Smoking & Tobacco Abstracts & News

STAN Bulletin
25th Edition
20-August-2012

Editor's note: A study in the *American Journal of Respiratory and Critical Care Medicine* (AJRCCM) titled 'Maternal Smoking in Pregnancy and Asthma in Preschool Children: a Pooled Analysis of 8 Birth Cohorts', by Neuman and colleagues, finds that "maternal smoking only during pregnancy was associated with increased risks for wheeze (odd ratio 1.39, 95 % CI 1.08-1.77) and asthma (odds ratio 1.65, 1.18-2.31) at age four to six years." The study, not yet available online, is already garnering news coverage following a press release and should be featured in the next issue of this bulletin.

Stan Shatenstein

Noteworthy:

"Health policies aimed at primary prevention, especially multi-factorial prevention including improving diet and reducing smoking and alcohol intake, should be reinforced as these represent the best strategy for arresting the present increasing trends in cancer incidence. The coming decades are likely to bring difficult financial circumstances, which will test the ability of statutory and voluntary organisations to meet the diverse needs of those diagnosed with cancer, but the work contained in this paper, and elsewhere, provides intelligence that may help us meet these challenges." [Maddams J, Utley M, Mølle H. Projections of cancer prevalence in the United Kingdom, 2010–2040, *Br J Cancer*]

"In view of the health burden of tobacco use, the underinvestment in tobacco control is extraordinary... For example, in low-income countries, for every US$9100 received in tobacco taxes, only $1 was spent on tobacco control. However, effective tobacco-control approaches have been seen with huge health and economic benefits in many countries." [Koplan JP, Mackay J, Curtailing tobacco use: first we need to know the numbers. *Lancet*]

In the News:

- Asia: Tobacco industry taps into emerging & developing markets; Future of plain cigarette packs
- Australia: BAT: Freedom of Information appeal for plain packaging documents rejected; Video; CV Media
- Australia: Will Cigarette Branding Ban Spread Beyond Borders, Tobacco, in Domino Effect?
- Australia: ACT: No Capital Territory investment funds for cigarette makers; Responsible Investment Policy
- Australia: Future Fund profits from an addictive, hypocritical investment
- Australia: Plain packets loom but lots of puff still left in Big Tobacco; Challenge success unlikely
- Canada: Mortality rate grim for lung cancer, patients still ignorant of relative risks
- Canada: Ontario: OCSA: Retailers mount new billboard campaign protesting contraband tobacco
- Czech Republic: Health Minister reveals blanket ban on smoking in restaurants being contemplated
- EU: European Union Considering Cigarette Logo Ban as Part of Upcoming Law Review
- India: Sangrur: Proposed tobacco ban set to go up in smoke
- Namibia: Tobacco Wars Heating Up; Australian victory strengthens argument for similar plans
- NZ: Dominion Post: Editorial: Keep fighting against tobacco; Plain packaging effective
- NZ: Supermarket chain goes beyond law, instructs staff to wrap customers' cigarette packs in plastic bags
- Philippines: Economic cost of smoking outweighs tax on cigarettes; Cigarette makers warned; Grim warnings
- Singapore: Survey reveals smokers could take up to 40 minutes on smoke breaks
- S. Africa: Health Minister Confirms Government to Follow New Australian Pack Branding Tobacco Laws
- Thailand: The Nation: Editorial: Stronger action required to curb massive health costs of smoking
- US: Young stars' cigarette habits show teens smoking appears to be cool
- US: CTFK: Myers: Let's Finish the Fight Against Tobacco

12.11.2012
Abstracts:

Mental Disorders and Cigarette Use among Adults in the United States


**Goodwin RD, Zvolensky MJ, Keyes KM, Hasin DS.**

**Abstract**

Background: The goal of this study was to determine the association between mental disorders and cigarette consumption and nicotine dependence. Methods: Data were drawn from the National Epidemiologic Survey of Alcohol and Related Conditions (NESARC), a nationally representative survey of adults (N = 43,093) aged 18 and older. Relationships between specific anxiety disorders, mood disorders, nondependent cigarette use, nicotine dependence among the whole sample, and nicotine dependence among cigarette users were examined. Results: After adjusting for demographics and comorbid mental disorders, generalized anxiety disorder (OR = 1.16 (1.29-1.51)), specific phobia (OR = 1.35 (1.21-1.51)), panic disorder (PD) (OR = 1.90 (1.62-2.23)), major depression (MDD) (OR = 1.31 (1.16-1.48)), and bipolar disorder (OR = 1.30 (1.09-1.54)) were associated with increased likelihood of nondependent cigarette use. Specific phobia (OR = 1.69 (1.49-1.91)), PD (OR = 1.82 (1.50-2.21)), MDD (OR = 1.59 (1.38-1.84)), and bipolar disorder (OR = 1.71 (1.39-2.09)) were associated with increased odds of nicotine dependence among the whole sample; social phobia (OR = 1.69 (1.19-2.40)), specific phobia (OR = 1.69 (1.43-2.01)), MDD (OR = 1.65 (1.34-2.02)), and bipolar disorder (OR = 2.38 (1.74-3.24)) were associated with increased risk of nicotine dependence among cigarette users. Conclusions: Specific anxiety disorders and mood disorders were uniquely associated with nondependent cigarette use, nicotine dependence among the whole sample, and the risk of nicotine dependence among cigarette users in the United States. Findings suggest that demographic differences, comorbid mood, anxiety, substance, and personality disorders all contributed to previously observed associations between mental disorders and nicotine dependence, explaining these links in some but not all cases.


