المركز السوري للأبحاث التدخين
SYRIAN CENTER FOR TOBACCO STUDIES

Syrian Society Against Cancer -Aleppo-

In this issue:

What's New:

- SCTS team participated in the Society for Research on Nicotine and Tobacco (SRNT) conference, Portland, OR, USA February 27- March 1, 2008 with poster presentations. The posters are:

  ∗ Dependence features among waterpipe users. Hammal F, Ward KD , Fouad MF , Eissenberg T, Maziak W.
  ∗ To what extent are primary health care (PHC) providers prepared to lead and implement anti-smoking program in PHC, in Aleppo, Syria? Asfar T, Ward KD, Al-Ali R, Vander Weg MW, Eissenberg T, Maziak W.
  ∗ Exposure to secondhand smoke at home and in public places in Syria: a developing country's perspective. Maziak W, Al-Ali R, Fouad MF, Rastam S, Wipfli H, Travers MJ, Ward KD, Eissenberg T.
  ∗ Increases in waterpipe tobacco smoking prevalence on a U.S. college campus. Cobb C, Ward KD, Maziak W, Eissenberg T.

- The SCTS in collaboration with Aleppo Department of Health have organized a one-day workshop on health research, titled "An introduction to health research and evidence-based clinical practice" on December 27, 2007 in Aleppo, Syria.

- SCTS researchers attended a two-day workshop held in Aleppo, Syria (January 26-27, 2008) conducted by the Cochrane Collaboration about "Critical appraisal of the evidence in general medicine". Dr. Samer Rastam from the SCTS was a faculty in this workshop with Dr. Christian Gluud, the coordinating editor of Cochrane Hepato-biliary group

The first Syrian Center for Tobacco Studies International Summer Program for Tobacco Control Research
This week-long tobacco control research-oriented course is designed to meet the needs of a wide range of health-related professionals, who need training in tobacco control research methods.
The course will be research-oriented, and will focus on methods of tobacco control research that are relevant to the tobacco epidemic in the Arab region.
For more information see the website: http://www.scts-sy.org

Published Studies/Reports:

Characteristics of U.S. waterpipe users: A preliminary report

Waterpipe smoking, a traditional method of tobacco use, has experienced a resurgence in the Middle East and Indian subcontinent in recent years. Despite growing evidence of its dependence potential and health-damaging effects, waterpipe use has spread beyond these regions to many other countries, including the United States. Because little is known about waterpipe use in the United States, we surveyed convenience samples of users from two U.S. cities, Richmond, Virginia (n5109), and Memphis, Tennessee (n534). Respondents in both cities were primarily young adults, a majority (75%) were men, and most were college students or had a college degree. Initial and current use usually occurred in a social context, with a group of friends in a cafe or restaurant or at home.

Most respondents had smoked waterpipe for 2 or fewer years, and 67% currently smoked at least once a month (22% smoked at least once per week and 10% smoked daily). Most believed waterpipe use to be less addictive and harmful than cigarette smoking, believed they could quit use at any time, but had no plans or desire to quit. A majority of respondents used other tobacco products such as cigarettes, and 35% of those who did not smoke cigarettes said they would ‘‘probably’’ or ‘‘definitely’’ smoke one in the next year. Multivariate correlates of greater frequency of use included younger age at first use, ownership of a waterpipe, use occurring primarily with groups of friends, and the perception of being ‘‘hooked.’’ Waterpipe users in these two convenience samples from the United States were young and educated, tended to experiment with multiple forms of tobacco, were unaware of the potentially harmful and addictive properties of waterpipe use, and planned to continue use in the future.

Educational efforts are needed to increase awareness of the potential hazards of this increasingly popular form of tobacco use.

Waterpipe-associated particulate matter emissions

Waterpipe tobacco smoking is increasingly common worldwide, and evidence about its harmful effects to smokers is emerging. However, no studies have investigated the potential exposure of nonsmokers to waterpipe smoke. We measured particulate matter (PM) emissions ($PM_{2.5}$, PM_{10}) before and during laboratory sessions in which 20 individuals used a waterpipe to smoke tobacco and 20 individuals smoked a cigarette (10 for each particle-size/ smoking-method), as well as 10 waterpipe and 10 cigarette smoldering sessions (i.e., without a smoker). A TSISidePak aerosol monitor obtained $PM_{2.5}$, PM_{10} background, smoking, and maximum levels. Mean $PM_{2.5}$ rose

