Smoking & Tobacco Abstracts & News
STAN Bulletin

1st Edition

1-June-2012

Editor's Note: Welcome to the inaugural edition of STAN Bulletin: **S**moking & **T**obacco **A**bstracts & **N**ews. Regular delivery will be twice weekly, Monday and Thursday mornings (Montreal time), though there will be at least one and possibly a few weeks of Monday-Wednesday-Friday mailings to clear a backlog of material gathered since GLOBALink MJU ceased publication in April. You may reply directly to this message to make PDF requests. Please indicate clearly which headlined abstracts are of interest to you. Requests must be limited to a maximum of five (5) PDFs from any given edition or on any given day. STAN Bulletin is subscription-free, but dependent on voluntary contributions by groups and individuals. I look forward to your feedback on the format and content. I hope this publication will be of help to you as we continue our collective work.

Stan Shatenstein

In the News:

- Australia: Customs Act Amendment: Harsher Penalties Proposed for Tobacco Smugglers
- Australia: Metal cigarette packets: retailers could get burned
- Canada: Alberta: Province set to launch $10-billion lawsuit against tobacco companies
- Canada: MB/SK: Provinces pass enabling legislation for health care recovery tobacco lawsuits
- Canada: Lancet Oncol: Budget cuts overshadow good news on cancer statistics
- China: Health Hazards of Smoking: Landmark report calls for butting out
- China: Shanghai: Health Promotion Commission Survey: Residents want smoking banned indoors
- Israel: Number of adult smokers declines by 2.7 percent to record low
- NZ: Tasmania: Smoke-free proposal stirs debate [*Tob Control*: Singapore: Phasing-out tobacco (2010)]
- Russia: Philip Morris, BAT, Japan Tobacco Battle Putin's Anti-Smoking Plan
- US: CA: Prop 29: Separating Fact From Fiction: Arguments for Yes Vote
- US: California: Prop 29: Ad Blitz Ahead of Vote on Cigarette Tax
- US: FL: Four tobacco companies ordered to pay more than $75 million to smoker's widow
- US: MN: State Supreme Court ruling ends Marlboro Lights class-action lawsuit
- US: NY: CLASH: Pro-tobacco lobby delays implementation of state park smoking ban
- US/NZ: Washington Post: Editorial: Snuffing out tobacco with taxes?

Noteworthy:

"Documentation of such a high prevalence of TSE [Tobacco Smoke Exposure] in this population lends further support to public policies for smoke-free multiunit housing because poor and medically underserved populations disproportionately live in apartments. Because smoking is more common among economically disadvantaged populations, multiunit housing is a source of childhood TSE even when nobody smokes in the child's unit... The benefits of smoke-free housing include decreased TSE for everyone in the building, lower teen smoking initiation rates, decreased school absenteeism, enhanced incentive for smoking cessation, increased financial resources of dwellers owing to lower smoking rates, decreased fire risks, and lower cleaning and insurance costs for building owners." [Winickoff JP, Joseph A. Toward a Population Free of Tobacco Smoke Exposure: Testing of Children in the Pediatric Setting, *APAM*]

"May 31 is World No Tobacco Day. This year's theme is tobacco industry interference, chosen, in WHO's words, “to expose and counter the tobacco industry's brazen and increasingly aggressive attempts to undermine the WHO Framework Convention on Tobacco Control (WHO FCTC)”... There is no sign of weakening of the tobacco industry's resolve to counter control measures. Tackling industry interference with tobacco control continues to be an essential component of public health strategy, and is likely to remain so for the foreseeable future." [Editorial. Tobacco industry versus tobacco control, *Lancet*]

In this Edition:

Abstracts:

German medical students lack knowledge of how to treat smoking and problem drinking

Addiction
Early View (Online Version of Record published before inclusion in an issue)
Article first published online: **3 MAY 2012**

Lisa Strobel, Nick K. Schneider, Henning Krampe, Tim Beißbarth, Tobias Pukrop, Sven Anders, Robert West, Paul Aveyard and Tobias Raupach

Abstract

Aim To assess the extent of undergraduate medical training on alcohol use disorders (AUD) and smoking, and medical students' perceived knowledge regarding consequences of, and treatment options for, these disorders compared with other chronic conditions.

Design Cross-sectional survey assessing teaching and perceived knowledge of health consequences and treatment options for AUD and smoking compared with diabetes and hypertension.

Setting Medical schools in Germany.

Participants Twenty-five of 36 medical school offices (response rate 69.4%) and 19 526 of 39 358 students from 27 medical schools (response rate 49.6%).

Measurement Medical schools were asked to provide information on curricular coverage of the four conditions. Students reported their year of study and perceived knowledge about the consequences of all four disorders and perceived knowledge of treatment options.

Findings Courses time-tabled approximately half as many teaching hours on AUD and tobacco as on diabetes or hypertension. Final-year students reported high levels of knowledge of consequences of all four conditions and how to treat diabetes and hypertension, but only 20% believed they knew how to treat alcohol use disorders or smoking.

Conclusions Curriculum coverage in German medical schools of alcohol use disorders and smoking is half that of diabetes and hypertension, and in the final year of their undergraduate training most students reported inadequate knowledge of how to intervene to address them.

http://onlinelibrary.wiley.com/doi/10.1111/j.1360-0443.2012.03907.x/abstract

---

Alternative Smoking Cessation Aids: A Meta-analysis of Randomized Controlled Trials

The American Journal of Medicine
Available online **11 April 2012**

Mehdi Tahiri, Salvatore Mottillo, Lawrence Joseph, Louise Pilote, Mark J. Eisenberg

Abstract

Background

Acupuncture, hypnotherapy, and aversive smoking are the most frequently studied alternative smoking cessation aids. These aids are often used as alternatives to pharmacotherapies for smoking cessation; however, their efficacy is unclear.

Methods

We carried out a random effect meta-analysis of randomized controlled trials to determine the efficacy of alternative smoking cessation aids. We systematically searched the Cochrane Library, EMBASE, Medline, and PsycINFO databases through December 2010. We only included trials that reported cessation outcomes as point prevalence or continuous abstinence at 6 or 12 months.

Results

Fourteen trials were identified; 6 investigated acupuncture (823 patients); 4 investigated hypnotherapy (273 patients); and 4 investigated aversive smoking (99 patients). The estimated mean treatment effects were acupuncture (odds ratio [OR], 3.53; 95% confidence interval [CI], 1.03-12.07), hypnotherapy (OR, 4.55; 95% CI, 0.98-21.01), and aversive smoking (OR, 4.26; 95% CI, 1.26-14.38).

Conclusion

Our results suggest that acupuncture and hypnotherapy may help smokers quit. Aversive smoking also may help smokers quit; however, there are no recent trials investigating this intervention. More evidence is needed to determine whether alternative interventions are as efficacious as pharmacotherapies.

http://www.sciencedirect.com/science/article/pii/S0002934312000034

Related *Cochrane Data Syst Rev*:

Acupuncture and related interventions for smoking cessation
http://onlinelibrary.wiley.com/o/cochrane/clsysrev/articles/CD000009/frame.html

Note: Studies featured previously in MJU.

Also:

A randomized controlled clinical trial of auricular acupuncture in smoking cessation (2007)
http://www.sciencedirect.com/science/article/pii/S1726490108700145

Related coverage:

Want to quit smoking ? Try acupuncture or hypnosis - Reuters
http://www.reuters.com/article/2012/05/07/us-smoking-acupuncture-idUSBRE84601X20120507
Some support for quit-smoking alternatives - Reuters
http://www.reuters.com/article/2012/05/04/us-ssmoking-alternatives-idUSBRE8431J520120504

Interplay of Genetic Risk Factors (*CHRNA5-CHRNA3-CHRNB4*) and Cessation Treatments in Smoking Cessation Success

The American Journal of Psychiatry, AJP in Advance
May 30, 2012

Li-Shiun Chen, Timothy B. Baker, Megan E. Piper, Naomi Breslau, Dale S. Cannon, Kimberly F. Doheny, Stephanie M. Gogarten, Eric O. Johnson, Nancy L. Saccone, Jen C. Wang, Robert B. Weiss, Alison M. Goate, Laura Jean Bierut

Abstract

Objective: Smoking is highly intractable, and the genetic influences on cessation are unclear. Identifying the genetic factors affecting smoking cessation could elucidate the nature of tobacco dependence, enhance risk assessment, and support development of treatment algorithms. This study tested whether variants in the nicotinic receptor gene cluster *CHRNA5-CHRNA3-CHRNB4* predict age at smoking cessation and relapse after an attempt to quit smoking.