Also:

The Role of Ethnic Pride and Parental Disapproval of Smoking on Smoking Behaviors among Minority and White Adolescents in a Suburban High School

The role of tobacco promoting and restraining factors in smoking intentions among Ghanaian youth

Published: 15 August 2012

David Doku, Susanna Raisamo and Nora Wiium

Abstract

Background

In Western countries, the relationship between smoking intentions and smoking behaviour is well established. However, youth smoking intentions and associated factors in developing countries are largely unexplored and the former may occur for a variety of reasons. We investigated youth smoking intentions in Ghana with regard to several tobacco promoting and restraining factors, including environmental, familial, attitudinal and knowledge measures.

Methods

A school-based survey of a representative sample of 12-20-year-olds was conducted in 2008 in Ghana (N = 1338, response rate 89.7%).

Results

In a bivariate model, both among ever and never smokers, allowing smoking on school compound, exposure to tobacco advertisement and parental smoking were associated with future intention to smoke. Compared to those who agreed that smoking is harmful to health, smoking is difficult to quit and that tobacco should not be sold to minors, those who disagreed or were not sure were more likely to have an intention to smoke. In the multivariate analyses, these associations persisted, except that the attitude measures concerning the difficulty of quitting smoking once started and tobacco sales ban were no longer significantly associated with smoking intentions.

Conclusions

These findings underscore the importance of school smoking policy, parental smoking behaviour and knowledge of the harmful effects of tobacco use in determining Ghanaian youths' future smoking intentions. Because current high percentages of smoking intentions may turn into high smoking rates in the future, the introduction of effective tobacco control measures at all levels of society to prevent youth smoking in Ghana may be essential.

http://www.biomedcentral.com/1471-2458/12/662/abstract
http://www.biomedcentral.com/content/pdf/1471-2458-12-662.pdf

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

Letter

Updated version of QRISK2
QRISK2 and the limitations of recording smoking in primary care

BMJ 2012; 345 doi: 10.1136/bmj.e5453 (Published 14 August 2012

Nigel James Masters, Catherine Tutt

The QRISK2 team has refined its latest version of the calculator with the addition of more information on smoking from the British primary care record.1 Future development will be hampered by the fact that the recording of smoking status in primary care uses a descriptive rubric rather than a numerical one. We have been advocating the recording of smoking pack-years (http://smokingpackyears.com/) in our records for many years, and we would also like to add “years smoked,” but the required read code is unavailable. The landmark smoking study of British doctors that ran from 1951 to 2001 used years smoked and active smoking to demonstrate high morbidity and early mortality in smokers.2 It is a pity that because the recording of smoking data in our general practice records (which lack the necessary numerical data) is poor, for the foreseeable future we will be unable to emulate that work using an enhanced QRISK2 calculator.

http://www.bmj.com/content/345/bmj.e5453.extract
Projections of cancer prevalence in the United Kingdom, 2010–2040
British Journal of Cancer advance online publication 14 August 2012; doi: 10.1038/bjc.2012.366

J Maddams, M Utley and H Mølle

Abstract

Background:

There are currently two million cancer survivors in the United Kingdom, and in recent years this number has grown by 3% per annum. The aim of this paper is to provide long-term projections of cancer prevalence in the United Kingdom.

Methods:

National cancer registry data for England were used to estimate cancer prevalence in the United Kingdom in 2009. Using a model of prevalence as a function of incidence, survival and population demographics, projections were made to 2040. Different scenarios of future incidence and survival, and their effects on cancer prevalence, were also considered. Colorectal, lung, prostate, female breast and all cancers combined (excluding non-melanoma skin cancer) were analysed separately.

Results:

Assuming that existing trends in incidence and survival continue, the number of cancer survivors in the United Kingdom is projected to increase by approximately one million per decade from 2010 to 2040. Particularly large increases are anticipated in the oldest age groups, and in the number of long-term survivors. By 2040, almost a quarter of people aged at least 65 will be cancer survivors.

