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.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Impact of COVID-19 pandemic on mental health among general
	Bangladeshi population: A cross-sectional study
AUTHORS	Das, Rajesh; Hasan, Md. Rakib; Daria, Sohel; Islam, Md. Rabiul

VERSION 1 – REVIEW

REVIEWER	Beaglehole, Ben University of Otago
REVIEW RETURNED	10-Dec-2020

GENERAL COMMENTS	The paper could do with English language editing in places
	although it mostly reads well Eg Page 5, line 18, Sentence
	beginning Though some doesn't really make sense
	Page 3, line 10Loneliness and sleep problems are not mental
	illnesses and anxiety can be normalplease rephrase here and at
	other places in the report.
	Page 3, line 37You have focussed on those with severity mild or
	greater. Is that in keeping with other studies? As a psychiatrist I'm
	more interested in the group with more severe issues.
	Page 4, line 12is homogeneity an advantage? Don't you want to
	see how the whole of society is doing? On what basis is it
	, ,
	homogeneous?
	Page 6/7 Methods: sampling is critical in evaluating this study.
	Were the participants in any way representative of the overall
	population of interest? Please describe recruitment in more detail.
	What was the recruitment rate? What proportion of people
	approached said no? Are there any studies completed pre-covid to
	place results in context?
	Page 7, Line 28I thought it was online?
	Discussion: The first two paragraphs do not relate to your study
	and are too general to be of benefit.
	Page 16, line 31. Agreed but insufficient information is provided on
	recruitment to judge which biases may be present.

REVIEWER	LOPES-JÚNIOR, LUÍS CARLOS
	Universidade Federal do Espirito Santo, Nursing Department
REVIEW RETURNED	27-Dec-2020

GENERAL COMMENTS	General comments: Thank you for the opportunity to review this timely article on an important and understudied topic on the impact of the COVID-19 pandemics on mental health of Bangladeshi population. The authors carried out a cross-sectional study aimed to measure the impact of the COVID-19 pandemic on mental health among the Bangladeshi population.

The study is well-written as well as is relevant, mainly in the current world health scenario of an unprecedented pandemic with repercussions in all dimensions of the health-disease process of individuals and population. Also, this study brings some interesting results and new insights as a potential contribution to the mental health field.

I have some comments, suggestions in order to strengthen the potential contribution of this topic in any revision the author(s) might undertake.

Major Revision:

INTRODUCTION

Page 5. Lines 9-13: Please, update the information according to the last Situation report COVID-19 from the WHO on December, 2020. By the way, I recommend that the reference number 2 should be replaced by the WHO reference or by the Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU), instead of Worldmeter reference.

Page 5. Lines 38: Please, to correct the reference (Chong et al., 2004) in Vancouver style.

Page 6. Lines 10-12: Please, update the information according to the last Situation report COVID-19 from the Bangladeshi population on December, 2020.

Page 6. Line 23-26: "To date, not enough attention has been paid to reduce mental health problems due to COVID-19 rather identifying and treating new cases." Please, include a reference here. Suggestion: "Impact of COVID-19 pandemic on mental health of young people and adults: a systematic review protocol of observational studies. doi: 10.1136 / bmjopen-2020-039426

METHODS

Regarding the all four biophysical measures, I would interested to know if these 4 instruments (ULS-8; PHQ-9; GAD-7 and PSQI) for data collection were validated in the Bangladeshi population? Please, clarify it for readers. Then, provide the values of the psychometric properties of each validated instrument (the Cronbach's alpha coefficient, the Intraclass Correlation Coefficient - ICC).

RESULTS

Page 9 and 10: I recommend changing the presentation of the tables in this section. In fact, they are two large tables for better visualization of your results.

Page 12-14: Tables 1 and 2 must be unified in a single Table, because this is the same layout. I suggest presenting four large columns; data on loneliness after depression; following generalized anxiety and sleep problems. This will allow a better understanding of the whole by readers, focusing on their dependent variables.

Regarding the binary logistic regression analysis, I also recommended to unify tables 3 and 4. Following the same logic and standard as Table 1 and 2 unified.

