Reviewer’s report

Title: Social media as a recruitment platform for a nationwide online survey of COVID-19 knowledge, beliefs, and practices in the United States: Methodology and feasibility analysis

Version: 0 Date: 05 May 2020

Reviewer: Danijela Nujic

Reviewer's report:


Review - manuscript BMRM-D-20-00158

Reviewer's Comments to Author:

General comment

This study analyzes social media as a recruitment platform for a nationwide online survey of COVID-19. Social media are presented as a very efficient cost-effective means of obtaining a valuable and informative survey but there are problems in achieving nationally representative sample. It is an interesting topic, but there are issues that need to be addressed.

Specific comments

It would be valuable if you include the information about the questionnaire's estimated completion time in the Methods section and how many questions did it contain. This would serve for a better understanding of the feasibility challenges and further comparisons with other surveys.

You mention that the Google advertisement was unsuccessful, but how long was it active?

Was the time of the main advertisement and budget predetermined?

Also, were the recruitment evaluations predetermined and what criteria did you plan/managed to evaluate (gender distribution, ethnic distribution, etc.) and in which timelines?

Gender distribution in the recruitment was evaluated on the fifth day, Ad2 was added on the sixth day and male-targeting on the seventh day. Are there any specific reasons for this time delay?

Why did you choose additional advertisements instead of a detailed targeting of the main advertisement during the recruitment adjustments?

Where these interventions (additional advertisements, targeting) preplanned?
On page 13 line 283-286 it says that „The success of recruitment in this survey supports evidence from a recent systematic review which identified Facebook's usefulness for reducing costs, shortening recruitment periods, and enhancing representativeness of target populations (4).” However, prior studies aimed to assess some specific targeted populations like HIV-positive or adolescents who smoke and in that field, Facebook proved to be very efficient. This study aimed to gain a nationally representative sample, which is opposed to targeted populations, which is still very hard to achieve. In the first place, considering the fact that a specific population even has the access to social media, and among them, the specific population approaches surveys. You should revise this sentence according to this and I recommend that you emphasize the strengths of this study in achieving the nationwide representative sample through interventions you implemented in the conclusion of the manuscript.

Education and employment of the participants are one of the main parameters through which we assess did we obtain a nationally representative sample. On page 14 line 301-308, it says that they were difficult to assess due to U.S. Census discrepancies. How did you design education and employment categories? This should be recognized as a limitation of the study.

To be more comprehensive about the final sample, I would recommend that you analyze and present demographic characteristics of participants as two categories 1) respondents who submitted complete surveys and 2) respondents who submitted incomplete surveys. So that readers can also see what are the characteristics of the respondents who under certain unknown circumstances don’t finish the survey and does this group significantly differs from the one that managed to finish the survey.

I think that conclusion in the abstract has to be more in line with study aims and study outcomes. It should provide information about main characteristics of the sample you obtained during the outbreak and the main impacts you achieved through interventions to provide a representative sample.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organisation that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

Reviewer Publication Consent. I agree for my report to be made available under an Open Access Creative Commons CC-BY License (http://creativecommons.org/licenses/by/4.0) if this manuscript is accepted for publication. Any comments that I do not wish to be included in the published report have been included as confidential comments to the editor, which will not be published. If you are not happy for us to publish this report, please contact the editorial office before completing the review. If you wish, you can include your name in your published report. Please note you must decide whether to include your name at the start of the process and confirm this decision whenever prompted. If you change your decision later, we will not be able to publish your name.

I agree to the terms of the CC-BY 4.0 license; please publish my name with my report.