

Peer-Review comments and authors responses

Authors:

“Dear Prof. Fregni and reviewers, thank you for allowing us to submit a revised draft of the manuscript *“Investigating the Mental Health Burden of the COVID-19 Pandemic in Two Populations from Different Socioeconomic Levels in São Paulo, Brazil”* for publication in the PPCR Journal. We appreciate the time and effort you and the reviewers dedicated to providing feedback on our manuscript and are grateful for the insightful comments and valuable improvements to our paper. We have incorporated most of the suggestions made by the reviewers. Those changes are highlighted within the manuscript. Please see below, in blue, for a point-by-point response to the reviewers’ comments and concerns. All page numbers refer to the revised manuscript file with tracked changes.”

Reviewer 1

Comments for authors:

“Dear authors, Congratulations on your manuscript! I found it really interesting. I am attaching some of the files with my comments. It was not clear for me when did the interviews took place. If it was all on the same month/year, or if it was at different points in time, as this can influence the results. Also, in the manuscript it said 2018, but I believe this date is not correct.”

Author response: Thank you! The focus groups took place on 13th and 15th March 2022 in Vila Benfica and Sao Paulo city center respectively. This information was now included to the text and can be found in the *Study Design* section.

Reviewer 2

Comments for authors:

“Great and very innovative approach to a serious consequence of Covid 19. A qualitative study is always challenging because of the complexity of the data analysis and gathering as well as the variables that involve behaviors and emotions. Research question was well established, the study design was matched accordingly, recruitment allowed both health-care provider (local partners) and community -based strategies (phone), all ethical aspects were fulfilled and focus group methodology was clearly described. The pilot (preliminary focus group with a subset of participants) was also developed as a part of the qualitative study. The questions were clear, without ambiguous terms and the instrument had open ended questions. The results were objectively written and discussed. Limitations were stated (which included a possible research bias) as well as the future perspectives.”

Author response: Thank you!

Reviewer 3

Comments for authors:

“Please consider whether to add more details about the ethical approvals obtained for the study in Brazil. Please consider adding more details about why this article is relevant to readers, which will attract more of them by highlighting the relevance of the project regarding the impact on the mental health of the different population groups of San Pablo, Brazil. Considering adding if the paper will be especially valuable to readers interest in the impact of covid 19 and public health in general and how it can be useful to prevent the recurrence of the impact describe in the paper in a situation similar to the former pandemia. The summary could express most details to ensure the reproducibility of the study. study and its external validity.”

- **Comment 1:** *“Please consider whether to add more details about the ethical approvals obtained for the study in Brazil.”*

Author Response: The fieldwork and the project were approved in Brazil by the Federal University of Rio Grande do Sul’s Research Ethics Committee (“Comite de Etica em Pesquisa – CEP”) on January 27th 2022. This information has been included to the text and can be found on Section “Recruitment Strategy: SP1 and SP2 groups”. The approval is registered at Plataforma Brazil under CAAE 54068521.0.0000.5347. Furthermore, this investigation abided by the principles of ethics in research as outlined by the Bylaws for Safeguarding Good Scientific Practice and Avoiding Scientific Misconduct at Universität Hamburg and the Code of Conduct from the Deutsche Forschungsgemeinschaft e.V (DFG, 2019). This information has been included to the text and can be found on Section “Recruitment Strategy: SP1 and SP2 groups”

- **Comment 2:** *“Please consider adding more details about why this article is relevant to readers, which will attract more of them by highlighting the relevance of the project regarding the impact on the mental health of the different population groups of San Pablo, Brazil. Considering adding if the paper will be especially valuable to readers interest in the impact of covid 19 and public health in general and how it can be useful to prevent the recurrence of the impact describe in the paper in a situation similar to the former pandemia.”*

Author Response: It makes perfect sense. We suggested that our evidence supports decision-making related to the consequences of the COVID-19 pandemic and allows a better preparedness of future pandemics and major natural disasters. It will be significant in

regions with high socioeconomic inequality levels. These comments were included to Discussion, 13th paragraph.