Method: In a community-based, cross-sectional study (N=5,216) and a randomized comparative effectiveness smoking cessation trial (N=1,073), the authors used Cox proportional hazard models and logistic regression to model the relationships of smoking cessation (self-reported quit age in the community study and point-prevalence abstinence at the end of treatment in the clinical trial) to three common haplotypes in the *CHRNA5-CHRNA3-CHRNB4* region defined by rs16969968 and rs680244.

Results: The genetic variants in the *CHRNA5-CHRNA3-CHRNB4* region that predict nicotine dependence also predicted a later age at smoking cessation in the community sample. In the smoking cessation trial, haplotype predicted abstinence at end of treatment in individuals receiving placebo but not among individuals receiving active medication. Haplotype interacted with treatment in affecting cessation success.

Conclusions: Smokers with the high-risk haplotype were three times as likely to respond to pharmacologic cessation treatments as were smokers with the low-risk haplotype. The high-risk haplotype increased the risk of cessation failure, and this increased risk was ameliorated by cessation pharmacotherapy. By identifying a high-risk genetic group with heightened response to smoking cessation pharmacotherapy, this work may support the development of personalized cessation treatments.

http://psychiatryonline.org/article.aspx?articleid=1169679&journalid=13

Related coverage & PR:

Genetics may predict a person's success of quitting smoking - Fox News
http://www.foxnews.com/health/2012/05/31/genetics-may-predict-person-success-quitting-smoking/
Genes Predict If Medication Can Help You Quit Smoking - ScienceDaily
http://www.sciencedaily.com/releases/2012/05/120530115826.htm

---

Determination of Tobacco Smoke Exposure by Plasma Cotinine Levels in Infants and Children Attending Urban Public Hospital Clinics

Arch Pediatr Adolesc Med. doi:10.1001/archpediatrics.2012.170
Published online **May 7, 2012**.

Delia A. Dempsey; Matthew J. Meyers; Sam S. Oh; Elizabeth A. Nguyen; Elena Fuentes-Afflick; Alan H. B. Wu; Peyton Jacob; Neal L. Benowitz

Abstract

Objective: To determine the prevalence of secondhand smoke (SHS) exposure among infants and young children who received preventive care at pediatric preventative care clinics associated with an urban public hospital. Cotinine, a metabolite of nicotine, has been used to study SHS exposure in population-based studies of children 3 years of age or older.

Design: Retrospective study using a convenience sample.

Setting: Urban county pediatric primary care clinics in San Francisco, California.

Participants: A total of 496 infants and children (mean [SD] age, 2.4 [1.9] years).

Interventions: Discarded plasma samples (which were routinely collected for lead screening) were tested, and medical records were reviewed, for SHS exposure.

Main Outcome Measure: Secondhand smoke exposure based on cotinine plasma level and history of exposure in the medical record.

Results: Thirteen percent of parents reported that their child was exposed to SHS, yet biochemical testing detected cotinine in 55% of samples, at a geometric mean (SD) of 0.23 (3.55) ng/mL. There were no significant sex or age differences. African American children had much higher mean cotinine levels than did Latino children (geometric mean difference, 6.07 ng/mL [95% CI, 4.37 to 8.43 ng/mL]).

Conclusion: In a city with a low smoking rate (12%) and public smoking bans, we documented 55% exposure among infants and young children, using a plasma biomarker, compared with 13% exposure reported by parents. Because SHS is associated with significant respiratory diseases and parents underreport exposure, routine biochemical screening should be considered as a tool to identify and reduce SHS exposure.

http://archpedi.ama-assn.org/cgi/content/short/archpediatrics.2012.170

Related *APAM* Editorial:

Toward a Population Free of Tobacco Smoke Exposure: Testing of Children in the Pediatric Setting
http://archpedi.ama-assn.org/cgi/content/short/archpediatrics.2012.297

Factors Associated With Smoking, Quit Attempts and Attitudes towards Total Smoking Bans at University: A Survey of Seven Universities in England, Wales and Northern Ireland

Asian Pac J Cancer Prev. 2012;13(2):705-14.

Ansari WE, Stock C.

Abstract

Objectives: This study assessed the associations between socio-demographic, health and wellbeing variables (independent variables) and daily smoking, attempts to quit smoking, and agreement with smoking ban (dependent variables). Methods: Data from 3,706 undergraduate students were collected from seven universities in England, Wales, and Northern Ireland using a standardised questionnaire. Results: About 15.8% of the whole sample reported daily smoking, while 12% were occasional smokers. Smoking was significantly more prevalent among males, but the difference was due to a higher rate of occasional smokers. About every second smoker (55%) had attempted to quit smoking. Almost 45% of the whole sample agreed or strongly agreed with implementing a total smoking ban on campus. Daily smoking was more likely among students with not sufficient income, students whose fathers had at least a bachelor degree; and, students who reported binge drinking. Conversely, daily smoking was less likely among students who rated their health as very good/ excellent, those who ate ≥5 portions of fruit or vegetables, and those who had never taken illicit drugs. Previous attempt/s to quit smoking were more likely among students who have never taken illicit drugs and those who agreed with a total smoking ban; and less likely among those with not sufficient income. Daily smokers were less likely to report quit attempts as compared to occasional smokers. An agreement with smoking ban was more likely among students who rated their health as very good/ excellent, those who ate ≥5 portions of fruit or vegetables daily, and those who had never taken illicit drugs, but less likely among daily smokers. Conclusion: Favourable health practices and positive attitudes towards smoking ban were associated with each other. Interventions would need to comprise multi-component programmes that do not solely focus on smoking prevention/cessation, but also on other health promoting practices as well.

http://www.apjcpcontrol.org/page/popup_paper_file_view.php?pno=NzA1LTE0IDEyLiZrY29kZT0yODIx&pgubun=i

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

Risk of cardiovascular serious adverse events associated with varenicline use for tobacco cessation: systematic review and meta-analysis

BMJ 2012; 344 doi: 10.1136/bmj.e2856 (Published 4 May 2012)

Judith J Prochaska, Joan F Hilton

Abstract

Objective To examine the risk of treatment emergent, cardiovascular serious adverse events associated with varenicline use for tobacco cessation.

Design Meta-analysis comparing study effects using four summary estimates.

Data sources Medline, Cochrane Library, online clinical trials registries, and reference lists of identified articles.

Review methods We included randomised controlled trials of current tobacco users of adult age comparing use of varenicline with an inactive control and reporting adverse events. We defined treatment emergent, cardiovascular serious adverse events as occurring during drug treatment or within 30 days of discontinuation, and included any ischaemic or arrhythmic adverse cardiovascular event (myocardial infarction, unstable angina, coronary revascularisation, coronary artery disease, arrhythmias, transient ischaemic attacks, stroke, sudden death or cardiovascular related death, or congestive heart failure).

Results We identified 22 trials; all were double blinded and placebo controlled; two included participants with active cardiovascular disease and 11 enrolled participants with a history of cardiovascular disease. Rates of treatment emergent, cardiovascular serious adverse events were 0.63% (34/5431) in the varenicline groups and 0.47% (18/3801) in the placebo groups. The summary estimate for the risk difference, 0.27% (95% confidence interval −0.10 to 0.63; P=0.15), based on all 22 trials, was neither clinically nor statistically significant. For comparison, the relative risk (1.40, 0.82 to 2.39; P=0.22), Mantel-Haenszel odds ratio (1.41, 0.82 to 2.42; P=0.22), and Peto odds ratio (1.58, 0.90 to 2.76; P=0.11), all based on 14 trials with at least one event, also indicated a non-significant difference between varenicline and placebo groups.

Conclusions This meta-analysis—which included all trials published to date, focused on events occurring during drug exposure, and analysed findings using four summary estimates—found no significant increase in cardiovascular serious adverse events associated with varenicline use. For rare outcomes, summary

estimates based on absolute effects are recommended and estimates based on the Peto odds ratio should be avoided.

http://www.bmj.com/content/344/bmj.e2856
http://www.bmj.com/highwire/filestream/582907/field_highwire_article_pdf/0.pdf

Note: Open Access. Full text PDF freely available from link immediately above. CMAJ study also Open Access, but not Commentary.

