

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	The need for support among healthcare professionals during the COVID-19 pandemic: a qualitative study at an academic hospital in the Netherlands
AUTHORS	Kranenburg, Leonieke; de Veer, Mathijs; Oude Hengel, Karen; Kouwenhoven-Pasmooij, T.A.; de Pagter, Anne; Hoogendijk, Witte; Busschbach, Jan; Van Mol, Margo

VERSION 1 – REVIEW

REVIEWER	Dopelt, Keren Ben-Gurion University of the Negev, Health Policy and Management
REVIEW RETURNED	26-Nov-2021

GENERAL COMMENTS	<p>It is an interesting and important paper. Some suggestions:</p> <p>Methods</p> <ol style="list-style-type: none">1. Please add a brief description of the hospital. How many beds, workers, etc.2. How many corona wards were opened, how many corona patients have they treated, how many employees work in the departments that participated in the qualitative study?3. It is written that the in-depth interviews were transcribed. Were the focus groups also transcribed? By whom?4. What was the correlation between the encoders? How did they reach a consensus?5. When were the focus and survey groups conducted?6. Where was the questionnaire taken from? Was it written for the purpose of the study? If so, what were the researchers based on? How is the questionnaire valid? Was there a pilot? <p>Results</p> <ol style="list-style-type: none">1. Sometimes the quotes do not seem to fit the themes. For example, in organizational factors -safety2. Supportive quotes should be added to several themes, such as adherence to working hours, sufficient amount of staff, etc.3. How many quotes were in each sub-theme?4. In the survey - what is the size of the population and what is the response rate? Does the sample represent a population? For example, 83.3% were women. <p>Discussion</p> <ol style="list-style-type: none">1. There is no discussion of the differences between the survey groups2. It is highly recommended to refer to the study of Dopelt et al. (2021), which was a similar mixed-methods study in a hospital in Israel (of Dopelt et al. Facing the unknown: Healthcare workers' concerns, experiences, and burnout during the COVID-19 pandemic - a mixed-methods study. Sustainability, August 2021; 13(16), 9021-9034; https://doi.org/10.3390/su13169021.)
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REVIEWER	Serlachius, Anna University of Auckland, Psychological Medicine
REVIEW RETURNED	02-Dec-2021

GENERAL COMMENTS	<p>This mixed methods study aims to address an important and timely topic-how can we better support healthcare professionals during the current pandemic. I have quite a few concerns regarding the methodology used, both for the qualitative and the quantitative analyses. These would need to be addressed before I would recommend this study for publication. These concerns are discussed below:</p> <p>Key concerns:</p> <p>-Qualitative methodology</p> <ol style="list-style-type: none"> 1.The authors state that they have used Thematic Analysis but the qualitative analysis section is not appropriately described and despite including the Standards for Reporting Qualitative Research they do not clarify what type of thematic analysis they used (inductive or deductive/semantic/latent or their research paradigm). It is unusual to see such a larger number of themes and I think there may be some confusion as to what is a code versus a theme. 2. In the manuscript it is unclear whether the team conducted focus groups or interviews 3. The conceptual model was quite confusing and looks more like a thematic map 4. The qualitative analyses lacked depth and interpretation of the data. 5. Under the 'organisational interventions' section, I thought these three suggestions would work better as the themes than the 14 'themes' described above. <p>-Quantitative methodology</p> <ol style="list-style-type: none"> 1. There was no description provided for what quantitative statistics were used. 2. The survey measures were not described in enough detail 3. I could not understand either Figure 2 or 3 and there was very little description of the actual results in the results section. <p>-Discussion</p> <p>I found the interpretation of the findings and the discussion quite short. It would have benefited from a more thorough discussion of existing literature around supporting healthcare professionals (not specifically related to COVID).</p> <p>Overall I feel like the authors have tried to do too much in one manuscript and the result is the methodology and findings are incomplete in both the qualitative and the quantitative sections.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Keren Dopelt, Ben-Gurion University of the Negev

Thank you for your thorough review, your comments and constructive suggestions.

Comments to the Author:

It is an interesting and important paper. Some suggestions:

Methods

1. Please add a brief description of the hospital. How many beds, workers, etc.

In the new version of the manuscript, we include a description of the hospital.

Changes made to the manuscript:

Methods section, line 95-97:

“Erasmus University Medical Center, of the leading national hospitals in the COVID-19 related care.”

2. How many corona wards were opened, how many corona patients have they treated, how many employees work in the departments that participated in the qualitative study?

We included a description of the number of corona patients: November 2020 when the study was conducted, there were 68 ICU beds, of which half were occupied with COVID-19 patients. There were two clinics with together 42 beds, with 34 COVID-19 patients admitted. We have added this information to the new version of the manuscript. For the qualitative study, we included employees based on function, and not necessarily based on their department. Therefore it becomes somewhat arbitrary to mention the number of employees work in the departments that participated in the qualitative study.

Changes made to the manuscript:

Methods section, line 97-99:

“There were 68 ICU beds....was conducted (reference date November 2, 2020). “

3. It is written that the in-depth interviews were transcribed. Were the focus groups also transcribed? By whom?

The focus groups were also transcribed, but this was not made clear in the text: we understand the confusion and have added this information to the new version of the manuscript. The focus groups and interviews recordings were transcribed by a professional organization for interview transcription in healthcare. We have also added this information to the revision of the manuscript.

Changes made to the manuscript:

Methods section, line 133-135:

“To start with, the focus groups and individual interview data ...for interview transcription in healthcare”.

