational and fine particulate data

Health Place. 2012 May 29. [Epub ahead of print]

Patel V, Thomson G, Wilson N.

Abstract

INTRODUCTION:

To address the paucity of research around smokefree streets, we: (i) refined existing data collection methods; (ii) expanded on the meagre previous research in this area; and (iii) compared results by differing size of urban centre.

METHODS:

We refined established methods; a solo observer simultaneously observed smoking and measured fine particulate levels (PM(2.5)) on a route of shopping streets in central Lower Hutt City, New Zealand.

RESULTS:

Over 33.6 h of measurement, mean fine particulate levels were 1.7 times higher when smoking was observed than when it was not (7.9 vs 4.8μg/m(3); p=0.0001).

CONCLUSIONS:

Smoking appeared to be a substantive contributor to fine particulate air pollution in city streets, when compared to levels adjacent to road traffic.

http://www.sciencedirect.com/science/article/pii/S1353829212001025

Related news coverage & video:

Smoking in streets can trigger lung cancer - study - One News
http://tvnz.co.nz/national-news/smoking-in-streets-can-trigger-lung-cancer-study-4962006

Is there benefit in smoking cessation prior to cardiac surgery?

Interact Cardiovasc Thorac Surg. 2012 Jul 2. [Epub ahead of print]

Sepehripour AH, Lo TT, McCormack DJ, Shipolini AR.

Abstract

A best evidence topic was written according to a structured protocol. The question addressed was whether smoking cessation prior to cardiac surgery would result in a greater freedom from postoperative complications. A total of 564 papers were found using the reported searches, of which five represented the best evidence to answer the clinical question. The authors, date, journal, study type, population, main outcome measures and results are tabulated. Reported measures were operative mortality, pulmonary complications, infective complications, neurological complications, transfusion requirements, duration of ventilation, intensive care unit and hospital stay, intensive care unit re-admission, postoperative gas exchange parameters and postoperative pulmonary function. The largest of the best evidence studies demonstrated a significant reduction in pulmonary complications in non-smokers (P < 0.001); however, there was an increased requirement for transfusion in this cohort (P = 0.002). There were non-significant reductions in neurological complications, infective complications and re-admissions to intensive care. Another large cohort study demonstrated significant reductions in non-smokers in mortality (P < 0.0001), pulmonary complications (P = 0.0002), infection (P < 0.0007), intensive care unit re-admission (P = 0.0002), duration of mechanical ventilation (P = 0.026) and intensive care unit stay (P = 0.002). A larger cohort study again demonstrated significant reductions in non-smokers in pulmonary complications (P < 0.002), duration of mechanical ventilation (P < 0.012) and intensive care unit stay (P < 0.005). A smaller prospective cohort study reported significantly raised PaO(2) (P = 0.0091) and reduced PaCO(2) (P < 0.0001) levels in the non-smokers as well as improved FVC and FEV(1) (P < 0.0001). There were also reductions in duration of intubation (P < 0.0001), intensive care unit stay (P < 0.0001) and hospital stay (P < 0.0013). Another small cohort study reporting outcomes of heart transplantation demonstrated significant improvement in non-smokers in terms of survival (P = 0.031), duration of intubation (P = 0.05) and intensive care unit stay (P = 0.021). We conclude that there is strong evidence demonstrating superior outcomes in non-smokers following cardiac surgery and advocate the necessity of smoking cessation as soon as possible prior to cardiac surgery.

http://icvts.oxfordjournals.org/content/early/2012/07/02/icvts.ivs177.long
http://icvts.oxfordjournals.org/content/early/2012/07/02/icvts.ivs177.full.pdf+html

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

How Do Perceptions About Cessation Outcomes Moderate the Effectiveness of a Gain-Framed Smoking Cessation Telephone Counseling Intervention?

J Health Commun. 2012 Jul 5. [Epub ahead of print]

Latimer-Cheung AE, Fucito LM, Carlin-Menter S, Rodriguez J, Raymond L, Salovey P, Makuch R, Cummings KM, Toll BA.