Conclusion:

Increasing cancer survival and the growing/ageing population of the United Kingdom mean that the population of survivors is likely to grow substantially in the coming decades, as are the related demands upon the health service. Plans must, therefore, be laid to ensure that the varied needs of cancer survivors can be met in the future.

http://www.nature.com/bjc/journal/vaop/ncurrent/abs/bjc2012366a.html

Related coverage:

Number of older people living with cancer 'to treble' by 2040 - The Guardian
http://www.guardian.co.uk/society/2012/aug/20/number-older-people-cancer-treble

Positive impact of Australian 'blindness' tobacco warning labels: findings from the ITC four country survey


Kennedy RD, Spafford MM, Behm J, Hammond D, Fong GT, Borland R.

Abstract

BACKGROUND:

Smokers with greater knowledge of the health effects of smoking are more likely to quit and remain abstinent. Australia has communicated the causal association of smoking and blindness since the late 1990s. In March 2007, Australia became the first country to include a pictorial warning label on cigarette packages with the message that smoking causes blindness. The current study tested the hypothesis that the introduction of this warning label increased smokers' knowledge of this important health effect.

METHODS:
Six waves of the International Tobacco Control Four Country Survey were conducted, as a telephone survey of 17,472 adult smokers in Australia, Canada, United Kingdom and the United States, with three waves before and three waves after the blindness health warning was introduced in Australia. The survey measured adult smokers' knowledge that smoking causes blindness.

RESULTS:

Australian smokers were significantly more likely to report that smoking causes blindness, compared to Canadian, UK and US smokers, where there were neither health campaigns nor health warnings labels about blindness. After the introduction of the blindness warning, Australian smokers were more likely than before the blindness warning to report that they know that smoking causes blindness (62 versus 49 per cent; OR = 1.68, 95% CI: 1.03, 2.76, p = 0.04). In Australia, smokers aged over 55 years were less likely than those aged 18 to 24 to report that smoking causes blindness (OR = 0.43; 95% CI: 0.29, 0.62, p < 0.001).

CONCLUSION:

While more smokers report that smoking causes blindness in Australia compared to other countries, which have not had national social marketing campaigns, further gains in knowledge were found after pictorial warning labels were introduced in Australia. Findings suggest there is still a need to educate the public about the causal association of smoking and blindness. More education may be needed to redress the knowledge gap in older Australian smokers as the incidence of age-related macular degeneration increases with age.


A review of risk factors for oral cavity cancer: the importance of a standardized case definition


Radoï L, Luce D.

Abstract

The aim of this work is to review the literature on risk factors of oral cavity cancer with a special attention to the definition of the cases, in order to highlight special features of these cancers and of their subsites. PubMed database was systematically searched to access relevant articles published between 1980 and 2010. Reference lists of selected papers were examined to identify further articles. One hundred and two studies met the inclusion criteria. Their results were difficult to compare because of the lack of uniformity in defining oral cavity. In addition, few studies examined risk factors other than alcohol and tobacco, and studies differentiating between subsites were rare. Despite these limitations, some characteristics of oral cavity cancers may be emphasized: smoked tobacco seems to be a stronger risk factor for oral cavity cancer than alcohol, and the floor of the mouth seems to be more sensitive to the harmful effects of alcohol and smoked tobacco. Studies limited strictly to oral cavity cancers and distinguishing between subsites are needed to better understand the aetiology of these cancers, and better define risk groups to target prevention efforts and screening.


The population and high-risk approaches to prevention: quantitative estimates of their contribution to population health in the Netherlands, 1970-2010


Mackenbach JP, Lingsma HF, van Ravesteyn NT, Kamphuis CB.

Abstract

BACKGROUND:

To compare the contribution of 'population' and 'high-risk' approaches to prevention, with regard to their impact on population health in the Netherlands between 1970 and 2010.
METHODS:
Preventive interventions that have had an impact on mortality and morbidity rates were identified using published evaluation studies and routinely collected mortality and morbidity data. These interventions were then classified into population versus high-risk approaches, depending on whether they were targeted to groups identified on the basis of their risk of disease.

RESULTS:
In the period 1970-2010, 22 new preventive interventions were introduced, which altogether avoided about 16,000 deaths and several hundred thousand disease cases per year in the Netherlands. Tobacco control and road safety measures had the largest impact. Preventive interventions based on a high-risk approach, such as hypertension detection and control and cancer screening, accounted for approximately one quarter of the total health gain.

