PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

This paper was submitted to a another journal from BMJ but declined for publication following peer review. The authors addressed the reviewers' comments and submitted the revised paper to BMJ Open. The paper was subsequently accepted for publication at BMJ Open.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Tobacco use by sexual and gender minorities: findings from a Brazilian national survey
AUTHORS	Carvalho, Aline; Bertoni, Neilane; Coutinho, Carolina; Bastos, Francisco; Fonseca, Vania

VERSION 1 – REVIEW

REVIEWER	Glantz, Stanton University of California, San Francisco, Center for Tobacco Control Research and Education
REVIEW RETURNED	11-Oct-2022

GENERAL COMMENTS	This is a nicely done analysis of tobacco use behavior a representative national sample of the Brazilian population, with a focus on LGBT people. The analysis is appropriate. There are, however, some changes need to make the presentation complete. The methods section needs to describe how the statistical analyses associated with Tables 1-3 were done. The tables also need to indicate the significance of specific comparisons. Provide n's for the logistic regressions in Table 4. The authors should consider adding the univariate associations to Table 4. Doing so would provide some indication about how independent the different effects are from each other. The authors conclude than "policies and measures should take those [LGBT people] who smoke into account in order to communicate and act more efficiently to reverse this situation," but they do not say what those policies and measures should be. Please add suggestions based on the data in the paper. In addition, the authors document differences across the full range of tobacco products. Why are the recommendations limited to smoking? Should there be any differences based on the product? What are "straw cigarettes"? Present all prevalences to 1 decimal place; two decimal places is more than the data support and also make the manuscript harder to read.

REVIEWER	Angelopoulos, Nikolaos
	National and Kapodistrian University of Athens
REVIEW RETURNED	30-Oct-2022

| GENERAL COMMENTS | Dear Authors,
Please, consider some of the comments below:
1. Make use of the term Sexual and Gender Minorities (SGM) when describing individuals that identify with one of the LGBTQIA+ terms. Additionally, it would be more appropriate to refer to the non-SGM group as individuals identifying as heterosexual.
2. It would be interesting to report the prevalence of tobacco and nicotine use in the group that responded "don't know" in the identification question, since they have a n=428, which is higher that the SGM group (n=160).
3. In the statistics tables it would be useful to report the calculated p-value for the significant comparisons since the confidence intervals are harder to interpret. The same goes for the in-text reports of results.
4. Include a breaking-down of the composition of the LGBT group for each possible answer to the survey question. Since the LGBT group is not homogeneous it is relevant for the reader to know the representation of each sub-group in the sample.
5. Past 12-month use of tobacco products is not fully indicative of current nicotine users. If this information is available, please include data on active smokers for each group (past 30-day use or daily use). Otherwise, include this in the limitations of the study.
6. Lastly, include in the limitations of the study the small sample size and that the data were collected in 2015.
Thank you for considering the recommendations above.
Best of luck. |

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Prof. Stanton Glantz, University of California, San Francisco

Comments to the Author:
This is a nicely done analysis of tobacco use behavior a representative national sample of the Brazilian population, with a focus on LGBT people. The analysis is appropriate. There are, however, some changes need to make the presentation complete.

Thank you for your kind and generous comments. We have attempted to respond to your suggestions insofar as possible.

The methods section needs to describe how the statistical analyses associated with Tables 1-3 were done. The tables also need to indicate the significance of specific comparisons.

Thank you for the suggestion. The statistical analysis in Supplemental Tables 1 (former Table 1) and Tables 1 and 2 (former tables 2 and 3) has been described in greater detail, as discussed at page 7 and 8, in the Methods section of the revised version.

Significance was assessed with a 95% confidence interval.

Provide n's for the logistic regressions in Table 4.

The following values have been added to Table 4, as suggested:

n – total population: 15,801

n – heterosexuals: 15,641

n – LGBT: 160

The authors should consider adding the univariate associations to Table 4. Doing so would provide some indication about how independent the different effects are from each other.