Abstract

The distinction between prevention and detection behaviors provides a useful guideline for appropriately framing health messages in terms of gains or losses. However, this guideline assumes that everyone perceives the outcomes associated with a behavior in a consistent manner, as prevention or detection. Individuals' perceptions of a behavior vary, and so the effects of framed messages may be optimized by considering individuals' perceptions rather than the prevention or detection function of the behavior. The authors tested this message-framing paradigm in a secondary analysis of data from a trial evaluating gain-framed smoking cessation counseling delivered through a state quitline (Toll et al., 2010). Smokers (N = 2,032) who called a state quitline received either gain-framed or standard care messages. Smokers' beliefs about the positive consequences of stopping smoking (outcome expectancies) were evaluated at baseline. Smoking status and self-efficacy were assessed at 3 months. Outcome expectancies moderated the framing effects among men but not among women. Men in the gain-framed counseling condition who had positive outcome expectancies were more likely to quit and had more confidence in their ability to quit or to remain abstinent than men who were uncertain of the positive outcome of smoking cessation. Among men, self-efficacy mediated the moderated framing effects of the intervention on quit status. These findings suggest that it may be useful to consider sex and individual differences in outcome expectancies when delivering gain-framed smoking cessation messages in the context of a state quitline.

http://www.tandfonline.com/doi/abs/10.1080/10810730.2012.665420

Prenatal nicotine exposure mouse model showing hyperactivity, reduced cingulate cortex volume, reduced dopamine turnover, and responsiveness to oral methylphenidate treatment

J Neurosci. 2012 Jul 4;32(27):9410-8.

Zhu J, Zhang X, Xu Y, Spencer TJ, Biederman J, Bhide PG.

Abstract

Cigarette smoking, nicotine replacement therapy, and smokeless tobacco use during pregnancy are associated with cognitive disabilities later in life in children exposed prenatally to nicotine. The disabilities include attention deficit hyperactivity disorder (ADHD) and conduct disorder. However, the structural and neurochemical bases of these cognitive deficits remain unclear. Using a mouse model we show that prenatal nicotine exposure produces hyperactivity, selective decreases in cingulate cortical volume, and radial thickness, as well as decreased dopamine turnover in the frontal cortex. The hyperactivity occurs in both male and female offspring and peaks during the "active" or dark phase of the light/dark cycle. These features of the mouse model closely parallel the human ADHD phenotype, whether or not the ADHD is associated with prenatal nicotine exposure. A single oral, but not intraperitoneal, administration of a therapeutic equivalent dose (0.75 mg/kg) of methylphenidate decreases the hyperactivity and increases the dopamine turnover in the frontal cortex of the prenatally nicotine exposed mice, once again paralleling the therapeutic effects of this compound in ADHD subjects. Collectively, our data suggest that the prenatal nicotine exposure mouse model has striking parallels to the ADHD phenotype not only in behavioral, neuroanatomical, and neurochemical features, but also with respect to responsiveness of the behavioral phenotype to methylphenidate treatment. The behavioral, neurochemical, and anatomical biomarkers in the mouse model could be valuable for evaluating new therapies for ADHD and mechanistic investigations into its etiology.

http://www.jneurosci.org/content/32/27/9410.abstract

Cross-sectional study identifying forms of tobacco used by Shisha smokers in Pakistan

J Pak Med Assoc. 2012 Feb;62(2):192-5.

Sameer-ur-Rehman, Sadiq MA, Parekh MA, Zubairi AB, Frossard PM, Khan JA.

Abstract

OBJECTIVES:

To estimate the frequency of different forms of tobacco intake such as smoker's tobacco, chewable tobacco and snuff tobacco among shisha smoker's and to study the patterns and predictors of shisha smoking affecting youth from different cities of Pakistan.

METHODS:

A cross-sectional study was conducted including youth from four cities. Participants were asked to fill out a data collection tool at shisha cafes, shopping malls and restaurants. Data was analyzed using SPSSv.18.

RESULTS:

A total of 406 participants, 296 (73%) males and 110 (27%) females were included in the study. There were 163 (40%) cigarette smokers; 65 (16%) chewed tobacco and 33 (8%) snuffed it. The median age at initiation of Shisha smoking was 20 years. 280 (69%) considered Shisha smoking to be less deleterious to health than cigarettes. Respiratory disease was the most commonly cited health effect reported. Most 248 (61%) of the participants were infrequent shisha smokers.