Referenced CMAJ study, Data Supplement & related Commentary:

Risk of serious adverse cardiovascular events associated with varenicline: a systematic review and meta-analysis
http://www.cmaj.ca/content/early/2011/07/04/cmaj.110218
http://www.cmaj.ca/content/early/2011/07/04/cmaj.110218.full.pdf+html
Online Appendices
http://www.cmaj.ca/content/early/2011/07/04/cmaj.110218/suppl/DC1
Varenicline for smoking cessation: Is it a heartbreaker?
http://www.cmaj.ca/content/early/2011/07/04/cmaj.110804

Related PR:

Cardiovascular safety concerns over smoking-cessation drug misleading
http://www.eurekalert.org/pub_releases/2012-05/uoc--sco050212.php

---

Smoking cessation interventions in the pre-admission clinic: assessing two approaches

Can J Anaesth. 2012 Apr 28. [Epub ahead of print]

Sachs R, Wild TC, Thomas L, Hammal F, Finegan BA.

Abstract

PURPOSE:

Brief intervention (BI) to encourage patients who smoke to quit is effective and should occur at every patient interaction. If smokers receive a motivational interview in addition to BI and are offered pharmacotherapy to treat nicotine withdrawal, cessation rates may be improved. We compared the uptake, implementation, and effectiveness of these two approaches in the delivery of a smoking cessation intervention during assessments in a pre-admission clinic (PAC).

METHODS:

The study was performed in the PAC at two tertiary care hospitals. At both hospitals, PAC patients were screened for smoking status, and current smokers were offered the opportunity to participate in a cessation program. Those who agreed were asked to consent to participate in an evaluation of program effectiveness that included a telephone interview about smoking status six months after hospital discharge. A cohort design was used to compare cessation outcomes across PACs during a one-year period of patient recruitment. The primary outcome measure was a self-reported continuous quit rate six months following hospitalization. Secondary outcomes included the number of patients willing to participate and the completeness of the delivery of program components.

INTERVENTIONS:

A BI delivered at one PAC consisted of brief advice and self-help materials, including handing the patient a business card with an available 1-800 Quit line (a telephone smoking cessation help line). The other PAC offered an intensive intervention (II) that included augmenting the BI with an in-hospital and post-discharge motivational interview and access to nicotine replacement therapy (NRT) during admission.

RESULTS:

At follow-up, we were able to contact 147 of the 288 smokers who agreed to participate in the evaluation of the program, and the self-reported quit rates for the BI and II interventions were 11.4% and 19.5%, respectively. More than 1,200 current smokers were identified and approached at both PACs during the 12-month patient recruitment period, and 60% of those were willing to accept the offered smoking cessation intervention (either BI or II). Implementation of II was uneven, particularly the delivery of the in-hospital motivational interview and prescription of NRT. Uptake of the 1-800 Quit service after discharge was inadequate.

CONCLUSION:

The PAC is a feasible location to identify smokers and offer a cessation intervention. There are considerable logistical barriers to the development of an II intervention program as described. A program that incorporates elements of BI and II could offer a practical approach to the implementation of a hospital-wide smoking cessation intervention.

http://www.springerlink.com/content/m711340h8118p31t/

Estimates of smoking-attributable mortality and hospitalization in BC, 2002-2007

Can J Public Health. 2012 Mar-Apr;103(2):137-41.

Tu AW, Buxton JA, Stockwell T.

Abstract

OBJECTIVE:

The objective of this paper was to estimate the number and rate of deaths and hospitalizations attributable to smoking in British Columbia (BC) from 2002 to 2007.

METHODS:

Using attributable fractions adjusted to BC smoking prevalence and mortality and hospital administrative data, estimates of smoking-attributable mortality (SAM) and smoking-attributable hospitalization (SAH) were calculated by year, disease category, sex, and geographic region.

RESULTS:

Among active smoking adults 15 years of age and older, there were an estimated 4,851 deaths and 25,314 hospitalizations attributed to smoking in BC in 2007. SAM and SAH rates in 2007 were estimated as 119 and 633 per 100,000, respectively. Rates increased from 2002 to 2005 but have declined in subsequent years. Lung cancer and chronic obstructive pulmonary disease were responsible for the largest proportion of SAM and SAH, respectively. There were regional differences, with the Northern Health authority having the highest rate of SAM and SAH and Vancouver Coastal Health authority having the lowest.

CONCLUSION:

Smoking still presents a substantial human and economic burden in BC. Estimates of annual SAM and SAH provide researchers with the ability to detect emerging trends, target intervention and cessation programs, and evaluate current smoking reduction programs. The methodology can be adapted to other provinces to allow for cross-province comparisons.

http://journal.cpha.ca/index.php/cjph/article/view/3073

Modeling the effect of disseminating brief intervention for smoking cessation at medical facilities in Japan: a simulation study

Cancer Causes Control. 2012 Apr 25. [Epub ahead of print]

Katanoda K, Levy DT, Nakamura M, Hagimoto A, Oshima A.

Abstract

PURPOSE:

The Japanese male smoking prevalence is still high. Underlying causes are the low quit attempt rate (QAR) and lack of pharmacotherapy (PT) use. Though health checkups are widely and systematically performed in Japan, this setting has not been utilized for intervention to smokers. We aimed to estimate the population effect of disseminating brief intervention (BI) at health checkup facilities combined with encouraging PT utilization.

METHODS:

The annual population quit rate (PQR) was modeled as a product of three components: the QAR, utilization of PT, and effectiveness of PT. A policy to disseminate effective BI at health checkup facilities was then incorporated into the PQR model as means to increase the QAR and/or PT utilization. Japanese male smokers aged 40-74 years were the target population, and the baseline year was set at 2005. The PQR and the number of smokers who successfully quit were compared with the baseline to evaluate the BI policy.

RESULTS:

The BI policy was estimated to increase the PQR from 4.3 to 5.7 % (rate ratio: 1.34) in a scenario where 75 % of smokers having an annual health checkup received BI and 60 % of BI-induced quit attempts were supported by PT, resulting in 177,000 new successful quitters on an annual basis and 3,000 avoidable cancer deaths in 10 years. Comparisons of different scenarios revealed that increasing QAR and encouraging PT were both essential to maximize the effect of BI policy.

CONCLUSION:

The dissemination of BI at health checkup facilities encouraging PT utilization is an effective tobacco control policy in Japan.

http://www.springerlink.com/content/r3ptq0405108p04l/?MUD=MP

Nicotine receptor partial agonists for smoking cessation

Cochrane Database Syst Rev. 2012 Apr 18;4:CD006103.

Cahill K, Stead LF, Lancaster T.

Abstract

BACKGROUND:

Nicotine receptor partial agonists may help people to stop smoking by a combination of maintaining moderate levels of dopamine to counteract withdrawal symptoms (acting as an agonist) and reducing smoking satisfaction (acting as an antagonist).

OBJECTIVES:

The primary objective of this review is to assess the efficacy and tolerability of nicotine receptor partial agonists, including cytisine, dianicline and varenicline for smoking cessation.

SEARCH METHODS:

We searched the Cochrane Tobacco Addiction Group's specialised register for trials, using the terms ('cytisine' or 'Tabex' or 'dianicline' or 'varenicline' or 'nicotine receptor partial agonist') in the title or abstract, or as keywords. The register is compiled from searches of MEDLINE, EMBASE, PsycINFO and Web of Science using MeSH terms and free text to identify controlled trials of interventions for smoking cessation and prevention. We contacted authors of trial reports for additional information where necessary. The latest update of the specialised register was in December 2011. We also searched online clinical trials registers.

SELECTION CRITERIA:

We included randomized controlled trials which compared the treatment drug with placebo. We also included comparisons with bupropion and nicotine patches where available. We excluded trials which did not report a minimum follow-up period of six months from start of treatment.

DATA COLLECTION AND ANALYSIS:

We extracted data on the type of participants, the dose and duration of treatment, the outcome measures, the randomization procedure, concealment of allocation, and completeness of follow-up.The main outcome measured was abstinence from smoking at longest follow-up. We used the most rigorous definition of abstinence, and preferred biochemically validated rates where they were reported. Where appropriate we pooled risk ratios (RRs), using the Mantel-Haenszel fixed-effect model.