Ad hoc consultant 1.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

The paper could do with English language editing in places although it mostly reads well.. Eg Page 5, line 18, Sentence beginning Though some doesn't really make sense.

Author's Response: Thank you for your observation and valuable suggestion. Following your advice, the whole manuscript has been edited by a person who is proficient in written English. We hope that after this language edit, the paper will be considered suitable for publication.

Page 3, line 10...Loneliness and sleep problems are not mental illnesses and anxiety can be normal...please rephrase here and at other places in the report.

Author's Response: Thank you for your suggestion. We have now rephrased the mentioned sentence and applied the same correction at other places as well. This revision can be seen in the abstract section of the revised manuscript (page 2, lines 5-8).

Page 3, line 37...You have focussed on those with severity mild or greater. Is that in keeping with other studies? As a psychiatrist I'm more interested in the group with more severe issues.

Author's Response: Thank you for your observation and valuable opinion. We have now presented the data in terms of the severity of the problems. This revision can be viewed in the abstract section of the revised manuscript (page 2, lines 18-21).

Page 4, line 12...is homogeneity an advantage? Don't you want to see how the whole of society is doing? On what basis is it homogeneous?

Author's Response: Thank you for your observation. Our data is the representation of the whole Bangladeshi population and I'm sorry for the mistake. We have revised the strengths and limitations section to make it reflective of the methods of the present study (page 3, lines 3-9).

Page 6/7 Methods: sampling is critical in evaluating this study. Were the participants in any way representative of the overall population of interest? Please describe recruitment in more detail. What was the recruitment rate? What proportion of people approached said no? Are there any studies completed pre-covid to place results in context?

Author's Response: Thank you for your valuable suggestion. Following your advice, we have now described the sampling method in the revised manuscript (page 5, lines 18-29; page 6, line 5-19). The pre-Covid-19 study reported that the prevalence of mental health problems ranging from 6.5% to 31.0% among the adult population in Bangladesh (page 11, lines 29-32). This information assisted to assume the expected prevalence during sample size calculation.

Ref 1: Hossain MD, Ahmed HU, Chowdhury WA, Niessen LW, Alam DS. Mental disorders in Bangladesh: a systematic review. BMC Psychiatry. 2014;14:216.

Ref 2: Minister of Health releases first findings of National Mental Health Survey. World Health Organization (2019). https://www.who.int/bangladesh/news/detail/27-11-2019-minister-of-health-releases-first-findings-of-national-mental-health-survey

Page 7, Line 28...I thought it was online?

Author's Response: Thank you for your observation. Yes, it was online and we have mentioned it in our revised manuscript.

Discussion: The first two paragraphs do not relate to your study and are too general to be of benefit.

Author's Response: Thank you for your valuable opinion. Following your observation, we have revised the discussion section including the first two paragraphs to make them more relevant to the present study (page 9 and 10 of revised manuscript).

Page 16, line 31. Agreed but insufficient information is provided on recruitment to judge which biases may be present.

Author's Response: Thank you for your comment. We have now included detailed information about the sampling method in the revised manuscript (page 5, line 18-29; page 6, lines 5-19).

Reviewer 2:

General comments:

Thank you for the opportunity to review this timely article on an important and understudied topic on the impact of the COVID-19 pandemics on mental health of Bangladeshi population. The authors carried out a cross-sectional study aimed to measure the impact of the COVID-19 pandemic on mental health among the Bangladeshi population.

The study is well-written as well as is relevant, mainly in the current world health scenario of an unprecedented pandemic with repercussions in all dimensions of the health-disease process of individuals and population. Also, this study brings some interesting results and new insights as a potential contribution to the mental health field.

I have some comments, suggestions in order to strengthen the potential contribution of this topic in any revision the author(s) might undertake.

Author's Response: Thank you for your evaluation and encouraging comments on our manuscript. All your comments and suggestions were valuable and helpful for the revision and improvement of the manuscript. According to your advice, the manuscript has been revised. We hope that after this revision, the paper is deemed fit for publication.