CONCLUSIONS:
In the period 1970-2010, considerably larger health gains have been achieved with the population approach than with the high-risk approach to prevention. National prevention policies should make judicious use of these complementary approaches to maximize health gain.

http://eurpub.oxfordjournals.org/content/early/2012/08/08/eurpub.cks106.abstract

Smoking and asthma: dangerous liaisons

ERJ
Published online before print August 16, 2012, doi: 10.1183/09031936.00073312

Riccardo Polosa and Neil C Thomson

Abstract
Cigarette smoking and asthma interact to induce important adverse effects on clinical, prognostic and therapeutic outcomes. This review examines recent evidence on the harmful effects of smoking in asthma, possible underlying inflammatory mechanisms for this altered response, management options for these patients and potential future therapeutic directions. Active smokers, particularly females, are at risk of developing asthma. Prevalence rates for smoking in asthma are relatively close to those found in the general population. Smokers with asthma experience worse asthma control than non-smokers with asthma. Mechanisms for the adverse effects of smoking in asthma include altered airway inflammation and corticosteroid insensitivity. Quitting smoking can improve symptoms and lung function, but the low rates of smoking cessation highlights the need for improved strategies for managing these patients. Clinical trials assessing new therapies for asthma need to enrol smokers to identify treatments that are effective in the asthma smoking phenotype.

http://erj.ersjournals.com/content/early/2012/08/16/09031936.00073312.abstract

Also:
Short cigarette smoke exposure facilitates sensitization and asthma development in mice
http://erj.ersjournals.com/content/early/2012/08/16/09031936.00096612.abstract

Epidemiology and Risk Factors of Urothelial Bladder Cancer


Abstract

CONTEXT:
Urothelial bladder cancer (UBC) is a disease of significant morbidity and mortality. It is important to understand the risk factors of this disease.

OBJECTIVE:

To describe the incidence, prevalence, and mortality of UBC and to review and interpret the current evidence on and impact of the related risk factors.

EVIDENCE ACQUISITION:

A literature search in English was performed using PubMed. Relevant papers on the epidemiology of UBC were selected.

EVIDENCE SYNTHESIS:

UBC is the 7th most common cancer worldwide in men and the 17th most common cancer worldwide in women. Approximately 75% of newly diagnosed UBCs are noninvasive. Each year, approximately 110,500 men and 70,000 women are diagnosed with new cases and 38,200 patients in the European Union and 17,000 US patients die from UBC. Smoking is the most common risk factor and accounts for approximately half of all UBCs. Occupational exposure to aromatic amines and polycyclic aromatic hydrocarbons are other important risk factors. The impact of diet and environmental pollution is less evident. Increasing evidence suggests a significant influence of genetic predisposition on incidence.

CONCLUSIONS:

UBC is a frequently occurring malignancy with a significant impact on public health and will remain so because of the high prevalence of smoking. The importance of primary prevention must be stressed, and smoking cessation programs need to be encouraged and supported...

UBC is a common malignancy. Most data available are based on retrospective analyses, and each risk factor for UBC has to be seen in light of genetic–environmental interactions to better evaluate its impact. It is evident, however, that UBC will remain frequent because of the ongoing high prevalence of smoking, which represents its main risk factor. The importance of primary prevention needs to be stressed, and smoking cessation programs should be encouraged and supported.


Visual Search and Attentional Bias for Smoking Cues: The Role of Familiarity


Oliver JA, Drobes DJ.

Abstract

Despite decades of work, the relationship between drug cues and actual drug use remains unclear. One promising area of research that may help explain this disconnect is the role of cognitive processing of drug cues, including attentional bias. This study utilized a visual search task that has previously been used to examine attentional bias in anxiety and eating disorders, but was modified to assess attentional bias for smoking cues. The task was completed by 106 participants (42.5% female), divided among three groups: smokers who continued smoking ad libitum, smokers who had abstained for 12 hours, and nonsmokers. An attentional bias for smoking stimuli was observed for both the initial orienting and maintenance subcomponents of attention. However, maintenance bias depended heavily upon the type of neutral stimuli used for comparison. Neither orienting nor maintenance bias differed across groups, indicating that these effects were not limited to smokers. Critically, the strongest predictor of attentional bias for smoking cues was previous environmental exposure to tobacco smoke. This raises questions about whether the traditional interpretation of attentional bias as an index of the incentive-motivational value of smoking cues is appropriate. Future empirical and theoretical work on smoking-related attentional bias should give greater consideration to the role that environmental exposure may play in its development.

http://psycnet.apa.org/psycinfo/2012-21978-001/

Also:
Cue Reactivity as a Predictor of Successful Abstinence Initiation Among Adult Smokers  
http://psycnet.apa.org/psycinfo/2012-21979-001/

Tobacco smoking attributable mortality and years of potential life lost in Georgia  

Gvinianidze K, Tsereteli D.