MAIN RESULTS:

Two recent cytisine trials (937 people) found that more participants taking cytisine stopped smoking compared with placebo at longest follow-up, with a pooled RR of 3.98 (95% confidence interval (CI) 2.01 to 7.87). One trial of dianicline (602 people) failed to find evidence that it was effective (RR 1.20, 95% CI 0.82 to 1.75). Fifteen trials compared varenicline with placebo for smoking cessation; three of these also included a bupropion treatment arm. We also found one open-label trial comparing varenicline plus counselling with counselling alone. We found one relapse prevention trial, comparing varenicline with placebo, and two open-label trials comparing varenicline with nicotine replacement therapy (NRT). We also include one trial in which all the participants were given varenicline, but received behavioural support either online or by phone calls, or by both methods. This trial is not included in the analyses, but contributes to the data on safety and tolerability. The included studies covered 12,223 participants, 8100 of whom used varenicline.The pooled RR for continuous or sustained abstinence at six months or longer for varenicline at standard dosage versus placebo was 2.27 (95% CI 2.02 to 2.55; 14 trials, 6166 people, excluding one trial evaluating long term safety). Varenicline at lower or variable doses was also shown to be effective, with an RR of 2.09 (95% CI 1.56 to 2.78; 4 trials, 1272 people). The pooled RR for varenicline versus bupropion at one year was 1.52 (95% CI 1.22 to 1.88; 3 trials, 1622 people). The RR for varenicline versus NRT for point prevalence abstinence at 24 weeks was 1.13 (95% CI 0.94 to 1.35; 2 trials, 778 people). The two trials which tested the use of varenicline beyond the 12-week standard regimen found the drug to be well-tolerated during long-term use. The main adverse effect of varenicline was nausea, which was mostly at mild to moderate levels and usually subsided over time. A meta-analysis of reported serious adverse events occurring during or after active treatment and not necessarily considered attributable to treatment suggests there may be a one-third increase in the chance of severe adverse effects among people using varenicline (RR 1.36; 95% CI 1.04 to 1.79; 17 trials, 7725 people), but this finding needs to be tested further. Post-marketing safety data have raised questions about a possible association between varenicline and depressed mood, agitation, and suicidal behaviour or ideation. The labelling of varenicline was amended in 2008, and the manufacturers produced a Medication Guide. Thus far, surveillance reports and secondary analyses of trial data are inconclusive, but the possibility of a link between varenicline and serious psychiatric or cardiovascular events cannot be ruled out.

AUTHORS' CONCLUSIONS:

Cytisine increases the chances of quitting, although absolute quit rates were modest in two recent trials. Varenicline at standard dose increased the chances of successful long-term smoking cessation between two- and threefold compared with pharmacologically unassisted quit attempts. Lower dose regimens also conferred benefits for cessation, while reducing the incidence of adverse events. More participants quit successfully with varenicline than with bupropion. Two open-label trials of varenicline versus NRT suggested a modest benefit of varenicline but confidence intervals did not rule out equivalence. Limited evidence suggests that varenicline may have a role to play in relapse prevention. The main adverse effect of varenicline is nausea, but mostly at mild to moderate levels and tending to subside over time. Possible links

with serious adverse events, including serious psychiatric or cardiovascular events, cannot be ruled out.Future trials of cytisine may test extended regimens and more intensive behavioural support. There is a need for further trials of the efficacy of varenicline treatment extended beyond 12 weeks.

http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006103.pub6/abstract

Additional *Cochrane Syst Data Rev* Update:

Interventions for smoking cessation in hospitalised patients
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001837.pub3/abstract

---

Maternal Smoking During Pregnancy and the Prevalence of Autism Spectrum Disorders Using Data from the Autism and Developmental Disabilities Monitoring Network

Environ Health Perspect
Online: 25 April 2012

Amy E. Kalkbrenner, Joe M. Braun, Maureen S. Durkin, Matthew J. Maenner, Christopher Cunniff, Li-Ching Lee, Sydney Pettygrove, Joyce S. Nicholas, Julie L. Daniels

Abstract

Background: Reported associations between gestational tobacco exposure and autism spectrum disorders (ASDs) have been inconsistent.

Objective: We estimated the association between maternal smoking during pregnancy and ASDs among children aged 8 years.

Methods: This population-based case-cohort study included 633,989 children, identified using publicly available birth certificate data, born in 1992, 1994, 1996, and 1998 from parts of 11 US states subsequently under ASD surveillance. Of these children, 3,315 were identified as having an ASD by the active, records-based surveillance of the Autism and Developmental Disabilities Monitoring Network. We estimated prevalence ratios (PRs) of maternal smoking from birth certificate report and ASDs using logistic regression, adjusting for maternal education, race/ethnicity, marital status, and maternal age; separately examining higher and lower-functioning case subgroups; and correcting for assumed under-ascertainment of autism by level of maternal education.

Results: About 13% of the source population and 11% of children with an ASD had a report of maternal smoking in pregnancy: adjusted PR (95% confidence interval) of 0.90 (0.80, 1.01). The association for the case subgroup Autistic Disorder (1,310 cases) was similar: 0.88 (0.72, 1.08), while that for ASD Not Otherwise Specified (ASD-NOS) (375 cases) was positive, albeit including the null: 1.26 (0.91, 1.75). Unadjusted associations corrected for assumed under-ascertainment were 1.06 (0.98, 1.14) for all ASDs, 1.12 (0.97, 1.30) for Autistic Disorder, and 1.63 (1.30, 2.04) for ASD-NOS.

Conclusions: After accounting for the potential of under-ascertainment bias, we found a null association between maternal smoking in pregnancy and ASDs, generally. The possibility of an association with a higher-functioning ASD subgroup was suggested, and warrants further study.

http://ehp03.niehs.nih.gov/article/info%3Adoi%2F10.1289%2Fehp.1104556

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

Related PR:

Smoking during pregnancy may increase risk for autism in children - Medwire News
http://www.medwire-news.md/45/99147/ObGyn/Smoking_during_pregnancy_may_increase_risk_for_autism_in_children.html

---

The use of mental health services by adolescent smokers: A nationwide Israeli study

Eur Psychiatry. 2012 Apr 27. [Epub ahead of print]

Shoval G, Mansbach-Kleinfeld I, Farbstein I, Kanaaneh R, Lubin G, Krivoy A, Apter A, Weizman A, Zalsman

G.

Abstract

In this study, we aimed to evaluate the utilization of mental health services by adolescent smokers, the presence of untreated mental disorders in this young population and the associated emotional and behavioral difficulties. We performed a nationwide survey study of an Israeli representative sample of 906 adolescents and their mothers. Mental disorders were assessed using the Development and Well-Being Assessment (DAWBA) Inventory. Emotional and behavioral difficulties were evaluated using the Strengths and Difficulties Questionnaire (SDQ). Mental health services use and smoking habits were evaluated by relevant questionnaires. Adolescent smokers were using significantly more mental health services than non-smokers (79% vs. 63%, respectively, P<0.001), independently of their mental health status or ethnic group. Adolescent smokers also reported more emotional and behavioral difficulties in most areas (P<0.001), which are consistent with their mothers' reports, except in the area of peer relationships. The treatment gap for the smoking adolescents was 53% compared to 69% in the non-smokers (P<0.001). This is the first study characterizing the use of mental health services and the related emotional and behavioral difficulties in a nationally-representative sample of adolescents. The findings of a wide treatment gap and the rates of the associated emotional and behavioral difficulties are highly relevant to the psychiatric assessment and national treatment plans of adolescent smokers.