Thank you for the suggestion. We have included a new table (page 17) with bivariate models and the text corresponding to the new analyses in both the Methods section and the Results of the revised version.

The authors conclude that "policies and measures should take those [LGBT people] who smoke into account in order to communicate and act more efficiently to reverse this situation," but they do not say what those policies and measures should be. Please add suggestions based on the data in the paper. In addition, the authors document differences across the full range of tobacco products. Why are the recommendations limited to smoking? Should there be any differences based on the product?

Thank you for the observation. There was an error in the wording, which has been corrected, replacing "who smoke" with "who use tobacco products".

As for the suggestions concerning policies and other measures aimed at reducing tobacco consumption and the associated harms, new descriptions were added to the last paragraph.

We believe it is important to address the interface between tobacco control policies and other related policies such as LGBT health, mental health, and human rights. We also highlight the importance of pursuing specific strategies for the profile of tobacco users that was identified in this population (young, more educated, and single), such as intensifying communication and monitoring of internet/social networks, bars, and parties. Finally, we emphasize the importance of greater attention to this population in terms of the supply of treatment for nicotine addiction and the inclusion of this topic in clinical protocols.

In response to the last observation, pertaining to the replacement of the term "smoker" with "tobacco user", there is no longer any need to explain specific measures for each tobacco product in the current study, since this imprecision was corrected previously. We thank the reviewer for this observation.

What are "straw cigarettes"?

We quote here the definition of straw cigarettes in a recent article on such products:

"Straw cigarettes are hand-rolled unfiltered cigarettes, common in Brazil, in which tobacco is rolled in a corn husk that resembles a straw; overall, straw cigarette sticks are longer and thinner than regular cigarettes." (Grilo G, Welding K, Szklo AS, et al. Straw cigarette branding: misleading descriptors and a new Marlboro man. Tobacco Control Published Online First: 17 November 2021)

Present all prevalence rates to 1 decimal place; two decimal places are more than the data support and make the manuscript harder to read.

Thank you for the suggestion. We have altered the presentation of the prevalence rates, using one decimal place throughout the text and tables.

Reviewer: 2
Dr. Nikolaos Angelopoulos, National and Kapodistrian University of Athens

Comments to the Author:
Dear Authors,
Please, consider some of the comments below:

1. Make use of the term Sexual and Gender Minorities (SGM) when describing individuals that identify with one of the LGBTQIA+ terms. Additionally, it would be more appropriate to refer to the non-SGM group as individuals identifying as heterosexual.

Thank you for the suggestion, we agree and have adopted it throughout the text and tables.

2. It would be interesting to report the prevalence of tobacco and nicotine use in the group that responded "don't know" in the identification question, since they have a n=428, which is higher that the SGM group (n=160).

Prevalence of tobacco use in the group that responded "don't know" was 18.1% (95% CI 13.9-22.3). This information was included in the text on page 11, paragraph 2.

3. In the statistics tables it would be useful to report the calculated p-value for the significant comparisons since the confidence intervals are harder to interpret. The same goes for the in-text reports of results.

We understand the referee's concern but decided not to replace one source of difficulty with an even greater one. Worse yet, the use of p-values here would violate the ASA statement (https://www.tandfonline.com/doi/full/10.1080/00031305.2016.1154108).

Several journals no longer accept the inclusion of "naked" p-values, as carefully discussed in a recent article published by the Royal Society, orienting the standard procedures in various journals (https://royalsocietypublishing.org/doi/10.1098/rsbl.2019.0174).

Of course, each journal is free to follow different norms and rules, but we ask the referee and editor to follow the rules defined as a consensus by ASA and the forum promoted by *Science* (available in the above-mentioned article).

4. Include a breaking-down of the LGBT group's composition for each possible answer to the survey question. Since the LGBT group is not homogeneous, it is relevant for readers to know each sub-group's proportion of the sample.

