Reviewer's report

**Title:** Hookah Tobacco Use Surpasses Cigarette Use among University Students: A Cross-Sectional Study of Multiple Tobacco Product Use

**Version:** 1  **Date:** 23 November 2012

**Reviewer:** Caroline Cobb

**Reviewer's report:**

**GENERAL COMMENTS**

This manuscript describes the results of a cross-sectional survey of college students at the University of Florida (UF). The purpose of the survey was to estimate and compare current patterns of use of a variety of tobacco products. The survey sample was weighted to reflect the UF population for the same semester enrolled students. Chi-square tests were used to examine differences in rates of tobacco use prevalence and to examine associations between sex, race, and tobacco use prevalence; t-tests were used to test differences in age for tobacco use prevalence. Results indicated ever and past year hookah smoking was more prevalent than cigarette smoking, and cigarettes were used slightly more than hookahs in the past month. Cigars were the 3rd most prevalent tobacco product used. Current cigarette smoking and multiple measures of cigar and smokeless tobacco use were more common among males in this study while hookah smoking was relatively equivalent among males and females. Results for racial associations with tobacco use prevalence were somewhat consistent with previous research with Whites and Hispanics having the highest cigarette and hookah smoking rates. Age differences, particularly for hookah users, were also similar to previous results with younger individuals reporting current hookah use. Results concerning the age of tobacco initiation and first tobacco product tried were novel as well as those concerning when/where hookah was usually consumed. Results offer evidence that hookah prevalence is becoming more salient, especially among university/young adult populations. While this study does have some interesting and unique findings, in the present form the manuscript is not as useful or as clear as it could be.

**SPECIFIC COMMENTS**

**MAJOR COMPULSORY REVISIONS**

1) The purpose of this study indicates the survey was aimed at assessing multiple types of tobacco use, but the Introduction focuses primarily on the background literature of cigarette and hookah smoking. I suggest reorganizing this section, and including a broader overview of recent changes in the tobacco product landscape.

2) The methods section lacks important information about why hookah specific questions were included (i.e., where and with who used). Are there additional questions for other tobacco use methods that are not reported here?
3) Like the Introduction, the Discussion focuses on cigarette and hookah smoking and relatively ignores findings for cigar smoking and smokeless tobacco use. Either the purpose of the study should be amended or additional discussion of these products should be included.

MINOR ESSENTIAL REVISIONS

ABSTRACT

4) Methods should name the tobacco products assessed.
5) Results should mention cigars/smokeless tobacco use rates.

METHODS:

6) Information concerning when the study was performed is crucial, please include.
7) Information about the matching back to university registrar data for weighting (page 4; page 5; page 6) should be consolidated to the Data Analysis section. It is distracting to refer to weighting in three different areas of the methods.

RESULTS:

8) Headings are needed for this section.
9) Results for dual tobacco use are limited to individuals who reported hookah and cigarette smoking. Please provide justification why other concomitant tobacco use patterns are not included.

DISCUSSION:

10) General writing style/quality for this section could be improved. For example, the terms “potential trend” and “emerging trend” seem overused. Additional headings would also be beneficial.
11) The description of the intercept sampling approach in the limitations section (page 13) is too detailed, please condense.

DISCRETIONARY REVISIONS

12) Line numbers would be helpful throughout the manuscript.
13) Page 14: “With current use prevalence approximately the same…” This sentence is awkward please revise.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.