# 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)	The mental health status of healthcare workers assisted in Hubei
	during the initial outbreak of COVID-19 and their influencing
	factors: A Prospective cohort study
AUTHORS	Zhou, Peng; Du, Na; Xiao, Yu; Li, Yunge; Li, Chunya; Geng, Ting

## **VERSION 1 – REVIEW**

Karimah, Azimatul

REVIEWER

KLVILVVLK	Hairrani, Azirratui
	Universitas Airlangga Fakultas Kedokteran, Psychiatry
REVIEW RETURNED	09-May-2022
GENERAL COMMENTS	This longitudinal study was very interesting and represents the mental health of health workers in highly prevalent COVID patients. Reviewer suggests describing the occupation of the health workers whether they were physician/specialists, nurses, medical analyst etc so the description of mental health of each professions can be describes more clearly.
REVIEWER	Littlechild, Brian
KLVILVVLK	University of Hertfordshire, Nursing and Social Work
DEVIEW DETLIDATED	
REVIEW RETURNED	18-May-2022
GENERAL COMMENTS	This submission does provide new knowledge in a very specific area of healthcare and issues for staff working within it in Hubei.
	One query from the reviewer would relate to what could they be seen to be quite limited study aims and methodology, and if it best meets the needs of the readership of BMJ Open.  The submission itself is well enough presented, though please see below for some comments on the nature and structure of the discussion.  My reservations concern elements of the discussion, which needs
	to be set out in a much more structured way around themes identified from the research, and the acknowledgement of what were clear findings, what comes from other relevant findings, and what is conjecture. In addition, some of the statements here are rather vague. So for example
	'The initial demographics and experiences related to the pandemic played an important role in predicting the long-term mental health of these special healthcare workers'? Needs more explanation/justification
	'Men will find it more difficult to release negative emotions caused by stress'. Based on what evidence/references? So, some statements need more justification/evidencing. It also needs more discussion/analysis of why all had poor mental health. It also needs more discussion/analysis of why the authors only compared this to the whole of the general population, when given

the aims of the paper and the sample, it would on the face of it appear to have been a much better approach to assess the same factors in the local health staff who had not moved areas in in the way the sample had. In this way, there could have been a much better set of indicators about what might have been relevant in terms of the moving to another area for the health staff studied, and which of the factors are found within working in healthcare provision in this way in any event without such a move taking place.

The discussion I suggest needs to be better set out; at the moment, it is rather discursive and unfocused- with a better resume of key findings, then discussion of the most important themes identified, and / or those most puzzling or new set out better.

## **VERSION 1 – AUTHOR RESPONSE**

Reviewer: 1

Dr. Azimatul Karimah, Universitas Airlangga Fakultas Kedokteran

Comments to the Author:

This longitudinal study was very interesting and represents the mental health of health workers in highly prevalent COVID patients. Reviewer suggests describing the occupation of the health workers whether they were physician/specialists, nurses, medical analyst etc so the description of mental health of each professions can be describes more clearly.

Reply: Thank you for your pertinent evaluation, and we have added the specific description of our subjects' occupation in the result part of '*The demographic data*', which could be seen in the highlight part, and we also changed the corresponding item in Table 1,4, 5.

Reviewer: 2

Prof. Brian Littlechild, University of Hertfordshire

Comments to the Author:

This submission does provide new knowledge in a very specific area of healthcare and issues for staff working within it in Hubei. One query from the reviewer would relate to what could they be seen to be quite limited study aims and methodology, and if it best meets the needs of the readership of BMJ Open.

Reply: Thank you for your pertinent evaluation. With regard to the study aims and methodology, we emphasized the importance and advantages of this design, and listed them in the part of 'Strengths and limitations'. Because the BMJ Open is a comprehensive journal, it would be helpful to spread more findings about the mental health of some special group, especially for those who volunteered for the assistance mission during the initial outbreak of COVID-19. We also added the importance of studying this special group in the introduction part, which could be seen in the highlight part.

The submission itself is well enough presented, though please see below for some comments on the nature and structure of the discussion.

My reservations concern elements of the discussion, which needs to be set out in a much more structured way around themes identified from the research, and the acknowledgement of what were clear findings, what comes from other relevant findings, and what is conjecture.

Reply: Thank you for your valuable evaluation. We have rewrote the discussion part according to your suggestion, which clings to the theme of our article, and better explained the reason for our results. All the corrections can be found in the highlight part in discussion.

In addition, some of the statements here are rather vague. So for example 'The initial demographics and experiences related to the pandemic played an important role in predicting the long-term mental health of these special healthcare workers'? Needs more explanation/justification

Reply: Thank you for your valuable evaluation, and we have added more explanation for this sentence, which could be seen in the highlight part in the first paragraph of discussion.

'Men will find it more difficult to release negative emotions caused by stress'. Based on what evidence/references? So, some statements need more justification/evidencing. Reply: Thank you for your valuable evaluation. After careful consideration, we decided to delete this sentence to ensure the rigor of the article.

It also needs more discussion/analysis of why all had poor mental health. It also needs more discussion/analysis of why the authors only compared this to the whole of the general population, when given the aims of the paper and the sample, it would on the face of it appear to have been a much better approach to assess the same factors in the local health staff who had not moved areas in in the way the sample had. In this way, there could have been a much better set of indicators about what might have been relevant in terms of the moving to another area for the health staff studied, and which of the factors are found within working in healthcare provision in this way in any event without such a move taking place.

Reply: Thank you for your valuable evaluation. With regard to the reason of poor mental health, we added more explanations, which could be seen in the highlight part in discussion. After reading your next suggestion, we found that our description did have some mistakes. Our intention is not to compare the mental health of healthcare workers with the general population. Because the scale of SRSS does not have the cutoff point, we could only know their sleep condition compared with the point of the national norm which was gotten from the general population. To solve this problem, we rewrote this sentence and deleted the reference which indicated the comparison between healthcare workers and the general population. We are also very grateful for your suggestion on how to evaluate the differences among different groups. Due to our original purpose, we only analyzed the data on this special group to understand their longitudinal change. In the future, if it is allowed, we would like to collect the data on those medical staff who did not move to another area and to analyse the differences.

The discussion I suggest needs to be better set out; at the moment, it is rather discursive and unfocused- with a better resume of key findings, then discussion of the most important themes identified, and / or those most puzzling or new set out better.

Reply: Thank you for your valuable evaluation. We have rewrote the discussion and adjusted the order of our results in the way you suggested. In the first paragraph of discussion, we concluded the two aims and findings of our study. In the second paragraph, we emphasized the change trend in sleep quality and analyzed the reasons. In the third paragraph, we showed the change in anxiety and depression over time and analyzed the reasons. In the fourth paragraph, we highlight the unique findings and fully analyzed the reasons. In the fifth paragraph, we put forward the influencing factors on COVID-19 experiences. In the next two paragraphs, we explained other demographic factors related to mental health.

## **VERSION 2 - REVIEW**

REVIEWER	Littlechild, Brian University of Hertfordshire, Nursing and Social Work
REVIEW RETURNED	02-Aug-2022

GENERAL COMMENTS Thank you for the careful response to the reviewer comments
--