Peer Review Report

Review Report on Psychosocial factors associated with adherence to COVID-19 preventive measures in low-middle-income countries, December 2020 to February 2021

Original Article, Int J Public Health

Reviewer: Andrea Tenorio Correia da Silva

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EVALUATION

Q 1 Please summarize the main findings of the study.

The authors performed a cross sectional web-survey to evaluate factors associated with adherence to COVID-19 preventive measures among adults in nine low- and middle- income countries -LMICs (Bangladesh, Benin, Brazil, Democratic Republic of Congo, Malaysia, Malawi, Mali, Thailand, and Uganda).

The authors examined data from a nonprobabilistic sample (n=10,183). Main results: Brazilian participants were 66.8% of the sample. Adherence varied from 66.8% (physical distancing) to 95.9 % (wearing face masks). Factors associated with a higher adherence to more COVID-19 preventive measures were being older, having higher education, being students or workers in the healthcare sector, those whose trusted source of COVID-19 information was health personnel, having reported worry or fear about being (re)infected with COVID-19. Lower adherence was found among those who had general anxiety symptoms.

Q 2 Please highlight the limitations and strengths.

Strengths

The first strength is the study novelty: to examine the association between mental health problems and the adherence to four COVID-19 preventive measures. The second strength is the locations where the study was carried out (nine LMICs), particularly because these countries have presented mortality and morbidity related to COVID-19, social and economic impacts of the pandemic much worse than in high income countries. Therefore, it is valuable to identify factors/variables that could improve adherence and, ultimately, limit transmission and health system overload.

Limitations

Non-probability sampling is the main limitation. It can result in biased samples, and sampling error cannot be calculated and degree of confidence in interpretation cannot be determined.

Although Brazil provided 66.8% of the sample, the authors did not performed any weighting strategy to analyze the data.

Moreover, the proportion of students/healthcare workers in the countries sub-sample varied form from 21.3% to 66.7%. It might affect the results since their adherence to the measures was higher. It also could affect the prevalence of depressive symptoms and anxiety.

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Major comments

The authors performed a cross sectional web-survey to evaluate factors associated with adherence to COVID-19 preventive measures among adults in nine low- and middle- income countries -LMICs (Bangladesh, Benin, Brazil, Democratic Republic of Congo, Malaysia, Malawi, Mali, Thailand, and Uganda). The main novelty of the study to examine the association between mental health problems and adherence to COVID-19 preventive measures in LMICs.

Points to be better explained or modified

1. Introduction section

The introduction section mainly focused on descriptive information about adherence to COVID-19 preventive measures. I suggest to enhance the explanation about the study rationale and scientific background related to mental health and adherence. Also, it would be important including any prespecified hypotheses regarding why someone with depressive symptoms or/and anxiety will present a lower adherence.

Is there any information available in previous epidemics SARS or MERS?

- 2. Method section
- 2.1 The data was collected from 10 December 2020 to 9 February 2021. It is important to describe what was the pandemic epidemiological context in each country in that period. Furthermore, add information about how public health authorities handle to communicate preventive measures in each country? Had any country provide face masks for population? Another essential issue is the unequal access to preventive measures based on social economic gap. For instance, in countries such as Brazil access to water or soap for hand washing was very unequal.
- 2.2 Having performed a non-probability sampling is a limitation. It can result in biased samples, and sampling error cannot be calculated and degree of confidence in interpretation cannot be determined. I suggest to describe the strategies used to minimize bias.
- 2.3 Although Brazil provided 66.8% of the sample, the authors did not performed any weighting strategy to analyze the data.
- 2.4 Moreover, the proportion of students/healthcare workers in the countries sub-sample varied form from 21.3% to 66.7%. It might affect the results since their adherence to the measures was higher. It also could affect the prevalence of depressive symptoms and anxiety.
- 2.5 It is important to improve explanation about how the authors consider join the data from African countries. Are those African countries comparable?
- 3. Discussion section
- 3.1 The comments about the association between mental health problems and the adherence to COVID-19 preventive measures are only descriptive. I suggest to enhance the discussion of those findings for both depressive symptoms and anxiety, provide hypothesis and explanation. Highlighting possible differences among the countries contexts.

Minor comments

1.Method section

Statistical analysis: Provide information whether cluster analysis was considered. Have the authors evaluated intra-class coefficients?

2. Results section

Considering that the association between mental health problems and adherence to COVID-19 preventive measures is the main novelty of the study. I suggest to present it in the beginning of the result section.

3. Discussion section

The novelty of the study is the association between mental health problems and adherence to COVID-19 preventive measures. I suggest to present it in the beginning of the discussion section.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

It is not concise. I suggest: Psychosocial factors associated withadherence to COVID-19 preventive measures in low- middle- income countries, December 2020 to February 2021

Q 5 Are the keywords appropriate?

Yes, they are.

Yes, it is.					
Q 7	Is the quality of the figures and tables sat	sfactory?			
Yes.					
Q 8	Does the reference list cover the relevant literature adequately and in an unbiased manner?)				
It covered relevant literature. However, I suggest to include literature regarding mental problems and adherence to preventive measures and enhance the introduction and discussion section.					
QUALITY ASSESSMENT					
Q 9	Originality				
Q 10	Rigor				
Q 11	Significance to the field				
Q 12	Interest to a general audience				
Q 13	Quality of the writing				
Q 14	Overall scientific quality of the study				
REVISION LEVEL					
Q 15	Please make a recommendation based on	our comments:			
Major revisions.					