CONCLUSION:

There is high frequency of tobacco usage in the form of cigarettes, chewable tobacco and snuff tobacco among shisha smokers of Pakistan. The highest frequency is for cigarette smoking. The rise in Shisha smoking as a trendy social habit appears to be occurring despite emerging scientific evidence of its potential health risks.

http://jpma.org.pk/full article text.php?article id=3274
http://jpma.org.pk/PdfDownload/3274.pdf

Also:

General perceptions and practices of smokers regarding tobacco-related issues and hazards
http://jpma.org.pk/full article text.php?article id=3469
http://jpma.org.pk/PdfDownload/3469.pdf

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

Efficacy of an emergency department-based multicomponent intervention for smokers with substance use disorders

J Subst Abuse Treat. 2012 Jul 2. [Epub ahead of print]

Bernstein SL, Bijur P, Cooperman N, Jearld S, Arnsten JH, Moadel A, Gallagher EJ.

Abstract
The efficacy of brief emergency department (ED)-based interventions for smokers with concurrent alcohol or substance use is unknown. We performed a subgroup analysis of a trial enrolling adult smokers in an urban ED, focusing on subjects who screened positive for alcohol abuse or illicit drug use. Subjects receiving usual care (UC) were given a smoking cessation brochure; those receiving enhanced care (EC) got the brochure, a brief negotiated interview, 6weeks of nicotine patches, and a telephone call. Follow-up occurred at 3months. Of 340 subjects in the parent study, 88 (25.9%) reported a substance use disorder. At 3months, substance users receiving EC were more likely to be tobacco-abstinent than those receiving UC (14.6% versus 0%, p=.015), and to self-identify as nonsmokers (12.5% v. 0%, p=.03). This finding suggests that concurrent alcohol or substance use should not prevent initiation of tobacco dependence treatment in the ED.

http://www.sciencedirect.com/science/article/pii/S0740547212001043

Cigarette smoke-induced failure of apoptosis resulting in enhanced neoplastic transformation in human bronchial epithelial cells

J Toxicol Environ Health A. 2012 Jun 15;75(12):707-20.

Du H, Sun J, Chen Z, Nie J, Tong J, Li J.

Abstract

The lack of apoptotic pathways may lead to undesirable cell survival and proliferation, which are recognized hallmarks of cancer. It is well known that exposure to cigarette smoke induces DNA lesions in pulmonary cells. At present, it is not fully elucidated whether these lesions are repaired to restore normal functions or induce apoptosis. In order to examine the role of apoptosis in smoking-induced effects, immortalized human bronchial epithelial cells (BEAS-2B) were exposed to cigarette smoke and examined for parameters associated with apoptosis and neoplastic transformation. Our results indicated a significant reduction in apoptosis and enhanced neoplastic transformation and decreased mitochondrial membrane potential Δψm of mitochondria compared to control cells. Time-course experiments revealed increased aberrant methylation of CpG islands of RAS-associated domain family protein 1A (RASSF1A) and O (6)-methylguanine-DNA-methyltransferase (MGMT). The activities were downregulated and repair of DNA adducts was inhibited. Our observations suggested that although cigarette smoke-induced damage in BEAS-2B cells after chronic exposure is not necessarily lethal, as evidenced by cell viability, the protein expression levels of caspase-3 showed a decrease in the S20 passage (metaphase) but subsequently increased from S30 to S40 (anaphase). Survivin expression was significantly changed in S5 cells, and this rise was maintained until S40. Our data suggest that the potency of cigarettes as carcinogens may be due to their ability to induce aberrant gene expression and failure to trigger apoptosis leads to subsequent neoplastic transformation.

http://www.tandfonline.com/doi/abs/10.1080/15287394.2012.690088

A Randomized Clinical Trial of Trans-Dermal Nicotine Replacement in Pregnant African-American Smokers

Matern Child Health J. 2012 Jul 4. [Epub ahead of print]

El-Mohandes AA, Windsor R, Tan S, Perry DC, Gantz MG, Kiely M.