Abstract

Smoking-attributable deaths and years of potential life lost were estimated using the formula adopted to estimate UK and US deaths caused by smoking. These estimates are based on sex-specific proportions by age of current and ex-smokers and rates of relative risk. For prevalence data we used data of 2010 STEPS survey in Georgia and Georgia Reproductive Health Survey 2005. Relative risks for potentially fatal diseases due to smoking are those that were used to estimate UK 1995 deaths. They were derived from years 1984-1988 of the Cancer Prevention Study II (CPS II). Smoking attributable mortality was estimated for year 2008, period when registration of deaths was done by adopted methods and institutions. By the calculations according to mortality data of year 2008 number of active smoking attributable deaths were 4331. Smoking is related with 10.1% of all deaths. By causes of death smoking attributed is 30% of all deaths caused by cancers, 10% of cardiovascular diseases, 9% of respiratory and 7% of digestive diseases. About 72500 potential years of life is lost in Georgia during year 2008 due to active smoking. Great majority of this burden is related with cardiovascular diseases and cancers.

Also:

Study of implementation level of tobacco restriction policy in cafes and restaurants of Georgia  

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

Transition and Change: Prospective Effects of Posttraumatic Stress on Smoking Trajectories in the First Year of College  
Health Psychol. 2012 Aug 13. [Epub ahead of print]

Read JP, Wardell JD, Vermont LN, Colder CR, Ouimette P, White J.

Abstract

Objective: College matriculation begins a period of transition that is marked by new freedoms and responsibilities and by increases in a variety of risky behaviors, including smoking. Trauma and posttraumatic stress disorder (PTSD) are well-established risk factors for smoking outcomes, and thus may be a point of intervention for college smoking. Yet, no studies have examined associations among trauma, PTSD, and smoking in college students. The present study provides such an examination. Method: Matriculating student smokers (N = 346) completed surveys in September (T1) and at 5 subsequent time points (T2-T6) over their first year of college. With latent growth analysis, we modeled smoking trajectories conditioned on PTSD symptom status (i.e., No PTSD Symptoms vs. Partial PTSD vs. Full PTSD). Results: Results showed that although smoking tended to decline during the first semester for all groups, significant risk for escalation in smoking during the second semester was conferred specifically by the presence of PTSD at matriculation. Conclusions: Interventions that offer support and resources to students entering college with PTSD may help to prevent smoking behaviors from escalating and may ultimately prevent the adoption of daily smoking in later adulthood.

http://psycnet.apa.org/psycinfo/2012-21499-001/

12.11.2012
Abuse and smoking cessation in clinical practice


Smith PM, Spadoni MM, Proper VM.

Abstract

Aims and objectives. This discursive paper explores issues of abuse during smoking cessation counselling. Background. During a training session for a smoking cessation intervention pilot study, nurses expressed concerns about issues of abuse that had previously surfaced during cessation counselling in their practice. Abused women are more likely to smoke. As guidelines recommend integrating cessation interventions into practice, issues of abuse are likely to surface. Methods. A literature review and synthesis of abuse and smoking cessation was undertaken to arrive at recommendations for practice. Results. There are a few suggestions about how to manage abuse within cessation counselling, but none have been studied: (1) integrate stress-management strategies, (2) assess for abuse, (3) provide separate interventions for partners to create a safe environment, and (4) develop interventions that consider the relationship couples have with tobacco. However, coping strategies alone do not address abuse, screening without treatment is not helpful, and partner interventions assume both partners are open to quitting/counselling. In contrast, as with all clinical practice, abuse and cessation would be considered separate but intertwined problems, and following best practice guidelines for abuse would provide the guidance on how to proceed. After care has been taken to address abuse, it is the patient's decision whether to continue with cessation counselling. Conclusion. Guidelines addresses both care planning and the ethical/legal issues associated with the disclosure of abuse and provide a practical tool for addressing abuse that obviates the need to tailor cessation interventions to abuse. Relevance to clinical practice. This paper clarifies a relationship between smoking and abuse and the subsequent implications for smoking cessation interventions and highlights the importance of addressing abuse and smoking cessation separately, even though they are interrelated problems. It provides nurses with appropriate initial responses when abuse is disclosed during an unexpected encounter such as during a smoking cessation intervention.


Also:

Use of multiple linear regression and logistic regression models to investigate changes in birthweight for term singleton infants in Scotland


Tobacco use in 3 billion individuals from 16 countries: an analysis of nationally representative cross-sectional household surveys


Summary

Background

Despite the high global burden of diseases caused by tobacco, valid and comparable prevalence data for patterns of adult tobacco use and factors influencing use are absent for many low-income and middle-income countries. We assess these patterns through analysis of data from the Global Adult Tobacco Survey (GATS).