http://www.sciencedirect.com/science/article/pii/S0924933812000144

Local Tolerance of a Sublingual Nicotine Tablet, an Open Single-centre Study

In Vivo May-June 2012 vol. 26 no. 3 463-468

LARS SAND, ANN-KRISTIN LEKERUD, MATS WALLSTRÖM and JAN M. HIRSCH

Abstract

Nicotine replacement therapy (NRT) is now widely used in various forms of administration to aid cessation of tobacco use. In this smoking cessation programme, a new tablet formulation has been compared to and found bioequivalent to the existing one. The present trial was performed in order to investigate the local tolerance of the new sublingual tablet. The study was performed as a prospective follow-up study of 16 weeks' duration on smokers using the new tablet, Nicorette® Microtab, over a period of 12 weeks. Fifty smokers were included in the study and the oral mucosa was inspected and photographed at each visit. At 12 weeks, participants were asked for their consent to take a biopsy from the site of application. Compliance with tablet use was high, with participants using an average of 12 tablets/day throughout the 12 week treatment period. Adverse events related to treatment were mild and tolerable. The changes observed were classified as being induced by frictional stimuli, with no changes to the deeper layers of the epithelium, and no thickening of the basal layers of the epithelium. The new tablet was considered well tolerated during the course of this study, with a benign local effect on the mucous membrane that was consistent with lesions that are reversible in nature.

http://iv.iiarjournals.org/content/26/3/463.abstract

Smoking at diagnosis and survival in cancer patients

International Journal of Cancer
Accepted Article (Accepted, unedited articles published online for future issues)
Accepted manuscript online: **26 APR 2012**

Graham W. Warren, Karin A. Kasza, Mary E. Reid, K. Michael Cummings and James R. Marshall

Abstract
The effect of smoking on survival in cancer patients is limited by the lack of structured prospective assessments of smoking at diagnosis. To assess the effect of smoking at diagnosis on survival, structured smoking assessments were obtained in a cohort of 5185 cancer patients within 30 days of a cancer diagnosis between 1982-98. Hazard ratios (HR) or odds ratios (OR) were generated to analyze the effects of

smoking at diagnosis on overall mortality (OM) and disease specific mortality (DSM) in a patient cohort from 13 disease sites containing at least 100 patients in each disease site. With a minimum of 12 years of follow-up, current smoking increased OM risk vs. recent quit (HR 1.17), former (HR 1.29), and never smokers (HR 1.38) in the overall cohort. Current smoking increased DSM risk vs. former (HR 1.23) and never smokers (HR 1.18). In disease sites with proportionately large (>20%) recent quit cohorts (lung, head/neck), current smoking increased OM and DSM risks as compared with recent quit. Current smoking increased mortality risks in lung, head/neck, prostate, and leukemia in men and breast, ovary, uterus, and melanoma in women. Current smoking was not associated with any survival benefit in any disease site. Data using prospective structured smoking assessments demonstrate that current smoking increased long term OM and DSM. Standardized smoking assessment at diagnosis is an important variable for evaluating outcomes in cancer patients.

http://onlinelibrary.wiley.com/doi/10.1002/ijc.27617/abstract

---

Waterpipe tobacco and cigarette smoking among university students in Jordan

Int J Tuberc Lung Dis. 2012 Apr 16. [Epub ahead of print]

Khabour OF, Alzoubi KH, Eissenberg T, Mehrotra P, Azab M, Carroll MV, Afifi RA, Primack BA.

Abstract

SETTING:

While waterpipe and cigarette smoking have been well studied in Syria and Lebanon, data from Jordan are limited.

OBJECTIVES:

To characterize the relative prevalence of waterpipe tobacco and cigarette smoking among university students in Jordan, and to compare the demographic and environmental factors associated with each form of tobacco use.

DESIGN:

We surveyed 1845 students randomly recruited from four universities in Jordan. We used multivariable logistic regression controlling for clustering of individuals within universities to determine associations between demographic and environmental covariates and waterpipe tobacco and cigarette use.

RESULTS:

Waterpipe tobacco smoking rates were 30% in the past 30 days and 56% ever, while cigarette smoking rates were 29% in the past 30 days and 57% ever. Past 30-day waterpipe tobacco smoking rates were 59% for males and 13% for females. Females had substantially lower odds than males of being current waterpipe (OR 0.12, 95%CI 0.10-0.15) or cigarette (OR 0.08, 95%CI 0.05-0.14) smokers. Current cigarette smoking was more significantly associated with markers of high socio-economic status (SES) than waterpipe tobacco smoking.

CONCLUSION:

Waterpipe tobacco smoking is as common as cigarette smoking among Jordanian university students. While cigarette smoking is consistently associated with high SES, waterpipe tobacco smoking is more evenly distributed across various populations.

http://www.ingentaconnect.com/content/iuatld/ijtld/pre-prints/ijtld110764

Editorial

Health, the forth pillar of sustainable development. A Rio+20 objective: prevention and precaution for cancer control in Africa

Journal africain du cancer / African Journal of Cancer
Online First, **26 April 2012**

A. J. Sasco

...Having done my MD thesis under the leadership of one of the pioneers in tobacco control, Pr Paul Fréour, I do not need to be convinced of the crucial need of a healthy living for the prevention of disease, including but not limited to avoidance of smoking. I spent years of my life as I still do, trying to act at all possible levels for convincing people and in particular the young not to smoke, to drink very little if any alcohol, to have a balanced healthy diet, and to indulge in physical exercise. Yet, close to 30 years in the field of cancer epidemiology for prevention convinced me that this is not enough. A significant, even if no one would agree of the precise estimation of its attributable risk, part of cancer is not due to genetics (in the classical restricted sense of alterations of the genome) and lifestyle. Having seen the number of cancer cases doubling over my career time, I conclude, after taking into account all causes of cancer (increase in population size, aging, screening, improvement in diagnostic methods, modifications of disease classification) the first two of which are easily taken into account through standardization of rates and the rest can be estimated by simulations, that there is a true, real increase in the occurrence of cancer in the world...

http://www.springerlink.com/content/y86366230624p052/

The Exposure-Dependent Effects of Aged Secondhand Smoke on Endothelial Function

J Am Coll Cardiol, 2012; 59:1908-1913, doi:10.1016/j.jacc.2012.02.025
Available online **14 May 2012**.

Paul F. Frey, Peter Ganz, Priscilla Y. Hsue, Neal L. Benowitz, Stanton A. Glantz, John R. Balmes, and Suzaynn F. Schick

Abstract

Objectives: The aim of this study was to investigate whether exposure to a range of relatively low concentrations of aged secondhand smoke (SHS), similar to those encountered commonly in the community, would impair endothelial function in a concentration-dependent manner.

Background: Exposure to SHS impairs endothelial function in humans. The concentration-dependent relationship for aged SHS effects on endothelial function after an exposure of short duration is unknown.

Methods: Thirty-three healthy nonsmokers were exposed to 1 of 2 low levels of aged SHS or to conditioned filtered air for 30 min. The primary end point was change in maximal percent brachial artery flow-mediated dilation after exposure.

Results: In a linear regression model for each increase in SHS exposure by 100 $\mu g/m^3$ respirable suspended particles, the absolute maximal percent brachial artery flow-mediated dilation was reduced by 0.67%. We did not find evidence of a threshold for the effect of SHS on flow-mediated dilation.

Conclusions: Short-term exposure to real-world levels of aged SHS for 30 min resulted in a concentration-dependent decrease in endothelial function as measured by flow-mediated dilation.

http://content.onlinejacc.org/cgi/content/abstract/59/21/1908
http://www.sciencedirect.com/science/article/pii/S0735109712009424

Joint Effects of Smoking and Gene Variants Involved in Sex Steroid Metabolism on Hot Flashes in Late Reproductive-Age Women

J Clin Endocrinol Metab. 2012 Mar 30. [Epub ahead of print]

Butts SF, Freeman EW, Sammel MD, Queen K, Lin H, Rebbeck TR.