447% for waterpipe (from 48 mg/m_3 background to 264 mg/m_3 smoking), and by 501% for cigarettes (from 44 mg/ m_3 to 267 mg/m_3), whereas mean PM_{10} rose by 563% for waterpipe (from 55 mg/m_3 to 365 mg/m_3), and by 447% for cigarettes (from 52 mg/m_3 to 287 mg/m_3) (p,.05 for all). The increase in PM during cigarette smoking was due primarily to $PM_{2.5}$, given that the proportion of $PM_{2.5}$ from total PM_{10} increase was 95% compared with 70% for waterpipe (p,.05). Maximum $PM_{2.5}$ was 908 mg/m_3 for waterpipe and 575 mg/m_3 for cigarettes, whereas maximum PM_{10} was 1052 mg/m_3 for waterpipe and 653 mg/m_3 for cigarettes. Mean $PM_{2.5}$ and PM_{10} smoldering levels did not differ from background for waterpipe but were significantly higher for cigarettes ($PM_{2.5}$: 33–190 mg/ m_3; PM_{10}: 42–220 mg/m_3). Policymakers considering clean air regulations should include waterpipe tobacco smoking, and the public should be warned about this source of smoke exposure.

Maziak W, Rastam S, Ibrahim I, Ward KD, Eissenberg T. Nicotine Tob Res. 2008 10(3):519-23.

Posters in the Society of Research on Nicotine and Tobacco (SRNT) annual meeting Portland, Oregon, USA.

Dependence features among waterpipe users

Waterpipe is a traditional tobacco use method in the Middle East that recently has spread globally, including to the U.S.

Methods : Because little is known about nicotine dependence among waterpipe users, we conducted a formative study, using qualitative methodology, to investigate potential signs and symptoms of dependence. Fifteen focus groups were conducted (n=64) stratified by gender. A topic guide was developed based on positive reinforcement, negative reinforcement, and social/cognitive models of nicotine dependence. Subjects included those who smoked weekly (n=21; 32.8%), and daily (n=43; 67.2%).

Results Most participants believed that individuals who smoked waterpipe occasionally (not every day) were unlikely to become dependent. There was consensus that craving, withdrawal symptoms, and frequent (e.g., daily) use are the most consistent and reliable features of dependence. Daily users often engaged in behavioral accommodation to ensure ready access to waterpipe, in such ways as shifting from smoking only in restaurants to home or work, storing waterpipes in places one frequents, and carrying waterpipe all the time. Both weekly and daily users reported that their smoking was often motivated by the desire to relax and socialize. Other motivations to smoke that were reported mainly by daily users included to avoid withdrawal, to cope with emotional distress, and because they cannot stop and assume that quitting will be very difficult. Some daily users but not weekly users used to smoke alone, and smoked in the morning, which was not part of social activity and seemed motivated at dosing nicotine.

Conclusion These data indicate that waterpipe users, particularly daily users, report signs and symptoms of dependence.

Hammal F, Ward KD , Fouad MF , Eissenberg T, Maziak W.

Poster presented at the annual meeting of the Society of Research on Nicotine and Tobacco, Portland, Oregon, USA. February 27- March 1, 2008 .

To what extent are primary health care (PHC) providers prepared to lead and implement anti-smoking program in PHC, in Aleppo, Syria?

In many developing countries, including Syria, evidence-based smoking cessation programs have not yet been integrated into primary health care (PHC) delivery, and little is known about provider factors that may affect implementation, including smoking prevalence, current tobacco intervention practices, and attitudes related to anti-smoking policies. To guide the development of system-wide smoking cessation services for Syria's PHC system, we examined these factors among PHC providers in Aleppo.

Methods: Anonymous questionnaires were distributed to all PHC providers in seven (of 17) randomly selected PHCs. Participation rate was 100% and included 85 physicians (60% men, mean age + SD 39.6 + 7.0 years), and 96 nurses (28.1% men, mean age + SD 35.4 + 7.3 years). .

Results: Current tobacco use was reported by 22.4% of physicians compared to 26% of nurses. Use was lower among women than men for both physicians (8.8% vs. 31.4%; p = 0.01) and nurses (17.3% vs. 48.1%, p = 0.004). Compared to non-smokers, smokers were less likely to support banning smoking in enclosed public places (P = 0.01) and in PHCs (P = 0.006). Only half of physicians routinely asked patients about their smoking status, among whom 81.9% advised patients to quit, 45.8% assessed patients' motivation to quit, 40.3% assisted patients in quitting, and 15.3% arranged follow-up visits. In a multivariate analysis, smoker physicians were less likely to assess patients' motivation to quit (OR = 0.24; 95% CI) and assist them in quitting (OR = 0.13; 95% CI).