Methods

Between Oct 1, 2008, and March 15, 2010, GATS used nationally representative household surveys with comparable methods to obtain relevant information from individuals aged 15 years or older in 14 low-income and middle-income countries (Bangladesh, Brazil, China, Egypt, India, Mexico, Philippines, Poland, Russia, Thailand, Turkey, Ukraine, Uruguay, and Vietnam). We compared weighted point estimates and 95% CIs of tobacco use between these 14 countries and with data from the 2008 UK General Lifestyle Survey and the 2006—07 US Tobacco Use Supplement to the Current Population Survey. All these surveys had cross-sectional study designs.

12.11.2012
Findings

In countries participating in GATS, 48·6% (95% CI 47·6—49·6) of men and 11·3% (10·7—12·0) of women were tobacco users. 40·7% of men (ranging from 21·6% in Brazil to 60·2% in Russia) and 5·0% of women (0·5% in Egypt to 24·4% in Poland) in GATS countries smoked a tobacco product. Manufactured cigarettes were favoured by most smokers (82%) overall, but smokeless tobacco and bidis were commonly used in India and Bangladesh. For individuals who had ever smoked daily, women aged 55—64 years at the time of the survey began smoking at an older age than did equivalently aged men in most GATS countries. However, those individuals who had ever smoked daily and were aged 25—34-years when surveyed started to do so at much the same age in both sexes. Quit ratios were very low (<20% overall) in China, India, Russia, Egypt, and Bangladesh.

Interpretation

The first wave of GATS showed high rates of smoking in men, early initiation of smoking in women, and low quit ratios, reinforcing the view that efforts to prevent initiation and promote cessation of tobacco use are needed to reduce associated morbidity and mortality.

Related Lancet Comment:

Curtailing tobacco use: first we need to know the numbers
http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2812%2961085-X/fulltext

Related news coverage:

"Alarming" smoking habits found in poorer countries - Reuters
http://www.reuters.com/article/2012/08/16/us-smoking-global-idUSBRE87F1FJ20120816
Largest-ever tobacco study finds 'urgent need' for policy change - CNN
Global Smoking Survey Paints A Grim Picture - NPR
206 million Indians use smokeless tobacco: study - The Hindu
http://www.thehindu.com/health/policy-and-issues/article3781957.ece

Thyroid function: Quitting smoking—transient risk of autoimmune hypothyroidism

Nature Reviews Endocrinology 8, 509-510 (September 2012) | doi:10.1038/nrendo.2012.132

Wilmar M. Wiersinga

Abstract

Smoking is a risk factor for Graves disease. However, Carlé et al. have demonstrated that individuals have a transient increased risk of developing overt autoimmune hypothyroidism in the first 2 years after quitting smoking. The mechanisms involved in these two opposing effects of smoking on the immune system are intriguing...

Clinicians should always recommend that individuals stop smoking because of the overriding risk of cardiovascular diseases and cancer associated with this activity. However, it might be useful for clinicians to know that nonspecific complaints in people who have recently ceased smoking could be due to attendant autoimmune hypothyroidism. Serum TSH levels could be monitored in symptomatic individuals who have recently stopped smoking in order to confirm or rule out primary hypothyroidism.

Smoking affects the immune system in multiple ways, modulating both cell-mediated and humoral immune responses. However, how smoking promotes immune pathways leading to Graves disease and simultaneously inhibits immune responses leading to autoimmune hypothyroidism is an intriguing but unresolved issue.


Referenced Clin Endocrinol study:
Impaired Cough Sensitivity in Children of Smokers


Paul M. Wise, Julie A. Mennella and Susana Finkbeiner

Abstract

**Introduction:** Exposure to environmental tobacco smoke puts children at greater risk for respiratory tract infection and other illnesses and increases the risk that children later become habitual smokers. Because cough sensitivity may relate to both illness and smoking initiation, we determined whether this vital reflex is impaired in children living with smokers.

**Methods** A single-inhalation capsaicin challenge was administered to 2 groups of healthy children (16 females, 22 males; 10–17 years old) and parents (25 mothers, 1 father): exposed children ($n=17$) and parents ($n=13$) who smoked $\approx 10$ cigarettes/day; and age-matched children ($n=21$) never exposed to smoke at home and parents who never smoked in their lifetimes ($n=13$). The lowest capsaicin concentrations that triggered (a) sensations of tingle, sting, or burn (irritation threshold) and (b) at least two coughs (cough threshold) were determined.