Abstract

We compared acceptability, adherence and efficacy of trans-dermal nicotine patches and cognitive behavioral therapy (Group 1) to cognitive behavioral therapy alone (Group 2) in minority pregnant smokers. This is a randomized controlled trial. 52 women were recruited during pregnancy with a mean gestational age 18.5 ± 5.0 weeks and followed through delivery. Randomization was by site and initial cotinine levels. Interventionists and interviewers were blinded to group assignment. Two different nicotine replacement therapy dosing regiments were administered according to the baseline salivary cotinine level. A process evaluation model summarized patient adherence. The main outcome measure was self-report of cessation since last visit, confirmed by exhaled carbon monoxide. Analyses of categorical and continuous measures were conducted as well as linear trend tests of salivary cotinine levels. Women lost to follow-up were considered treatment failures. Participants were on average 27.5 ± 5.4 years old, 81 % were single, 69 % unemployed and 96 % were Medicaid eligible. A process evaluation indicated patients in both groups were adherent to scheduled program procedures through Visit 4, but not for Visits 5 and 6. Confirmed quit rates were: at visit 3, 23 (Group 1) and 0 % (Group 2) (p = 0.02); at visits 4 and 5, no difference; at visit 6, 19 (Group 1) and 0 % (Group 2) (p = 0.05). Group 1 delivered infants with a mean gestational age of 39.4 weeks versus 38.4 weeks in Group 2 (p = 0.02). 73 % (52/71) of the eligible smokers agreed to participate and 65 % (17/26) of Group 1 completed the protocol (i.e. attended 6 visits). A comparison of Group 1 and 2 quit rates confirmed a non-significant difference.

http://www.springerlink.com/content/l8751216n664hx31/?MUD=MP

The short term effect of nicotine abstinence on visuospatial working memory in smoking patients with schizophrenia

Nord J Psychiatry. 2012 Jul 5. [Epub ahead of print]

Ghiasi F, Farhang S, Farnam A, Safikhanlou S.

Abstract

Background: Patients with schizophrenia suffer from wide range of deficits in neurocognitive functions of the brain, including visuospatial working memory. Aims: This study aims at evaluating the effect of short-term smoking abstinence on different components of visuospatial working memory in smoker patients with schizophrenia as well as possible reversal effect of a nicotine patch. Methods: In this trial, 45 male smoker patients with schizophrenia (Razi Hospital, Tabriz, Iran, 2010) were randomly divided into three groups. One group experienced a short time (overnight) smoking abstinence; one group used a single dose of nicotine patch (21 mg) after an overnight smoking abstinence and one group with no intervention or restrain on smoking was considered as control. The function of visuospatial working memory was tested by the brief visuospatial memory test-revised (BVMT-R) at the baseline and after the intervention. Results: The three groups were matched regarding age, educational level and the initial elements of cognitive performance. Between-the-group analysis showed that patients with an overnight smoking abstinence had a significant decrease in percent retained score and an increase in recognition biases compared to patients using nicotine patch and controls. No significant changes were observed in patints using nicotine patch or controls. Conclusions: Smoking abstinence results in visuospatial disabilities in male smoker patients with schizophrenia, including delayed recall and recognition biases.

http://informahealthcare.com/doi/abs/10.3109/08039488.2012.687765

Estimating Benefits of Past, Current, and Future Reductions in Smoking Rates Using a Comprehensive Model With Competing Causes of Death

Prev Chronic Dis. 2012 Jul;9:E122. Epub 2012 Jul 5.

van Meijgaard J, Fielding JE.

Abstract

INTRODUCTION:

Despite years of declining smoking prevalence, tobacco use is still the leading preventable contributor to illness and death in the United States, and the effect of past tobacco-use control efforts has not fully translated into improvements in health outcomes. The objective of this study was to use a life course model with multiple competing causes of death to elucidate the ongoing benefits of tobacco-use control efforts on US death rates.

METHODS:

We used a continuous-time life course simulation model for the US population. We modeled smoking initiation and cessation and 20 leading causes of death as competing risks over the life span, with the risk of death for each cause dependent on past and current smoking status. Risk parameters were estimated using data from the National Health Interview Survey that were linked to follow-up mortality data.

RESULTS:

Up to 14% (9% for men, 14% for women) of the total gain in life expectancy since 1960 was due to tobacco-use control efforts. Past efforts are expected to further increase life expectancy by 0.9 years for women and 1.3 years for men. Additional reduction in smoking prevalence may eventually yield an average 3.4-year increase in life expectancy in the United States. Coronary heart disease is expected to increase as a share of total deaths.

CONCLUSION:

A dynamic individual-level model with multiple causes of death supports assessment of the delayed benefits of improved tobacco-use control efforts. We show that past smoking reduction efforts will translate into further increases in life expectancy in the coming years. Smoking will remain a major contributor to preventable illness and death, worthy of continued interventions.

http://www.cdc.gov/pcd/issues/2012/11_0295.htm
http://www.cdc.gov/pcd/issues/2012/pdf/11_0295.pdf

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

Commentary

What was the first epidemiological study of smoking and lung cancer?

Prev Med. 2012 Jun 27. [Epub ahead of print]

Samet JM.

Abstract

Based on his critique of the early case-control study of smoking and lung cancer by Mueller, Morabia questions the priority that has been assigned to this research. I examine Morabia's approach to retrospectively assess quality and question its general applicability and replicability. By citation analyses, the case-control studies published in the 1950s have had far greater impact. Morabia's commentary points to the complexity and subtlety of re-interpreting older literature.

http://www.sciencedirect.com/science/article/pii/S009174351200268X

Referenced *Prev Med* report:
Quality, originality, and significance of the 1939 “Tobacco consumption and lung carcinoma” article by Mueller, including translation of a section of the paper
http://www.sciencedirect.com/science/article/pii/S0091743512002022

Referenced *Z Krebsforsch* report:

Tabakmissbrauch und Lungencarcinom (1939)

http://legacy.library.ucsf.edu/tid/owt88h00/pdf

Cigarette smoking in China: public health, science, and policy

Rev Environ Health. 2012;27(1):43-9.

Au WW, Su D, Yuan J.

Abstract
Throughout the world, cigarette smoking is a habit that causes serious health, economic, and social problems. Therefore, many countries have taken an active role to control and to ban smoking. The chronic smoking problem in China is particularly acute because China has the largest population of smokers in the world, over 300 million currently. If 30% of these smokers were to die of smoke-related diseases in the next 20 years, the impact from the more than 90 million premature deaths could be damaging to China. In addition, numerous non-smokers also experience health problems from exposure to environmental tobacco smoke. China's efforts to reduce or to ban smoking in certain public places have not been well-coordinated or enforced compared with those in other countries. Therefore, success has been minimal. Consequently, leaders in China should not be complacent about combating the serious national health problem. A multiprong approach in combination with the MPOWER policy from the World Health Organization that targets different levels of acquisition of the smoking habit must be used. Examples may include the government's reduced reliance on profits from the sale of cigarettes, the elimination of advertisements that encourage smoking among young individuals, the presentation of more graphic illustration of harmful effects from smoking on every pack of cigarettes, higher taxes/prices on cigarettes, and the implementation of enforceable bans on smoking in public places. As shown in other countries, such coordinated effort can be highly effective in the reduction of smoking and can have healthy consequences.

http://www.degruyter.com/view/j/reveh.2012.27.issue-1/reveh-2012-0003/reveh-2012-0003.xml

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Acute myocardial infarction: Clinical features and outcomes in young adults in Singapore

World J Cardiol. 2012 Jun 26;4(6):206-10.

Wong CP, Loh SY, Loh KK, Ong PJ, Foo D, Ho HH.

Abstract

AIM:

To investigate the clinical features and in-hospital outcomes of young adults with acute myocardial infarction (AMI) in Singapore.

METHODS:

Between January 2005 to September 2010, 333 consecutive patients aged ≤ 45 years old were diagnosed to have AMI at our institution. As Singapore is a multi-ethnic society, we also analysed whether ethnic differences exist between the three dominant ethnic groups, Malay, Chinese and Indian with regards to the clinical features. Clinical data was collected retrospectively on demographic characteristics, presenting signs and symptoms, blood investigation, angiographic findings and in-hospital clinical outcomes.

RESULTS:

The mean age at presentation was 40.2 ± 4.0 years with male predominance (94%). The majority of patients were Chinese (51%) followed by Indians (31%) and Malays (18%). The most common risk factor was smoking (74%) followed by hypertension (28.5%) and hyperlipidemia (20.0%). 37% of patients were obese. The majority of patients had single vessel disease (46%) on coronary angiography. The mean total cholesterol, low-density lipoprotein and high-density lipoprotein levels were 5.6 ± 1.2 mmol/L, 3.8 ± 1.1 mmol/L and 0.93 ± 0.25 mmol/L respectively. The mean left ventricular function was 44% ± 10% with the incidence of heart failure 3% and cardiogenic shock 4.5%. Overall in-hospital mortality was low with 4 deaths (1.2%). For ethnic subgroup analysis, Indians have a 3-fold risk of developing premature AMI when compared to other ethnic groups.

CONCLUSION:

Young AMI patients in Singapore are characterized by male predominance, high incidence of smoking and obesity. Overall in-hospital clinical outcomes are favourable. Among the 3 ethnic groups, Indians have the highest risk of developing premature AMI.

http://www.wjgnet.com/1949-8462/full/v4/i6/206.htm
http://www.wjgnet.com/1949-8462/pdf/v4/i6/206.pdf

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

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