Three Year Trends in the Use Of Emerging Tobacco Products Among Parents

1. INTRODUCTION

Recently, snus and electronic cigarettes have been introduced to the US market, while water pipes (shisha), especially in group social settings, have gained popularity. These products are often promoted as safer alternatives to traditional cigarettes and a potential way to decrease the harm caused by tobacco. However, people who may never have smoked a cigarette or who had been addicted to nicotine in the past may be enticed to use tobacco by these alternative products, posing an individual harm caused by tobacco. However, people who may never have smoked a cigarette or who had been addicted to nicotine in the past may be enticed to use tobacco by these alternative products, posing an individual or public health risk. There is also the potential that current smokers may use these products as an alternative to cessation. In the absence of sufficient data and FDA (and state/local) regulation, the public health community needs more research on the population prevalence of use of these products. The purpose of this study is to assess three year trends in use of these emerging products among US parents. Results from this study can inform regulatory decisions about these products, and can guide clinical counseling efforts regarding the risks of any tobacco use.

2. METHODS

Cross-sectional dual-frame surveys representing national probability samples of adults were administered to 2010 to 2012. The mixed-mode design includes RDD frame and a probability-based internet panel frame to reduce bias due to wireless substitution. Analyses were based on adults who responded that at least one person under the age of 18 resided in their household.

Results: Within the overall samples, 37.1% of 2010 respondents (n=190) and 32.6% of the 2012 respondents (n=121) were classified as parents. Lifetime prevalence of snus use (6.4% to 5.0%) did not significantly change from 2010 to 2012. Lifetime prevalence of electronic cigarettes increased from 1.3% to 10.2% and use of water pipes increased from 7.0% to 10.7%, p<.001. In 2012, current snusers (41.1%) and former smokers (12.7%) were the most likely to have tried electronic cigarettes than never smokers (6.5%). Current smokers (20.7%) were more likely than never smokers (11.7%) to have tried smoking a waterpipe. Ever use of snus and waterpipes also varied with age, younger parents were more likely to have tried these products. White parents and parents of other races were more likely to have tried water pipe than black parents. In multivariable analysis, cigarette smoking status and age remained significant for both products. Race and sex were also significant predictors of waterpipes use.

Conclusions: Use of emerging tobacco products raises concerns about secondhand smoke and secondhand smoke on their children and see their use as a way to create a smoke-free home.

3. RESULTS

Cross-sectional dual-frame surveys representing national probability samples of adults were administered to 2010, 2011, and 2012. The design included a Random Digit Dialing (RDD) frame and an internet panel frame developed from a probability sample of US adults, in order to reduce non-coverage issues arising from wireless substitution. The RDD frame included both household and listed landline telephones, five attempts were made to contact those selected adults who were not home. The Survey Research Laboratory at Mississippi State University’s Social Science Research Center administered the survey via computer-assisted telephone interviews to respondents in this frame. The probability-based panel frame included an online survey conducted by Knowledge Networks, administered to a randomly selected sample from a nationally representative research panel. This panel is based on a sampling frame which includes both listed and unlisted numbers, those without a landline telephone, and does not accept self-selected volunteers, and provides sample coverage for 99% of U.S. households. Data were weighted to adjust for age, race, gender, and region, as well as to over- and oversample internet panel respondents who also had a landline telephone and were therefore also eligible for the RDD frame.

4. CONCLUSION

Greater awareness of emerging tobacco product prevalence and the high risk demographic user groups will inform efforts to determine appropriate public health policy and regulatory action.

Future research should address whether parents use these products to help reduce the harmful effects of secondhand smoke on their children and see their use as a way to create a smoke-free home.

Limitations:

- The dual frame methodology is designed to reduce the potential for sample bias associated with either RDD or internet panel sampling, alone, but we still can't eliminate the potential for nonresponse bias.
- These data are self-report and cross-sectional, and we could not verify that responses concerning cigarette smoking and electronic cigarette use were not biased.