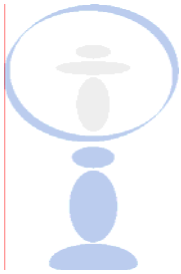
Conclusions: Given the important role of PHC providers in reducing smoking among the general population and advancing tobacco control policies, these data support the need to increase tobacco education among PHC providers in Syria.

Asfar T, Ward KD, Al-Ali R, Vander Weg MW, Eissenberg T, Maziak W.

Poster presented at the annual meeting of the Society of Research on Nicotine and Tobacco, Portland, Oregon, USA. February 27- March 1, 2008 .

Increases in waterpipe tobacco smoking prevalence on a U.S. college campus

Tobacco smoking using a waterpipe (a.k.a. hookah, narghile, shisha) is spreading worldwide, and may be particularly common on U.S. college campuses. Despite concerns regarding waterpipe tobacco smoking and public health, there is little information regarding its prevalence among the U.S. college-age population. In 2006, a survey of 744 Introduction to Psychology students at Virginia Commonwealth University (VCU; 71.9% < age 20, 64.9% women, 43.4% non-white, 92.9% U.S. citizen) revealed 48.4% lifetime, 43.4% past year, and 20.4% past 30 day waterpipe tobacco smoking.1 Within the respondents that reported past 30 day waterpipe use, 60% reported that waterpipe is less harmful than a regular cigarette. In 2007, the identical survey was administered to a new group of Introduction to Psychology students at VCU (n=339; 62.8% < age 20, 62.8% women, 37.8% non-white, 95.6% U.S. citizen). In this sample, surveyed exactly one year later, respondents reported 60.8% lifetime, 53.7% past year, and 26.0% past 30-day use. In addition, of those respondents who reported using a waterpipe to smoke tobacco in the past 30 days, 25.3% believed waterpipe to be less harmful than cigarettes, and a large proportion believed that there was a low or no likelihood of addiction using the waterpipe socially (50.5 %). These data suggest that waterpipe tobacco smoking prevalence may be increasing among U.S. college students.
Controlling waterpipe tobacco smoking in the future likely requires better understanding of users' motivations and attitudes, as well as the acute and long term health effects of this form of tobacco use.



Cobb C, Ward KD, Maziak W, Eissenberg T.

Poster presented at the annual meeting of the Society of Research on Nicotine and Tobacco, Portland, Oregon, USA. February 27- March 1, 2008 .

Exposure to secondhand smoke at home and in public places in Syria: a developing country's perspective

This study employs sensitive methods to address the issue of exposure to secondhand smoke among children and women in an understudied developing country setting (Syria).
Methods: This study combines data collected by the Syrian Center for Tobacco Studies as part of two international studies conducted in 2006; the Secondhand Smoke Exposure among Women and Children study (Johns Hopkins) and the Global Air Monitoring Study (Roswell Park Cancer Institute). We employed objective measures (hair nicotine, and ambient household nicotine assessed by passive monitors) to assess children and mothers exposure to secondhand smoke at home, and used the TSI SidePak Personal Aerosol Monitor to sample respirable suspended particles less than 2.5 µm diameter ($PM_{2.5}$) in the air in public places (40 restaurants/cafés in Aleppo).
Results: In homes, mean ambient nicotine level (± standard deviation, SD) was 2.24±2.77 µg/m^3. Mean level of hair nicotine was 11.8 ng/mg among children (n=54), and was higher if the mother was a smoker (19.4± 23.6 ng/mg) than non-smoker (5.2±6.9 ng/mg) ($p<0.05$). Mean hair nicotine among non-smoking mothers (n=23) was 1.17±1.56 ng/mg. Children's hair nicotine level was strongly correlated with ambient household nicotine and number of cigarettes smoked daily in the house (r=0.54 and r=0.50, respectively, *$p<0.001$*), as well as was related to having a father who smoked in the children's presence. In public places, average $PM_{2.5}$ in the monitored 40 hospitality venues was 464 µg/m^3 and correlated with smoker density measured as cigarettes-waterpipes/100 m^3 (r=0.33, p=0.04).
Conclusions: Children in Syria are exposed to high levels of SHS at home, of which mother's smoking plays a major role. Also, levels of respirable hazardous particles are high in public hospitality venues putting customers and workers at serious health risks. Efforts to limit exposure of children and women at home and to adopt clean air policies should become a public health priority in Syria and the Arab region.

Maziak W, Al Ali R, Fouad MF, Rastam S, Wipfli H, Travers MJ, Ward KD, Eissenberg T.

Poster presented at the annual meeting of the Society of Research on Nicotine and Tobacco, Portland, Oregon, USA. February 27- March 1, 2008 .