We agree that this observation is relevant. We made two additions to this topic over the course of the article, explaining the impossibility of performing such an analysis, although acknowledging its importance. In the Methods section of the revised version, we explain the

impossibility of performing separate analyses for each sub-category, as explained in the following excerpt (page 6, 2nd paragraph):

"The variable that allowed identification of this population was obtained with the question: "Do you consider yourself…", with the following options: "heterosexual", "homosexual (gay or lesbian)", "bisexual", "transsexual, transvestite, transgender", "other", "don´t know", or "prefer not to answer". This question ended up encompassing two distinct conceptual groups: sexual orientation (which would include options such as heterosexual, homosexual, or bisexual, among others not included) and gender identity (which would include options such as transsexual, transvestite, and transgender), and other definitions not included as options (e.g., cisgender woman or man, nonbinary, among others). Nevertheless, given the low prevalence of some categories in the sample, we opted to create a dichotomous variable called sexual orientation/gender identity, where one of the categories was "non-SGM" (n=15,641) and the other was "SGM", which included homosexuals, bisexuals, transsexuals, transvestites, and transgenders (n=160)."

We address this issue again in the Discussion section of the revised version, highlighting this point as a limitation to the study, as explained in the following excerpt (page 23, 2nd paragraph):

"Notwithstanding the topic´s importance, we highlight a limitation to the study, namely a factor that was impossible to explore due to the relatively low figures for SGM (despite the large sample size), but that is highly relevant: the understanding that the term SGM (or the acronym LGBTQIA+ and its variations) encompasses different groups related to sexual orientation and gender identity. In fact, the acronym combines subgroups with highly distinct characteristics and experiences and particular issues inherent to their orientation or identity. Thus, treating all these subgroups as a single category reduces the fact that these differences may impact smoking differently, including the way it is manifested. An example involves studies that address specific groups within SGM, such as studies on transgenders or lesbians, or even those that manage to stratify their analyses within some subcategory of this broad category"

5. Use of tobacco products in the previous 12 months is not fully indicative of current nicotine users. If this information is available, please include data on active smokers for each group (past 30-day use or daily use). Otherwise, include this in the limitations of the study.

We agree with this observation's relevance concerning tobacco use in the previous 30 days as the best indicator of smokers or active tobacco users. However, this information was only available for smokers of industrialized cigarettes. There was no information on the use of other tobacco products in the previous 30 days. Since our goal was to analyze the consumption of various tobacco products as a whole, this asymmetry would have created an unjustifiable asymmetry.

The questionnaire's option was in no way arbitrary, but reflected the fact that the consumption of other tobacco products is much less frequent than that of industrial cigarettes, creating the risk of dealing with excessively scarce observations. Since the study's overall intended precision had been calculated in advance (available in the original report, Methods section, Chapter 2), we adopted not to violate this painstaking procedure used in the entire study, following the recommendations by Rothman and Greenland (https://pubmed.ncbi.nlm.nih.gov/29912015/). There is obviously a trade-off here, in strict compliance with the rules on precision, resulting in the limitations that we faced.

Likewise, this information was not available for alcohol use, drugs, or violence. We thus chose to adopt the variable "overall tobacco use in the previous 12 months".

6. Lastly, include in the limitations of the study the small sample size and that the data were collected in 2015.

We agree with the suggestion. This information was included on pages 23 and 24 of the Discussion section.

Thank you for considering the recommendations above.
Best of luck.

Thank you for your generous comments. We have attempted to respond to your suggestions insofar as possible.

VERSION 2 – REVIEW

REVIEWER	Glantz, Stanton University of California, San Francisco, Center for Tobacco Control Research and Education
REVIEW RETURNED	13-Mar-2023

GENERAL COMMENTS	I realize that you chnaged LGBTQ.. to SGM because one of the reviewers suggested doing so, but I think that the original wording was more precise. I suggest that the editor decide which terminology is preferable.

REVIEWER	Angelopoulos, Nikolaos National and Kapodistrian University of Athens
REVIEW RETURNED	26-Mar-2023

GENERAL COMMENTS	The reviewer provided a marked copy with additional comments. Please contact the publisher for full details.