- **Comment 3:** *“The summary could express most details to ensure the reproducibility of the study. study and its external validity.”*

Author Response: The external validity of this study to the broader population is indeed compromised. The generalization of our results may be, however, applicable to cities in developing countries and with similar socioeconomic characteristics. We included a more specific clarification about this topic to Discussion, 12th and 13th paragraph.

Reviewer 4

- **Comment 1:** *“The title does not quite capture the scope of the study. At first glance, it appears that it would be a measure of mental health burden but rather the study looks at the perceptions of COVID-19 impact on mental health in the two populations. The title should be revised to better reflect the focus of the study.”*

Author Response: The title has been improved to “Mental health burden of the COVID-19 pandemic in two populations from different socioeconomic levels in São Paulo, Brazil: a qualitative analysis”

- **Comment 2:** *“Similarly, the research question and hypothesis need to be rephrased to specify the study focus on line with the qualitative approach employed. The hypothesis is currently phrased to connote a quantitative enquiry.”*

Author Response: It makes perfect sense. We had an exploratory approach followed by a research question addressing “how” instead of “how much”. After including “a qualitative analysis” to the title, and to avoid misinterpretations, we then replaced the word “worse”, which can be interpreted as a scale obtained through a quantitative analysis, to the term “different” related to well-being conditions and mental health triggers in our hypothesis.

- **Comment 3:** *“The recruitment strategy is unclear in how the two groups were sampled to be balanced regarding gender and similar socio-economic characteristics. Table 1 basically shows how the 2 group compare and represent different socio-economic levels but does not speak to the 'balance' being referred to.”*

Author Response: As an exploratory study in a non-controlled setting, we aimed to balance both groups only regarding gender and socioeconomic levels. Considering the abysmal socioeconomic differences among both chosen sub-regions in the city of Sao Paulo, the socioeconomic characteristics of the enrolled participants were indirectly determined by their sub-district of residence. In respect of gender, the COVIDGI staff and our partners tried to contact the same number of males and females’ volunteers from both groups. We

provided a more specific strategy which can be found on section “Recruitment Strategy: SP1 and SP2 groups”.

- **Comment 4:** *“An explanation is required on why the two groups were contacted via different means and a reflection on how this possibly affected the findings of the study.”*

Author Response: The different types of contact to volunteers of group SP1 and group SP2 were due to the different level of access to both populations, as it highlights the major socioeconomic differences among both groups. Our access to group SP2 was mainly intermediated by Teto Brasil NGO and the community leaders, our local partners. Given the challenges to reach the participants from group SP2, a different approach of contacting volunteers was considered as better compared to a standardized approach, which could compromise the access to the volunteers and, therefore, jeopardize the feasibility of our fieldwork. A more specific text was included to the section “Recruitment Strategy: SP1 and SP2 groups”.

- **Comment 5:** *“The rationale for choosing a focus group discussion for this inquiry needs to be provided and a reflection on how the dynamics of interactions in a focus group could influence the study findings. Also, when the groups were held was not stated (month/year).”*

Author Response: This approach (focus groups) aims to preserve the richness of each participant's testimony. It also allows participants to interact and generate ideas in a non-controlled setting. We included more specific information about date (day/month/year) to the section “Study design” and more specific information about the choice of focus groups discussion in the section “Focus Groups Guidelines”.

- **Comment 6:** *“It is not clear if the 20 participants were for each group or both groups combined and how many were in each group. Some information regarding the characteristics of the participants should be provided.”*

Author Response: As qualitative analysis in a non-controlled setting and focusing on the territorial aspects of the two different populations, no specific demographic characteristics were reported. We enrolled 20 volunteers, being 10 participants per group. No further characteristic of the participants was provided, as their names were concealed to keep confidentiality. We included more specific information to the section “Focus Groups Guidelines”.

- **Comment 7:** *“The limitations of having a single analyst for the data should be acknowledged despite measures to improve intracoder reliability. Though some reflexivity was demonstrated while addressing the limitations of the study, more*

considerations on reflexivity is required providing a clearer picture of the lens through which the researchers view the conceptualization, conduct and reporting of the study.”

Author Response: Thank you for the acknowledgment. The fact of having one single data analyst is indeed a weakness of the analysis and is now clearer in the discussion, on 12th paragraph.