**Results** Cough thresholds were 2 times as high in exposed children ($15.00 \, \mu M; 95\%$ confidence interval ($CI$): $9.98–22.55 \, \mu M$) as in non-ETS-exposed children ($7.31 \, \mu M; CI: 5.25–10.19 \, \mu M, p = .003$). Smoking parents also had higher cough thresholds than never-smoker parents ($p = .009$). Throat irritation was reported at concentrations below cough threshold for both children and parents. Irritation thresholds did not differ significantly between the two groups of children but were higher for smoking parents than for never-smokers ($p = .027$).

**Conclusions** We provide the first evidence that the cough reflex is impaired in seemingly healthy children who live with smokers. The 2-fold difference in cough threshold is comparable in magnitude to the change that occurs with acute respiratory tract infection.

http://ntr.oxfordjournals.org/content/early/2012/08/09/ntr.nts198.abstract

Related coverage

Secondhand smoke impairs vital cough reflex in kids

Association of nicotine dependence susceptibility gene, CHRNA5, with Parkinson's disease age at onset: Gene and smoking status interaction

*Parkinsonism Relat Disord*, 2012 Aug 8. [Epub ahead of print]


Abstract

**BACKGROUND:**

Smoking is a well documented environmental factor that reduces susceptibility to Parkinson's disease (PD). Several genetic variants within the nicotinic cholinergic receptor gene cluster, CHRNA5-CHRNA3-CHRNB4 have been reported to be associated with nicotine dependence (ND), and this association has been validated in multiple studies.

**OBJECTIVES:**

Due to the inverse correlation between smoking and PD susceptibility, we investigated whether ND-related genetic variants are associated with age at onset (AAO) of PD among smokers.
METHODS:

We performed a genetic association study in a sample of 677 Italian PD patients, ages 34-76. 438 had never smoked (NS), and 239 were current or past smokers (ever-smokers, ES). Three independent SNPs within the CHRNA5-CHRNA3-CHRNB4 gene cluster (rs588765, rs16969968, rs578776) were analyzed for association with AAO.

RESULTS:

We demonstrated an interaction between the rs588765 SNP and smoking status (NS vs. ES) that was nominally significant in its effect on PD AAO (p = 0.04). The rs588765 ND risk allele 'C' was associated with delayed AAO among ES (even when smoking intensity variables are accounted for), but had no significant effect among NS. In the ES group, a dominant model of inheritance was observed: carriers of the 'CC' genotype presented delayed AAO compared to carriers of the 'CT' or 'TT' genotypes.

CONCLUSION:

Our preliminary results suggest that the ND risk variant, rs588765, has a protective effect in PD, and is associated with later AAO, but only when the individual was previously exposed to nicotine. This may be explained by modulating the neuroprotective effect of chronic nicotine exposure against striatal dopaminergic damage. Further validation studies in additional populations are required.


Behavioural and psychological responses of lower educated smokers to the smoke-free legislation in Dutch hospitality venues: A qualitative study


Van der Heiden S, Gebhardt WA, Willemsen MC, Nagelhout GE, Dijkstra A.

Abstract
Objective: In 2008, smoke-free legislation was implemented in hospitality venues (HV) in the Netherlands. We investigated how continuing smokers with a lower educational background respond behaviourally and psychologically to the legislation and the norm it communicates. Design: In 2010, 18 lower-educated daily smokers were interviewed. Transcripts were analysed with MAXQDA software. Theories of self-awareness and social in- and exclusion were applied to interpret findings. Results: Smokers had become more self-aware and the experience of a more negative norm surrounding smoking had made them reevaluate their smoking. Smokers had also become more self-aware of their own smoking, both in HV and in general. Feelings of increased social exclusion were reported. Participants dealt with the increased awareness and feelings of social exclusion in different ways depending on their evaluation of the smoking ban, changes in attitude towards own smoking, changes in HV patronage and changes in smoking behaviour. Conclusion: Theories of self-awareness and social in- and exclusion were useful in understanding consequences of a HV smoking ban on continuing smokers. Four different types of responses were identified, i.e. (1) actively trying to quit, (2) socially conscious smoking, (3) feeling victimised and (4) rejecting the norm. Implications for future smoke-free legislation are discussed.


Sensory modality of smoking cues modulates neural cue reactivity


Yalachkov Y, Kaiser J, Görtres A, Seehaus A, Naumer MJ.

Abstract

RATIONALE:

Behavioral experiments have demonstrated that the sensory modality of presentation modulates drug cue reactivity.
OBJECTIVES:
The present study on nicotine addiction tested whether neural responses to smoking cues are modulated by the sensory modality of stimulus presentation.

METHODS:
We measured brain activation using functional magnetic resonance imaging (fMRI) in 15 smokers and 15 nonsmokers while they viewed images of smoking paraphernalia and control objects and while they touched the same objects without seeing them.