Abstract

Background:Although smoking has a known association with hot flashes, the factors distinguishing smokers at greatest risk for menopausal symptoms have not been well delineated. Recent evidence supports a relationship between menopausal symptoms and variants in several genes encoding enzymes that metabolize substrates such as sex steriods, xenobiotics, and catechols. It is currently not known whether the impact of smoking on hot flashes is modified by the presence of such variants.Objective:The objective of the study was to investigate the relationship between smoking and hot flash occurrence as a function of genetic variation in sex steroid-metabolizing enzymes.Methods:A cross-sectional analysis of data from the Penn Ovarian Aging study, an ongoing population-based cohort of late reproductive-aged women, was performed. Smoking behavior was characterized. Single-nucleotide polymorphisms in five genes were investigated: COMT Val158Met (rs4680), CYP1A2*1F (rs762551), CYP1B1*4 (Asn452Ser, rs1800440), CYP1B1*3 (Leu432Val, rs1056836), and CYP3A4*1B (rs2740574).Results:Compared with nonsmokers, European-American COMT Val158Met double-variant carriers who smoked had increased odds of hot flashes [adjusted odds ratio (AOR) 6.15, 95% confidence interval (CI) 1.32-28.78)]; European-American COMT Val158Met double-variant carriers who smoked heavily had more frequent moderate or severe hot flashes than nonsmokers (AOR 13.7, 95% CI 1.2-154.9). European-American CYP 1B1*3 double-variant carriers who smoked described more frequent moderate or severe hot flashes than nonsmoking (AOR 20.6, 95% CI 1.64-257.93) and never-smoking (AOR 20.59, 95% CI 1.39-304.68) carriers, respectively. African-American single-variant CYP 1A2 carriers who smoked were more likely to report hot flashes than the nonsmoking carriers (AOR 6.16, 95% CI 1.11-33.91).Conclusion:This is the first report demonstrating the effects of smoking within the strata of gene variants involved in sex steroid metabolism on hot flashes in late reproductive-age women. The identification of individuals with a genetic susceptibility to smoking-related menopausal symptoms could contribute to interventions targeted at reducing reproductive morbidity both in the menopause and across the reproductive life course.

http://jcem.endojournals.org/content/early/2012/03/29/jc.2011-2216.abstract

Note: Study appeared previously in MJU.

Related PR:

Smokers with variants in specific genes at increased risk for hot flashes - News-Medical-Net
http://www.news-medical.net/news/20120503/Smokers-with-variants-in-specific-genes-at-increased-risk-for-hot-flashes.aspx

---

Letter to the Editor

Tobacco toxicity ignored as a cause of death. Why?

J Forensic Leg Med. 2012 May;19(4):239. Epub 2012 Jan 11.

Tormey WP.

Under the UK Births and Deaths Registration Act 1953, the Medical Certificates of the cause of death stratify those causes into (a) the disease or condition directly leading to death followed by other disease or conditions, if any, leading to that main cause. There is also a space to list other significant conditions contributing to the death but not related to the disease or condition. In 2010 in England, almost 20% of deaths of people over the age of 35 years were due to smoking. The leading two causes of death in males are ischaemic heart disease and malignancies of the trachea, bronchus and lung and in females, ischaemic heart disease leads the way and airways cancers are fifth. A poison is defined as “a substance that when introduced into or absorbed by a living organism causes death or injury,”. Cigarette smoke contains 43 known carcinogens and about 400 other toxins including nicotine, tar and carbon monoxide. Therefore tobacco smoke is poisonous. Yet the UK’s Office for National Statistics excludes alcohol and tobacco from the table of deaths related to drug misuse citing International Classification of Diseases, Tenth Revision codes as the rationale. The far fewer cases of lethal poisonings from opiates, amphetamines, antidepressants, benzodiazepines and others are listed. In 1992, the UK regulations were changed to allow any doctor issuing a death certificate to include tobacco smoking among the causes of death. There was a large increase in citing smoking on death certificates after the change but by 1997, smoking was again ignored. In 1998, Robinson et al reminded doctors that smoking should be mentioned as a cause of death on

death certificates.

Cotinine is a biological marker of nicotine exposure. Blood levels of cotinine distinguish active from passive smokers. In the Royal College of Pathologists (RCPath) Guidelines on Autopsy Practice, cotinine is not listed as a compound in Scenario 1 on death with likely cardiac pathology. The RCPath should amend their guidelines to include tobacco smoke toxicity in all relevant scenarios. Meanwhile smoking should be given the prominence it has universally earned on death certificates worldwide.

http://www.sciencedirect.com/science/article/pii/S1752928X11002472

A Novel Evaluation of World No Tobacco Day in Latin America

J Med Internet Res 2012;14(3):e77

John W Ayers, Benjamin M Althouse, Jon-Patrick Allem, Daniel E Ford, MPH, Kurt M Ribisl, Joanna E Cohen

Abstract

Background: World No Tobacco Day (WNTD), commemorated annually on May 31, aims to inform the public about tobacco harms. Because tobacco control surveillance is usually annualized, the effectiveness of WNTD remains unexplored into its 25th year.
Objective: To explore the potential of digital surveillance (infoveillance) to evaluate the impacts of WNTD on population awareness of and interest in cessation.
Methods: Health-related news stories and Internet search queries were aggregated to form a continuous and real-time data stream. We monitored daily news coverage of and Internet search queries for cessation in seven Latin American nations from 2006 to 2011.
Results: Cessation news coverage peaked around WNTD, typically increasing 71% (95% confidence interval [CI] 61–81), ranging from 61% in Mexico to 83% in Venezuela. Queries indicative of cessation interest peaked on WNTD, increasing 40% (95% CI 32–48), ranging from 24% in Colombia to 84% in Venezuela. A doubling in cessation news coverage was associated with approximately a 50% increase in cessation queries. To gain a practical perspective, we compared WNTD-related activity with New Year's Day and several cigarette excise tax increases in Mexico. Cessation queries around WNTD were typically greater than New Year's Day and approximated a 2.8% (95% CI –0.8 to 6.3) increase in cigarette excise taxes.
Conclusions: This novel evaluation suggests WNTD had a significant impact on popular awareness (media trends) and individual interest (query trends) in smoking cessation. Because WNTD is constantly evolving, our work is also a model for real-time surveillance and potential improvement in WNTD and similar initiatives.

http://www.jmir.org/2012/3/e77/

Note: Open Access. Full text html freely available from JMIR links above and below.

Related coverage:

World No Tobacco Day helps people consider quitting, research says - Los Angeles Times
http://www.latimes.com/health/boostershots/la-he-quit-smoking-20120530,0,5552277.story

Also:

Interpreting the Outcomes of Automated Internet-Based Randomized Trials: Example of an International Smoking Cessation Study
http://www.jmir.org/2012/1/e5/

The Effect of the Internet on Teen and Young Adult Tobacco Use: A Literature Review

J Pediatr Health Care. 2012 Apr 20. [Epub ahead of print]

Forsyth SR, Kennedy C, Malone RE.

Abstract

Research has shown that a positive association exists between exposure to smoking imagery, such as that found in movies and print advertising, and the subsequent uptake of cigarette smoking. Children appear to be especially vulnerable to advertising messaging and other positive portrayals of smoking, given that most adult smokers develop the habit before age 18 years. Although many traditional types of media have been studied, the current generation of youth is growing up as digital natives, with young people increasingly using the Internet for entertainment and to obtain information. Currently the Internet is an essentially unregulated marketplace of ideas and images. However, the effect of the Internet on teen smoking initiation has received little attention in studies. In this literature review, we summarize and critique the existing work, identify current knowledge gaps, and offer suggestions to health care providers about how to address this issue.

http://www.sciencedirect.com/science/article/pii/S0891524512000429

Changes in Smoking Prevalence and Number of Cigarettes Smoked Per Day Following the Implementation of a Comprehensive Tobacco Control Plan in New York City

J Urban Health. 2012 Apr 28. [Epub ahead of print]

Coady MH, Jasek J, Davis K, Kerker B, Kilgore EA, Perl SB.

Abstract

The New York City (NYC) Health Department has implemented a comprehensive tobacco control plan since 2002, and there was a 27% decline in adult smoking prevalence in NYC from 2002 to 2008. There are conflicting reports in the literature on whether residual smoker populations have a larger or smaller share of "hardcore" smokers. Changes in daily consumption and daily and nondaily smoking prevalence, common components used to define hardcore smokers, were evaluated in the context of the smoking prevalence decline. Using the NYC Community Health Survey, an annual random digit dial, cross-sectional survey that samples approximately 10,000 adults, the prevalence of current heavy daily, light daily, and nondaily smokers among NYC adults was compared between 2002 and 2008. A five-level categorical cigarettes per day (CPD) variable was also used to compare the population of smokers between the 2 years. From 2002 to 2008, significant declines were seen in the prevalence of daily smoking, heavy daily smoking, and nondaily smoking. Among daily smokers, there is also evidence of population declines in all but the lowest smoking category (one to five CPD). The mean CPD among daily smokers declined significantly, from 14.6 to 12.5. After an overall decline in smoking since 2002, the remaining smokers may be less nicotine dependent, based on changes in daily consumption and daily and nondaily smoking prevalence. These findings suggest the need to increase media and cessation efforts targeted towards lighter smokers.

http://www.springerlink.com/content/p2872g8l66373777/

Effect of donor smoking on survival after lung transplantation: a cohort study of a prospective registry

The Lancet, Early Online Publication, 29 May 2012

Robert S Bonser, Rhiannon Taylor, David Collett, Helen L Thomas, John H Dark, James Neuberger

Summary

Background

The risk that a positive smoking history in lung donors could adversely affect survival of transplant recipients causes concern. Conversely, reduction of the donor pool by exclusion of donors with positive smoking histories could compromise survival of patients waiting to receive a transplant. We examined the consequences of donor smoking on post-transplantation survival, and the potential effect of not transplanting lungs from such donors.