Major Revision:

INTRODUCTION

Page 5. Lines 9-13: Please, update the information according to the last Situation report COVID-19 from the WHO on December, 2020. By the way, I recommend that the reference number 2 should be replaced by the WHO reference or by the Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU), instead of World meter reference.

Author's Response: Thank you for your observation. We have updated the information and corresponding references in our revised manuscript. This revision can be found in the introduction section (page 4, lines 4-7).

Page 5. Lines 38: Please, to correct the reference (Chong et al., 2004) in Vancouver style.

Author's Response: Thank you for your observation. I'm sorry for the mistake. Along with this one, we have again checked and corrected all the references and citations in the revised manuscript.

Page 6. Lines 10-12: Please, update the information according to the last Situation report COVID-19 from the Bangladeshi population on December, 2020.

Author's Response: Thank you for your observation. We have now updated the information from WHO Bangladesh COVID-19 Morbidity and Mortality Weekly Update (MMWU) as of 27 December 2020 in the revised manuscript (page 5, lines 1-4).

Page 6. Line 23-26: "To date, not enough attention has been paid to reduce mental health problems due to COVID-19 rather identifying and treating new cases." Please, include a reference here. Suggestion: "Impact of COVID-19 pandemic on mental health of young people and adults: a systematic review protocol of observational studies. doi: 10.1136 / bmjopen-2020-039426

Author's Response: Thank you for your valuable suggestion. Following your suggestion, we have revised the sentence and added appropriate references (page 5, lines 9-12).

METHODS

Regarding the all four biophysical measures, I would interested to know if these 4 instruments (ULS-8; PHQ-9; GAD-7 and PSQI) for data collection were validated in the Bangladeshi population? Please, clarify it for readers. Then, provide the values of the psychometric properties of each validated instrument (the Cronbach's alpha coefficient, the Intraclass Correlation Coefficient - ICC).

Author's Response: Thank you for your important observation. Yes, psychometric instrument validation is important for cross-cultural adaption as a validated questionnaire ensures more reliable and valid results. The development of the Bangla version of psychometric instruments was done following the procedure of forward-backward translation according to the guideline by Beaton et al., 2000. Then we piloted the questionnaire in a randomly selected small group to confirm clarity and understanding. However, we didn't complete the validation process due to the shortage of time as we wanted to assess the mental health among general Bangladeshi people at the early stage of the COVID-19 pandemic. This information can be found in the method section of page 6, lines 5-19.

RESULTS

Page 9 and 10: I recommend changing the presentation of the tables in this section. In fact, they are two large tables for better visualization of your results.

Author's Response: Thank you for your comments and suggestions. Following the recommendation, we have changed the presentation of Tables. The revised tables can be seen at the end of the revised manuscript.

Page 12-14: Tables 1 and 2 must be unified in a single Table, because this is the same layout. I suggest presenting four large columns; data on loneliness after depression; following generalized anxiety and sleep problems. This will allow a better understanding of the whole by readers, focusing on their dependent variables.

Author's Response: Thank you for your valuable observation. We have merged Table 1 and Table 2 to make a single "Table 1". The revised Table 1 can be seen at the end of the revised manuscript.

Regarding the binary logistic regression analysis, I also recommended to unify tables 3 and 4. Following the same logic and standard as Table 1 and 2 unified.

Ad hoc consultant 1.

Author's Response: Thanks for your suggestion. We have unified table 3 and table 4 to make a single "Table 2" in the revised manuscript. The revised Table 2 can be seen at the end of the revised manuscript.

VERSION 2 - REVIEW

REVIEWER	LOPES-JÚNIOR, LUÍS CARLOS
	Universidade Federal do Espirito Santo, Nursing Department
REVIEW RETURNED	28-Feb-2021
GENERAL COMMENTS	The authors responded appropriately to my questions and
	suggestions / recommendations. The manuscript is better
	presented in this version. In this sense, I recommend the
	acceptance of this version for publication in the BMJ Open.