RESULTS:
Haptically presented, smoking-related stimuli induced more pronounced neural cue reactivity than visual cues in the left dorsal striatum in smokers compared to nonsmokers. The severity of nicotine dependence correlated positively with the preference for haptically explored smoking cues in the left inferior parietal lobule/somatosensory cortex, right fusiform gyrus/inferior temporal cortex/cerebellum, hippocampus/parahippocampal gyrus, posterior cingulate cortex, and supplementary motor area.

CONCLUSIONS:
These observations are in line with the hypothesized role of the dorsal striatum for the expression of drug habits and the well-established concept of drug-related automatized schemata, since haptic perception is more closely linked to the corresponding object-specific action pattern than visual perception. Moreover, our findings demonstrate that with the growing severity of nicotine dependence, brain regions involved in object perception, memory, self-processing, and motor control exhibit an increasing preference for haptic over visual smoking cues. This difference was not found for control stimuli. Considering the sensory modality of the presented cues could serve to develop more reliable fMRI-specific biomarkers, more ecologically valid experimental designs, and more effective cue-exposure therapies of addiction.

http://www.springerlink.com/content/04r1k2300431g503/

Also:
Nicotine-induced enhancement of responding for conditioned reinforcement in rats: Role of prior nicotine exposure and α4β2 nicotinic receptors
http://www.springerlink.com/content/d06254tu20k712w5/

Microbiological components in mainstream and sidestream cigarette smoke

Published: 16 August 2012
Lennart Larsson, Christina Pehrson, Tenzin Dechen and Mardi Crane-Godreau

Abstract

Background
Research has shown that tobacco smoke contains substances of microbiological origin such as ergosterol (a fungal membrane lipid) and lipopolysaccharide (LPS) (in the outer membrane of Gram-negative bacteria). The aim of the present study was to compare the amounts of ergosterol and LPS in the tobacco and mainstream (MS) and sidestream (SS) smoke of some popular US cigarettes.

Methods
We measured LPS 3-hydroxy fatty acids and fungal biomass biomarker ergosterol in the tobacco and smoke from cigarettes of 11 popular brands purchased in the US. University of Kentucky reference cigarettes were also included for comparison.

Results
The cigarette tobacco of the different brands contained 6.88-16.17 (mean 10.64) pmol LPS and 8.27-21.00 (mean 14.05) ng ergosterol/mg. There was a direct correlation between the amounts of ergosterol and LPS in cigarette tobacco and in MS smoke collected using continuous suction; the MS smoke contained 3.65-8.23% (ergosterol) and 10.02-20.13% (LPS) of the amounts in the tobacco. Corresponding percentages were 0.30-0.82% (ergosterol) and 0.42-1.10% (LPS) for SS smoke collected without any ongoing suction, and 2.18% and 2.56% for MS smoke collected from eight two-second puffs.

Conclusions

Tobacco smoke is a bioaerosol likely to contain a wide range of potentially harmful bacterial and fungal components.

http://www.tobaccoinduceddiseases.com/content/10/1/13/abstract

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

Evaluating Effects of Statewide Smoking Regulations on Smoking Behaviors Among Participants in the Survey of the Health of Wisconsin

Wisc Med J
Volume 111, Issue 4, 166-171, August 2012

Alexis Guzmán, Matthew C. Walsh, Stevens S. Smith, Kristen C. Malecki, F. Javier Nieto

Abstract

Background: Studies have shown that laws banning smoking in public places reduce exposure to secondhand smoke, but the impact of such laws on exposure to smoke outside the home and on household smoking policies has not been well documented. The goal of this study was to evaluate the effects of 2009 Wisconsin Act 12, a statewide smoke-free law enacted in July 2010, among participants in the Survey of the Health of Wisconsin (SHOW).

Methods: Smoking history and demographic information was gathered from 1341 survey participants from 2008 to 2010. Smoking behaviors of independent samples of participants surveyed before and after the legislation was enacted were compared.

Results: The smoking ban was associated with a reduction of participants reporting exposure to smoke outside the home (from 55% to 32%; P < 0.0001) and at home (13% to 7%; P = 0.002). The new legislation was associated with an increased percentage of participants with no-smoking policies in their households (from 74% to 80%; P = .04). The results were stronger among participants who were older, wealthier, and more educated.

Conclusion: Smoke-free legislation appears to reduce secondhand smoke exposure and to increase no-smoking policies in households. Further research should be conducted to see if these effects are maintained.

http://www.wisconsinmedicalsociety.org/currentissue
http://viewer.zmags.com/publication/3b0190ed#/3b0190ed/20

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

Related news coverage:

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12.11.2012