Reviewer’s report

**Title:** Demographic, psychosocial, and genetic risk associated with smokeless tobacco use among Mexican heritage youth

**Version:** 2  **Date:** 28 January 2015

**Reviewer:** claiton H D bau

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Demographic, psychosocial, and genetic risk associated with smokeless tobacco use among Mexican heritage youth

This is potentially interesting study that addresses a substance use disorder in an specific ethnic group.

However, the study has relevant limitations that should be considered as major compulsory revisions:

1- I could not find anywhere in the text of the original number of SNPs investigated prior to analysis that resulted in SNPs with significant results. Correction for multiple comparisons was performed?

2- The article lacks a detailed description with respect to the state of the art in genetic studies on STU, considering both GWAS as well as candidate genes approaches?

3- Writing sometimes suggests a determinism that is not suitable for such a complex. This is even more questionable when authors propose that unreplicated genetic data could be used to “identify youth at increased risk for STU”.

4- The preparation of the “genetic risk score” follows a circular logic that obviously results in a positive finding considering that it is based in the same SNPs that were selected exactly because they presented significant findings in the same sample, without any validation procedure.

5- Adjustment of the effect of STU by cigarette use is inappropriate because the pathophysiology of both types of substance abuse is at least partly shared.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests