

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Mental Health and Health-Related Quality of Life among Healthcare Workers in Indonesia during the Coronavirus Disease 2019 Pandemic: A Cross-Sectional Study
<b>AUTHORS</b>	Syاملan, Adila T.; Salamah, Sovia; Alkaff, Firas; Prayudi, Yogi E.; Kamil, Muhammad; Irzaldy, Abyan; Karimah, Azimatul; Postma, Maarten; Purba, Fredrick; Arifin, Bustanul

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Htay , Mila University of Malaya, Department of Social and Preventive Medicine
<b>REVIEW RETURNED</b>	27-Oct-2021

<b>GENERAL COMMENTS</b>	<p>Background</p> <p>1. The authors well-described the situation of the COVID-19 pandemic globally, locally and the burden on mental health among HCWs.</p> <p>Methods</p> <p>2. In the sample size calculation, please include the expected frequency and include the reference if it is based on the previous study.</p> <p>3. What is the sampling method?</p> <p>4. The authors mentioned that 392 respondents' data were finally included in the analysis. Approximately 58% were doctors, 13.3% were nurses, etc. Why and how these respondents were decided to be included in this study? Who were categorized as others?</p> <p>5. The workload and nature are different in various sectors of healthcare. Could it be biased the findings of this study?</p> <p>Results</p> <p>6. I would suggest the authors include the respondent number at the end of the table title. Eg. Table 2. Sociodemographic characteristic of the respondents (n=392) The column should be n(%).</p> <p>Discussion</p> <p>7. In the discussion, the authors mentioned as follow; "The discrepancy between our study and the previous studies might lies in the time period difference for the data collection, where in our study it was conducted in the later time of the pandemic while in the previous studies it was conducted in the beginning of the pandemic. We argue that in the beginning of the pandemic, the mental health status is not as affected as in the later periods" However, a meta-analysis (Liu, X., Zhu, M., Zhang, R. et al. 2021, <a href="https://doi.org/10.1038/s41398-021-01501-9">https://doi.org/10.1038/s41398-021-01501-9</a>) discussed that "the</p>
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	<p>mental health burden might be more at the early stage of the COVID-19 pandemic due to the sudden changes of workload, and lack of adequate understanding of the COVID-19 pandemic. However, at the later stage of the pandemic, HCWs became familiar with the situation and gained a more comprehensive understanding of the disease. This led to higher self-regulation ability under the circumstance of the epidemic.”</p> <p>I would suggest the authors to consider about the phases of psychological responses to the pandemic/ disaster, psychological adaptation and revise the discussion.</p> <p>8. Please include the limitations of the study. 9. Is the sampling method affect the generalization of the findings? 10. Please include the practical and specific recommendations based on the findings of the study.</p>
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<b>REVIEWER</b>	Magnavita, Nicola Università Cattolica Sacro Cuore, Public Health
<b>REVIEW RETURNED</b>	02-Nov-2021

<b>GENERAL COMMENTS</b>	<p>A cross-sectional study of mental health problems in health care workers in Indonesia during the pandemic. The descriptive study needs to be improved from a bibliographic point of view</p> <p>1. In the introduction correctly the authors state that healthcare workers are at risk for anxiety, depression and burnout. Immediately thereafter they report the results of a meta-analysis of ongoing COVID-19 mental disorders and compare this value with the general population outside the pandemics. The comparison is not correct. They must compare cases during Covid with those present in the same population before Covid. For example, burnout cases during the pandemic are compared with those already seen in health care workers in previous years [[Magnavita N, Chirico F, Garbarino S, Bragazzi NL, Santacroce E, Zaffina S. SARS/MERS/SARS-CoV-2 Outbreaks and Burnout Syndrome among Healthcare Workers. An Umbrella Systematic Review. Int. J. Environ. Res. Public Health 2021, 18(8), 4361; <a href="https://doi.org/10.3390/ijerph18084361">https://doi.org/10.3390/ijerph18084361</a>.</p> <p>2. Also in the Introduction, where they state that the studies are scarce, they should observe that most of the studies published so far are cross-sectional and therefore illustrate a particular moment of the pandemic, not the evolution of health and health in the course of the pandemic. This effect is seen in prospective studies [Magnavita, N.; Soave, P.M.; Antonelli, M. A One-Year Prospective Study of Work-Related Mental Health in the Intensivists of a COVID-19 Hub Hospital. Int. J. Environ. Res. Public Health 2021, 18, 9888. <a href="https://doi.org/10.3390/ijerph18189888">https://doi.org/10.3390/ijerph18189888</a>.]</p> <p>3. There are many features of the pandemic that vary over time. For example, the recurrence of epidemic waves, the availability of vaccines, affect mental health. The research was conducted between December and February. Authors should compare their results with studies conducted over the same period [Magnavita N, Soave PM, Antonelli M. Prolonged Stress Causes Depression in Frontline Workers Facing the COVID-19 Pandemic-A Repeated Cross-Sectional Study in a COVID-19 Hub-Hospital in Central Italy. Int J Environ Res Public Health. 2021 Jul 8;18(14):7316. doi: 10.3390/ijerph18147316.].</p> <p>4. The authors conducted an online study and did not ascertain whether respondents had cared for patients with COVID-19. This is a serious limitation of the study and must be discussed.</p>
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	<p>5. Moreover, those who respond to online studies do not exactly correspond to the audience of workers: they have more confidence with computers and more time to respond. The sample is often spoiled.</p> <p>6. More than a fifth of the answers were rejected. The authors should explain why this loss is so high.</p> <p>7. Finally, the sample is very small compared to the totality of health workers in Indonesia.</p>
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### VERSION 1 – AUTHOR RESPONSE

Reviewer #1

Dr. Mila Htay, University of Malaya:

No.	Reviewer comments	Responses to reviewer
1	The authors well-described the situation of the COVID-19 pandemic globally, locally and the burden on mental health among HCWs.	Dear reviewer, Thank you for the comment.
2	In the sample size calculation, please include the expected frequency and include the reference if it is based on the previous study.	Dear reviewer, We have added the expected frequency for the sample size calculation in the resived manuscript (page 7 line 145-146)
3	What is the sampling method?	Dear reviewer, The sampling method in this study was nonprobability purposive snowball sampling. We have added the information on page 7 line 139-140.
4	The authors mentioned that 392 respondents' data were finally included in the analysis. Approximately 58% were doctors, 13.3% were nurses, etc. Why and how these respondents were decided to be included in this study? Who were categorized as others?	<p>Dear reviewer, In this study, we defined the HCWs as those who worked at the healthcare sectors. This was in accordance to the latest Laws of The Republic of Indonesia on Healthcare Workers. We have added the definition and the reference in the method section of the revised manuscript (page 7 line 142-143; ref number 32).</p> <p>In this study, those who were categorized as others were: nutritionist, physiotherapist, laboratory analyst, acupuncturist, and health educators. We have added the information in table 2 and in the supplementary tables.</p>
5	The workload and nature are different in various sectors of healthcare. Could it be biased the findings of this study?	Dear reviewer, Thank you for the comment. We agree that the workload and the workplace differences may have biased the findings about the prevalence of mental health problems. We have added this potential bias in the study limitation section (page 18 line 387-389).

6	<p>I would suggest the authors include the respondent number at the end of the table title. Eg. Table 2.</p> <p>Sociodemographic characteristic of the respondents (n=392)</p> <p>The column should be n(%).</p>	<p>Dear reviewer,</p> <p>In the revised manuscript, we have added the number of respondents at the end of each table title. We also have changed the column in table 2 from "N=392" to "n (%)".</p>
7	<p>In the discussion, the authors mentioned as follow; "The discrepancy between our study and the previous studies might lies in the time period difference for the data collection, where in our study it was conducted in the later time of the pandemic while in the previous studies it was conducted in the beginning of the pandemic. We argue that in the beginning of the pandemic, the mental health status is not as affected as in the later periods"</p> <p>However, a meta-analysis (Liu, X., Zhu, M., Zhang, R. et al. 2021) discussed that "the mental health burden might be more at the early stage of the COVID-19 pandemic due to the sudden changes of workload, and lack of adequate understanding of the COVID-19 pandemic. However, at the later stage of the pandemic, HCWs became familiar with the situation and gained a more comprehensive understanding of the disease. This led to higher self-regulation ability under the circumstance of the epidemic."</p> <p>I would suggest the authors to consider about the phases of psychological responses to the pandemic/ disaster, psychological adaptation and revise the discussion.</p>	<p>Dear reviewer,</p> <p>Thank you for the comments. We have revised our statement regarding the possible explanation of mental health prevalence differences between our study and previous studies from Indonesia. We have also discussed about the phases of psychological responses to the pandemic on the revised manuscript (page 14-15 line 291-308) and include the suggested reference (ref 40).</p>
8	<p>Please include the limitations of the study.</p>	<p>Dear reviewer,</p> <p>Thank you for the suggestion. We have added the limitations of this study in the revised manuscript (page 18 line 377-395)</p>
9	<p>Is the sampling method affect the generalization of the findings?</p>	<p>Dear reviewer,</p> <p>Due to the nature of nonprobability sampling, findings in this study cannot be generalized. We have address this in the study limitation section in the revised manuscript (page 18 line 380-387).</p>
10	<p>Please include the practical and specific recommendations based on the findings of the study.</p>	<p>Dear reviewer,</p> <p>We have included practical and specific recommendations based on the findings of our study in the conclusion section (page 19 line 404-408)</p>

Reviewer #2

Prof. Nicola Magnavita, Università Cattolica Sacro Cuore:

No.	Reviewer comments	Responses to reviewer
1	<p>In the introduction correctly the authors state that healthcare workers are at risk for anxiety, depression and burnout. Immediately thereafter they report the results of a meta-analysis of ongoing COVID-19 mental disorders and compare this value with the general population outside the pandemics. The comparison is not correct. They must compare cases during Covid with those present in the same population before Covid. For example, burnout cases during the pandemic are compared with those already seen in health care workers in previous years</p> <p>[[Magnavita N, Chirico F, Garbarino S, Bragazzi NL, Santacroce E, Zaffina S. SARS/MERS/SARS-CoV-2 Outbreaks and Burnout Syndrome among Healthcare Workers. An Umbrella Systematic Review. <i>Int. J. Environ. Res. Public Health</i> 2021, 18(8), 4361;</p>	<p>Dear reviewer, Thank you for the comment. We have changed the comparison with the healthcare workers population before the COVID-19 pandemic in the introduction section of the revised manuscript (page 5-6 line 112-114).</p>
2	<p>Also in the Introduction, where they state that the studies are scarce, they should observe that most of the studies published so far are cross-sectional and therefore illustrate a particular moment of the pandemic, not the evolution of health and health in the course of the pandemic. This effect is seen in prospective studies [Magnavita, N.; Soave, P.M.; Antonelli, M. A One-Year Prospective Study of Work-Related Mental Health in the Intensivists of a COVID-19 Hub Hospital. <i>Int. J. Environ. Res. Public Health</i> 2021, 18, 9888.</p>	<p>Dear reviewer, Thank you for the comment. We have added further explanation regarding the study design of the previously published studies in Indonesia in the introduction section of the revised manuscript (page 6 line 117-120).</p>
3	<p>There are many features of the pandemic that vary over time. For example, the recurrence of epidemic waves, the availability of vaccines, affect mental health. The research was conducted between December and February. Authors should compare their results with studies conducted over the same period [Magnavita N, Soave PM, Antonelli M. Prolonged Stress Causes Depression in Frontline Workers Facing the COVID-19 Pandemic-A Repeated Cross-Sectional Study in a COVID-19 Hub-Hospital in Central Italy. <i>Int J Environ Res Public Health</i>. 2021 Jul 8;18(14):7316. doi: 10.3390/ijerph18147316.].</p>	<p>Dear reviewer, Thank you for the comment. Other than comparing the result with other studies from Indonesia, we also compared our findings with other studies that conducted over the same period as our study (page 15-16 line 310-324). We also include the suggested study in the discussion (ref 41).</p>
4	<p>The authors conducted an online study and did not ascertain whether respondents had cared for patients with COVID-19. This is a serious limitation of the study and must be discussed.</p>	<p>Dear reviewer, Thank you for the comment. We have discussed that not all of the HCWs included in our study treated COVID-19 patients, and some of them also worked as second line HCWs in the discussion</p>

