

## **Characteristics of women smoking in water pipe cafes in Cairo, Egypt**

**Background:** Tobacco use is increasing throughout the developing world. In particular, the use of water pipes to smoke tobacco has become increasingly popular among women. Many women water pipe users go to cafes to smoke rather than doing so at home, where it may not be allowed or accepted by family or neighbors. Although effective tobacco control policies will require an understanding of the complex socio-demographic, behavioral, and motivational characteristics of such women, they have been underrepresented in previous surveys of tobacco use.

**Objectives:** In order to address this knowledge gap, our study was conducted in Cairo, Egypt, to determine the personal and social characteristics of women smokers, their use of cigarettes and water pipes, and their attitudes, beliefs, and knowledge towards tobacco smoking and its health effects.

**Methods:** An anonymous self administered questionnaire was given to women who smoked in water pipe cafés.

**Results:** A total of 630 subjects participated: 49 % were cigarette-only smokers, 23% smoked both cigarettes and water pipes, and 28% exclusively smoked water pipes. The median age was 32.5 years, while those who exclusively smoked water pipes were younger than cigarette smokers on average (29 vs. 37,  $p<.001$ ). Cigarette smokers started smoking at a younger age (median 22 years) than water pipe smokers (mean 24 years,  $p<0.01$ ). Marital status was strongly associated with many of the surveyed factors: 63% of the unmarried women participants were water pipe smokers, compared to 41% of the married women and 41% of divorced or widowed women ( $p<0.01$ ). Being unmarried was also associated with the belief that water pipe smoking is less harmful than cigarettes (44% vs. 38% of married women, and 27% of divorced/widowed).

**Conclusion:** The results of this study suggest that future tobacco control efforts in Egypt will need to specifically address the use of tobacco products by women in cafés, where it is becoming increasingly popular for women to smoke.

**Key Words:** tobacco, smoking, women, water pipe, shisha, epidemiology