Reviewer's report

Title: Adult Attention-Deficit/Hyperactivity Disorder and nicotine use: a qualitative study of patient perceptions.

Version: 2 Date: 3 February 2014

Reviewer: Nicole P. Yuan

Reviewer's report:

Comments to the Authors:
Overall, the authors were responsive to the reviewers' feedback and made several changes that improved the quality of the paper. The addition of relevant literature and details about the study methods were particularly useful. However, the revised paper still raised some questions and concerns about the study design, analysis, and interpretation of findings. I hope my comments help the authors with future revisions.

Major Compulsory Revisions (authors must respond before decision on publication can be made)

1. In the Introduction, the authors stated that qualitative investigations "would be fruitful." They described the value of the knowledge gained. I recommend that they indicate some implications for practice, such as implications for treatment and prevention of tobacco use among individuals diagnosed with ADHD.

2. In the same Introduction paragraph, the authors indicated the tobacco use may be influenced by "cultural factors" and "social behaviors." Both are broad concepts. It would be helpful if the authors elaborated on these points, and provided support from the tobacco use literature.

3. In the Statement of Purpose, the authors indicated that they used an inductive qualitative approach that made no assumptions about the relationship between ADHD and nicotine use. However, they wrote an Introduction that was focused on two theories of tobacco use (self-medication and disinhibition). Thus, it seemed like the justification for their study was to conduct a qualitative study that tested both theories. It would be helpful if the authors addressed the disconnect between the purpose of the study and analytical approach and background provided in the Introduction.

4. In the Analysis section, the authors indicated that blind dual coding was conducted. Was there always agreement? If not, how did the coders address disagreements? Such details impact the validity of the qualitative analyses.

5. In the Results, the authors indicated that 9 participants described a link between ADHD and tobacco use, and 1 did not. But there were a total of 12 participants? What were the findings from the remaining 2 participants?

6. In the Results, the term "peer-group-mediated behavior" in Theme II was confusing. I recommend that the authors clearly define that term or choose an
alternative term that is more self-explanatory. In addition, the results section provided few findings about the impact of peers separate from seeking a positive self-image. I recommend that they elaborate the finding about peer relations if it is a separate theme.

7. In the Results, Theme II seems to contain some separate and distinct findings. It is unclear why the authors combined findings that were tied to personality traits (sensations-seeking) with social factors (seeking positive self-image with peers). I recommend that the authors consider separating these findings into two themes, which would help increase the significance of both results.

8. In the Discussion, I recommend that the authors acknowledge the one negative case that did not describe a link between ADHD and tobacco use. They also should address the 2 cases that were missing in the results section regarding their perceptions of a link or not.

9. In the Discussion, the authors stated “comparisons with healthy volunteers or the general public would be misleading.” I recommend that the authors elaborate on this point because it was not clear how they would be misleading. If such research would not be beneficial, then I recommend that the authors identify other areas for future research. In the limitations section, they indicated that research should be conducted by more diverse patient groups. What types of patient groups?

10. In the paragraph about limitations, it would be helpful if the authors discussed the potential self-selection bias attributed to the sample of 12 participants and how it may have influenced the findings.

11. In the Conclusion and Abstract, the authors provided the suggestion that clinicians who treat patients with ADHD and comorbid tobacco use should apply the findings to improve treatment alliances. The implication is important; however, it would be more significant if the authors provided further elaboration on how it might be done.

Minor Essential Revisions (authors can be trusted to make these revisions)

1. In the Methods section, the authors added useful information about the purpose of the larger epidemiologic study and the purpose of the qualitative sub-study. I suggest that the authors move that description to the end of the Introduction in the section. It could be combined with or precede the paragraph about the goals of the study.

2. In the Methods section, the authors described the numbers of participants who were eligible, who were contacted, and who agreed to participate. 25% of the individuals agreed to participate. It would be helpful if the authors indicated reasons for the low participation rate based on data collected or potential explanations developed by the authors. Were the in-person format and lack of compensation potential barriers to participation?

3. In the Methods section, the authors stated they used themes identified in “earlier interviews”. In their response to the reviewers, they indicated that it meant interviews conducted earlier for this study. I suggest they rewrite the sentence in the paper, so it is clear that the earlier interviews were from this
study and not the larger epidemiologic study or another study.

4. In the Methods, the authors added details about the transcription activities. It would be helpful if they provided some information about the background of the research team, which they identified with initials. Were they all researchers? Were they all trained in qualitative research methods? Any other background information that would increase the credibility of the research team? This information is actually provided in the limitations section. I recommend that they provide it in the Methods section.

5. The addition of the topic/interview guide was useful. I recommend the authors put the information in a table instead in the body of the text.

6. In the Results, the authors stated that the patterns of smoking varied among the participants. Although they provided the findings in a table, I suggest they describe this interesting finding in more detail in the body of the text.

7. The Results section would be coherent if the authors described the findings related to the influence of prescription drugs in terms of a separate theme. Then all the sub-headings would represent themes that emerged from the interview data.

8. In the second paragraph of the Discussion, the authors described a finding related to smoking being a "social behavior." I recommend that the authors summarize all the findings about social factors in one section. I believe they fall more under Theme II. It would be helpful if the authors attempted to keep each theme distinct, although they noted there was some overlap.

Level of interest: An article of importance in its field

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.