		section (page 15 line 321-322). We have also mentioned about this in the study limitation section (page 18 line 387-389).
5	Moreover, those who respond to online studies do not exactly correspond to the audience of workers: they have more confidence with computers and more time to respond. The sample is often spoiled.	Dear reviewer, Thank you for the comment. We have addressed this issue in the study limitation section (page 18 line 381-383).
6	More than a fifth of the answers were rejected. The authors should explain why this loss is so high.	Dear reviewer, Thank you for the comment. We have mentioned the high loss of respondents and also give possible explanation of the high loss in the study limitation section (page 18 line 392-395).
7	Finally, the sample is very small compared to the totality of health workers in Indonesia.	Dear reviewer, Thank you for the comment. Although the number of respondents in this study had surpass the minimum required number of samples, we agreed that the number of respondents are very small in comparison with the total number of HCWs in Indonesia. We have addressed this in the study limitation section (page 18 line 383-385).

#### VERSION 2 – REVIEW

<b>REVIEWER</b>	Htay , Mila University of Malaya, Department of Social and Preventive Medicine
<b>REVIEW RETURNED</b>	10-Mar-2022

<b>GENERAL COMMENTS</b>	<p>This study aimed to assess the mental health status and HRQoL among HCWs during the Coronavirus Disease 2019 Pandemic in Indonesia. I have only a few minor suggestions as follows.</p> <p><b>Introduction</b> The introduction well described the background context of the study, including the COVID-19 pandemic and mental health burden among HCWs. The knowledge gap on the scarcity of literature about mental health issues and health-related quality of life in Indonesia highlights the importance to conduct this study.</p> <p><b>Methods</b> 1. In the method section, the study population has been mentioned as “The HCWs in this study were defined as those who worked in the healthcare sector”. The term HCW is broad and therefore, it</p>
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	<p>would be better to mention specifically which categories are aimed to be included in this study.</p> <p>2. It would be nice if the details of the sample size estimation method is explained, including the total population of HCWs, the margin of error, etc.</p> <p>Results</p> <p>3. May I suggest the authors include the reference articles at the footnote of Table 1, from that you have taken the cut-off score?</p> <p>4. May I suggest amending the sample size description in the title of the tables? “N” usually refers for the population, and “n” refers for the sample size. It would be nice to amend as (n=392).</p> <p>Discussion</p> <p>5. Page 16, line 337. Kindly amend the typo for the references. “This will negatively affect their mental health condition 42, 43. I43n Indonesia,....)</p>
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### VERSION 2 – AUTHOR RESPONSE

Reviewer #1

Dr. Mila Htay, University of Malaya:

No.	Reviewer comments	Responses to reviewer
1	In the method section, the study population has been mentioned as “The HCWs in this study were defined as those who worked in the healthcare sector”. The term HCW is broad and therefore, it would be better to mention specifically which categories are aimed to be included in this study.	Dear reviewer,  Thank you for the suggestion. We have described specific categories aimed to be included in this study (page 7 line 144 – 146)
2	It would be nice if the details of the sample size estimation method is explained, including the total population of HCWs, the margin of error, etc.	Dear reviewer,  Thank you for the suggestion. We have added the details of the sample size estimation calculation in the revised manuscript (page 7 line 149 – 152).
3	May I suggest the authors include the reference articles at the footnote of Table 1, from that you have taken the cut-off score?	Dear reviewer,  Thank you for the suggestion. We have added the reference at the footnote of Table 1 in the revised manuscript (page 26).
4	May I suggest amending the sample size description in the title of the tables? “N” usually refers for the population, and “n” refers for the sample size. It would be nice to amend as (n=392).	Dear reviewer,  Thank you for the suggestion. We have revised the sample size description in the title of the table 2, 3, 4, and 5 in the revised manuscript (page 27, 29, 30, and 31)

5	Page 16, line 337. Kindly amend the typo for the references. "This will negatively affect their mental health condition 42, 43. I43n Indonesia,....)	Dear reviewer,  Thank you for the correction. We have amend the typo for the references of the mentioned sentence in the revised manuscript (page 15 line 311).
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**VERSION 3 – REVIEW**

<b>REVIEWER</b>	Htay , Mila University of Malaya, Department of Social and Preventive Medicine
<b>REVIEW RETURNED</b>	24-Mar-2022
<b>GENERAL COMMENTS</b>	Thank you. The authors have addressed all the reviewer's comments perfectly.