Methods

We analysed the effect of donor smoking on 3 year survival after first adult lung transplantation from brain-dead donors done between July 1, 1999, and Dec 31, 2010, by Cox regression modelling of data from the UK Transplant Registry. We estimated the effect of acceptance of lungs from donors with positive smoking histories on survival and compared it with the effect of remaining on the waiting list for a potential transplant from a donor with a negative smoking history donor, by analysing all waiting-list registrations during the same period with a risk-adjusted sequentially stratified Cox regression model.

Findings

Of 1295 lung transplantations, 510 (39%) used lungs from donors with positive smoking histories. Recipients of such lungs had worse 3 year survival after transplantation than did those who received lungs from donors with negative smoking histories (unadjusted hazard ratio [HR] 1·46, 95% CI 1·20—1·78; adjusted HR 1·36, 1·11—1·67). Independent factors affecting survival were recipient's age, donor—recipient cytomegalovirus matching, donor—recipient height difference, donor's sex, and total ischaemic time. Of 2181 patients registered on the waiting list, 802 (37%) died or were removed from the list without receiving a transplant. Patients receiving lungs from donors with positive smoking histories had a lower unadjusted hazard of death after registration than did those who remained on the waiting list (0·79, 95% CI 0·70—0·91). Patients with septic or fibrotic lung disease registered in 1999—2003 had risk-adjusted hazards of 0·60 (95% CI 0·42—0·87) and 0·39 (0·28—0·55), respectively.

Interpretation

In the UK, an organ selection policy that uses lungs from donors with positive smoking histories improves overall survival of patients registered for lung transplantation, and should be continued. Although lungs from such donors are associated with worse outcomes, the individual probability of survival is greater if they are accepted than if they are declined and the patient chooses to wait for a potential transplant from a donor with a negative smoking history. This situation should be fully explained to and discussed with patients who are accepted for lung transplantation.

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2812%2960160-3/abstract
http://www.sciencedirect.com/science/article/pii/S0140673612601603

Related *Lancet* Comment:

Expansion of the donor lung pool: use of lungs from smokers
http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2812%2960650-3/fulltext
http://www.sciencedirect.com/science/article/pii/S0140673612606503

News coverage:

Better to transplant smokers' lungs than staying on wait list, U.K. study finds - Toronto Star
http://www.thestar.com/news/canada/article/1201962--better-to-transplant-smokers-lungs-than-staying-on-wait-list-u-k-study-finds
Use of Smokers' Lungs for Transplant Has Pros, Cons - Philadelphia Inquirer/HealthDay News
http://www.philly.com/philly/health/HealthDay665150_20120529_Use_of_Smokers__Lungs_for_Transplant_Has_Pros__Cons.html
For Transplant, Smoker's Lung Beats No Lung - MedPage Today
http://www.medpagetoday.com/Transplantation/Transplantation/32976

Additional *Lancet* Editorial & News:

Tobacco industry versus tobacco control
http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60839-3/fulltext
http://www.sciencedirect.com/science/article/pii/S0140673612608393
Turkey wins plaudits for tobacco control
http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60841-1/fulltext
http://www.sciencedirect.com/science/article/pii/S0140673612608411

Smoking Family, Secondhand Smoke Exposure at Home, and Quitting in Adolescent Smokers

Nicotine Tob Res first published online April 30, 2012

Man Ping Wang, Sai Yin Ho, Wing Sze Lo, and Tai Hing Lam

Abstract

Introduction: This study investigated the associations of smoking family and secondhand smoke (SHS) exposure at home with quit attempts and smoking cessation among adolescents.

Methods: Students from 85 randomly selected secondary schools in Hong Kong were surveyed using an anonymous self-administered questionnaire on SHS exposure at home and outside the home in the past 7 days, quit attempts, smoking cessation, sociodemographic characteristics, and smoking status of family members and peers. Families with 1 or more smoking members (excluding the subject) were classified as smoking families and otherwise as nonsmoking families. Logistic regression yielded adjusted odds ratios (*AOR*s) for quit attempts and smoking cessation in smoking families with or without SHS exposure at home compared with nonsmoking families.

Results: Of 4,361 students who had smoked in the past 12 months, 70.3% were living with smokers and 52.8% were exposed to SHS at home. Compared with nonsmoking families, the *AOR*s (95% *CI*) for making at least 1 quit attempt in the past 12 months were 0.80 (0.61–1.05) for 0 day, 0.80 (0.63–1.04) for 1–3 days, and 0.65 (0.50–0.86) for 4–7 days of SHS exposure at home. The corresponding *AOR*s (95% *CI*) for smoking cessation were 0.58 (0.48–0.70), 0.45 (0.35–0.58), and 0.49 (0.41–0.60) (*p* for trend <.001). Any SHS exposure at home was associated with 28% and 53% lower odds of quit attempts and smoking cessation, respectively.

Conclusions: Living with smoker(s) and especially being exposed to SHS at home may hinder quit attempts and smoking cessation among Chinese adolescent smokers.

http://ntr.oxfordjournals.org/content/early/2012/04/29/ntr.nts109.abstract

Also:

Variations in Daily Cigarette Consumption on Work Days Compared With Nonwork Days and Associations With Quitting: Findings From the International Tobacco Control Four-Country Survey
http://ntr.oxfordjournals.org/content/early/2012/04/29/ntr.nts110.abstract
Reach and Effectiveness of a Community Program to Reduce Smoking Among Ethnic Turkish Residents in Rotterdam, the Netherlands: A Quasi-Experimental Design
http://ntr.oxfordjournals.org/content/early/2012/04/26/ntr.nts096.abstract
Panic Attack History and Anxiety Sensitivity in Relation to Cognitive-Based Smoking Processes Among Treatment-Seeking Daily Smokers
http://ntr.oxfordjournals.org/content/early/2012/04/26/ntr.ntr332.abstract

Open Access:

From Men to Mice: *CHRNA5/CHRNA3*, Smoking Behavior and Disease
http://ntr.oxfordjournals.org/content/early/2012/04/26/ntr.nts106.abstract
http://ntr.oxfordjournals.org/content/early/2012/04/26/ntr.nts106.full.pdf+html
http://ntr.oxfordjournals.org/content/early/2012/04/26/ntr.nts106/suppl/DC2

Epidemiologic investigation of an occupational illness of tobacco harvesters in southern Brazil, a worldwide leader in tobacco production

Occup Environ Med. 2012 Apr 26. [Epub ahead of print]

Bartholomay P, Iser BP, Oliveira PP, Santos TE, Malta DC, Sobel J, Moura LD.

Abstract

Objectives As part of smoking surveillance, the authors conducted an epidemiologic investigation in southern Brazil to identify the occurrence of Green Tobacco Sickness and risk factors for illness and to recommend

control and prevention measures. Methods A 1:2 case-control study matched by subjects' smoking habits. The study population was residents of Candelária, Rio Grande do Sul state, who farm tobacco and provided a urine sample for cotinine measurement by high-performance liquid chromatography. Confirmed cases were persons with compatible clinical presentation (headache, nausea, vomit, dizziness or weakness) and cotinine level >10 ng/ml. Controls were persons without compatible signs or symptoms. The association measure was the matched OR with 95% CIs and p<0.05. Results Of 33 confirmed cases, 64% were men, average age was 33 years (SD ±11.8 years) and 57% were landowners. Cases have had similar illness in the past and were likelier to be workers hired by farmers-landowners than controls. Multivariate analysis yielded independent association between these variables and illness, controlled for age and sex. Contact with pesticides and working with wet tobacco leaves were not associated with illness. Conclusions The authors confirmed Green Tobacco Sickness in southern Brazil; the authors recommend investigation of its prevalence in tobacco-growing regions and monitoring of and education about the disease and its prevention by occupational health authorities.

http://oem.bmj.com/content/early/2012/04/25/oemed-2011-100307.abstract

---

Tobacco Outlet Density and Demographics: A Geographically Weighted Regression Analysis

Prev Sci. 2012 Apr 28. [Epub ahead of print]

Mayers RS, Wiggins LL, Fulghum FH, Peterson NA.

Abstract

Previous studies have indicated that tobacco outlets seem to be clustered in low-income minority neighborhoods. This study utilized a cross-sectional design to examine the relationships among minority status, median household income, population density, commercial land use, and location of tobacco outlets at the census tract level in Polk County, Iowa. Using geographically weighted regression, this study re-examines one previously carried out in the same location by Schneider et al. (Prevention Science 6: 319-325, 2005). Contrary to that and some other previous studies, this research found no relationship between tobacco outlet density and percent Hispanic, and found a negative relationship with regard to two variables-that of being African American and median household income. Positive significant relationships were found with population density and land use.

http://www.springerlink.com/content/4361n075t3r6834m/

Varenicline decreases alcohol consumption in heavy-drinking smokers

Psychopharmacology (Berl). 2012 May 1. [Epub ahead of print]

Mitchell JM, Teague CH, Kayser AS, Bartlett SE, Fields HL.

Abstract

RATIONALE:

Emerging evidence suggests that the α4β2 form of the nicotinic acetylcholine receptor (nAChR) modulates the rewarding effects of alcohol. The nAChR α4β2 subunit partial agonist varenicline (Chantix™), which is approved by the Food and Drug Administration for smoking cessation, also decreases ethanol consumption in rodents (Steensland et al., Proc Natl Acad Sci U S A 104:12518-12523, 2007) and in human laboratory and open-label studies (Fucito et al., Psychopharmacology (Berl) 215:655-663, 2011; McKee et al., Biol Psychiatry 66:185-190 2009).

OBJECTIVES:

We present a randomized, double-blind, 16-week study in heavy-drinking smokers (n = 64 randomized to treatment) who were seeking treatment for their smoking. The study was designed to determine the effects of varenicline on alcohol craving and consumption. Outcome measures included number of alcoholic drinks per week, cigarettes per week, amount of alcohol craving per week, cumulative cigarettes and alcoholic drinks consumed during the treatment period, number of abstinent days, and weekly percentage of positive ethyl

glucuronide and cotinine screens.

RESULTS:

Varenicline significantly decreases alcohol consumption (χ (2) = 35.32, $p < 0.0001$) in smokers. Although varenicline has previously been associated with suicidality and depression, side effects were low in this study and declined over time in the varenicline treatment group.

CONCLUSIONS:

Varenicline can produce a sustained decrease in alcohol consumption in individuals who also smoke. Further studies are warranted to assess varenicline efficacy in treatment-seeking alcohol abusers who do not smoke and to ascertain the relationship between varenicline effects on smoking and drinking.

http://www.springerlink.com/content/9121n276383128u7/
http://www.springerlink.com/content/9121n276383128u7/fulltext.pdf

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

Related PR:

Anti-Smoking Drug Decreases Alcohol Consumption in Heavy-Drinking Smokers
http://www.newswise.com/articles/view/588863/?sc=rsmn

Is harm reduction profitable? An analytical framework for corporate social responsibility based on an epidemic model of addictive consumption

Social Science & Medicine
Volume 74, Issue 12, June 2012, Pages 1856–1863
Available online **16 March 2012**.

Sophie Massin

Abstract

This article aims to help resolve the apparent paradox of producers of addictive goods who claim to be socially responsible while marketing a product clearly identified as harmful. It advances that reputation effects are crucial in this issue and that determining whether harm reduction practices are costly or profitable for the producers can help to assess the sincerity of their discourse. An analytical framework based on an epidemic model of addictive consumption that includes a deterrent effect of heavy use on initiation is developed. This framework enables us to establish a clear distinction between a simple responsible discourse and genuine harm reduction practices and, among harm reduction practices, between use reduction practices and micro harm reduction practices. Using simulations based on tobacco sales in France from 1950 to 2008, we explore the impact of three corresponding types of actions: communication on damage, restraining selling practices and development of safer products on total sales and on the social cost. We notably find that restraining selling practices toward light users, that is, preventing light users from escalating to heavy use, can be profitable for the producer, especially at early stages of the epidemic, but that such practices also contribute to increase the social cost. These results suggest that the existence of a deterrent effect of heavy use on the initiation of the consumption of an addictive good can shed new light on important issues, such as the motivations for corporate social responsibility and the definition of responsible actions in the particular case of harm reduction.

http://www.sciencedirect.com/science/article/pii/S0277953612001724

The Spanish tobacco tax loopholes and their consequences

Tob Control Published Online First: 23 May 2012

Ángel López-Nicolás, María Belén Cobacho, Esteve Fernández

Abstract

Objectives The Spanish government has strengthened tobacco control policies since 2005, including changes in tobacco taxes. Because these changes have targeted cigarettes mainly, the tobacco industry has marketed cheaper alternative tobacco products, offering smokers the possibility to downtrade. This paper traces the evolution of patterns of demand for cigarettes and other tobacco products in Spain over the period 2005–2011 in order to assess the impact of such tax loopholes.

Methods The authors use data on tobacco products prices and sales as well as changes in the structure and levels of tobacco taxes to relate tax changes to price changes and subsequent market share changes.

Results Tax reforms have lifted the bottom end of the cigarette price distribution, but the industry has been successful in marketing fine-cut tobacco at cheap prices. There have been partial attempts to correct this asymmetric tax treatment, but these have not avoided a remarkable increase in the market share of fine-cut tobacco. The absence of a minimum tax on quantity for the rest of tobacco products allows the industry to place them as potential future downtrading vehicles.

Conclusions In order to address public health objectives, tax policies should aim to equalise the cost of smoking across different tobacco products. Otherwise the tobacco industry can exploit tax loopholes to market cheap alternatives to cigarettes. This requires all tobacco products to bear a minimum tax on quantity, whose levels need to be adjusted in order to reflect the equivalence between different forms of smoking.

http://tobaccocontrol.bmj.com/content/early/2012/05/22/tobaccocontrol-2011-050344.abstract

Also:

Using findings from a public opinion poll to build political support for tobacco control policy in Kenya
http://tobaccocontrol.bmj.com/content/early/2012/05/22/tobaccocontrol-2011-050058.abstract
The influence of a smoking ban on the profitability of Belgian restaurants

http://tobaccocontrol.bmj.com/content/early/2012/04/28/tobaccocontrol-2011-050283.abstract
Video games and the next tobacco frontier: smoking in the Starcraft universe
http://tobaccocontrol.bmj.com/content/early/2012/04/30/tobaccocontrol-2011-050314.extract

---

Dispelling myths about gender differences in smoking cessation; population data from the USA, Canada, and Britain

Tob Control
Published Online First **30 May 2012**

Martin J Jarvis, Joanna E Cohen, Cristine D Delnevo, Gary A Giovino

Abstract

Objectives Based mainly on findings from clinical settings, it has been claimed that women are less likely than men to quit smoking successfully. If true, this would have important implications for tobacco control interventions. The authors aimed to test this possibility using data from general population surveys.

Methods The authors used data from major national surveys conducted in 2006e2007 in the USA (Tobacco Use Supplement to the Current Population Survey), Canada (Canadian Tobacco Use Monitoring Survey) and the UK (General Household Survey) to estimate rates of smoking cessation by age in men and women.

Results The authors found a pattern of gender differences in smoking cessation which was consistent across countries. Below age 50, women were more likely to have given up smoking completely than men, while among older age groups, men were more likely to have quit than women. Across all age groups, there was relatively little difference in cessation between the sexes.

Conclusions Conclusions about gender differences in smoking cessation should be based on evidence from the general population rather than from atypical clinical samples. This study has found convincing evidence

that men in general are not more likely to quit smoking successfully than women.

http://tobaccocontrol.bmj.com/content/early/2012/05/10/tobaccocontrol-2011-050279.abstract

Related coverage:

Quitting Smoking - Men Vs. Women - Medical News Today
http://www.medicalnewstoday.com/articles/246010.php

==========

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

==========