4. *What was the correlation between the encoders? How did they reach a consensus?*

The framework was first independently developed by two researchers (MdV and LK). Thereafter, they discussed both their individual frameworks to come to one. The coding in NVivo was done by one researcher (MdV), and discussed in meetings with LK. As this coding work was conducted by a single person, no correlation could be calculated.

Changes made to the manuscript:

Methods section, line 139-145:

“Only after that, one researcher (MV) coded all transcripts line by line...for internal homogeneity and external heterogeneity.”

5. *When were the focus and survey groups conducted?*

This is mentioned in the methods section. Following your and the editor's comments, the time frame is now also included in the abstract.

Changes made to the manuscript:

Abstract, line 34-35:

“The study was conducted in October and November 2020, during the second wave of the COVID-19 pandemic.”

6. *Where was the questionnaire taken from? Was it written for the purpose of the study? If so, what were the researchers based on? How is the questionnaire valid? Was there a pilot?*

As described in the introduction of this rebuttal, we omitted the quantitative results in this report completely, which makes the questions above not actual anymore.

Results

1. *Sometimes the quotes do not seem to fit the themes. For example, in organizational factors -safety*

We added more descriptive text before mentioning the quote. We also checked other quotes and added more explanation where needed and made adjustments accordingly.

Changes made to the manuscript:

Results section, line 164-277:

We made several changes in the subparagraph “Factors contributing to the vitality and resilience of healthcare workers during COVID-19”.

2. *Supportive quotes should be added to several themes, such as adherence to working hours, sufficient amount of staff, etc.*

In the new version of the manuscript we add supportive quotes for each subtheme.

Changes made to the manuscript:

Results section, line 174-277:

We added supportive quotes for each subtheme.

3. *How many quotes were in each sub-theme?*

Quotes per theme ranged from 58 to 187 for the first research question, and from 12 to 49 for the second research question. Quotes per subtheme ranged from 6 to 82 for the first research question, and from 2 to 18 for the second research question. Even though some (sub)themes had considerable fewer quotes than others, we still chose to include them as a separate theme, as they met the criteria of internal homogeneity and external heterogeneity.

4. *In the survey - what is the size of the population and what is the response rate? Does the sample represent a population? For example, 83.3% were women.*

As described in the introduction of this rebuttal, we omitted the quantitative results in this report completely, which makes the questions above not actual anymore.

Discussion

1. *There is no discussion of the differences between the survey groups*

As described in the introduction of this rebuttal, we omitted the quantitative results in this report completely, which makes the questions above not actual anymore.

2. *It is highly recommended to refer to the study of Dopelt et al. (2021), which was a similar mixed-methods study in a hospital in Israel (of Dopelt et al. Facing the unknown: Healthcare workers' concerns, experiences, and burnout during the COVID-19 pandemic - a mixed-methods study. Sustainability, August 2021; 13(16), 9021-9034;*

Thank you for this relevant reference. We now integrate this reference in the introduction and discussion.

Changes made to the manuscript:

Introduction, line 68-72:

Reference added to the sentence: "First, at the departmentsand consequently their families".

Discussion, line 354-355:

"Similarly, the study by Dopelt et al. (2021).... disappointment in healthcare workers."

Reviewer: 2

Dr. Anna Serlachius, University of Auckland

Comments to the Author:

This mixed methods study aims to address an important and timely topic-how can we better support healthcare professionals during the current pandemic. I have quite a few concerns regarding the methodology used, both for the qualitative and the quantitative analyses. These would need to be addressed before I would recommend this study for publication.

Thank you for the thorough comments and constructive suggestions. We believe that your comments have helped us to improve our manuscript on various important points, especially in explaining the methodology, and in presenting and discussing the results of the qualitative part of our study.

Furthermore, following your and the editor's remarks, we reconsidered reporting the quantitative results. In the previous submitted version of our manuscript, the report of quantitative results was already limited compared to the report of the qualitative results, and only served to provide a broader view on the 'needs' of healthcare professionals during the COVID-19 pandemic. One of the reasons for limited reporting of quantitative outcomes was the disappointing quality of the quantitative results due to low response rates on the survey. When reconsidering the report of the quantitative results, we concluded that the quantitative results evoked questions about validity, in particular the (non)-representativeness of the results. We therefore decided to no longer include the quantitative data, although we do report that such data were sampled, and we do report the difficulties we encountered with data collection. In the text below we will address your comments in detail.

These concerns are discussed below:

Key concerns:

-Qualitative methodology

1. The authors state that they have used Thematic Analysis but the qualitative analysis section is not appropriately described and despite including the Standards for Reporting Qualitative Research they do not clarify what type of thematic analysis they used (inductive or deductive/semantic/latent or their research paradigm). It is unusual to see such a larger number of themes and I think there may be some confusion as to what is a code versus a theme.

We understand these points and have added more information on how we analysed the data to the methods section of the revised manuscript. Therewith, the reader will be able to better understand the approach and steps that we took within our qualitative approach. We applied a semantic and essentialist approach, and our analysis combines an inductive (reading and analyzing all data) and deductive (coding data following a set coding framework). Based on this approach, we came to a relatively large number of themes, which, in fact were the "subthemes". This may have caused the confusion on this part of the data presentation. Therefore, we renamed the themes into subthemes throughout the manuscript, which better suits their position in the context of the entire data set. The four quadrants, as already described in the first version of the manuscript, in fact are the main themes. Furthermore, in the revised version of the manuscript, we added descriptions of the contents of each of the main themes.

Changes made to the manuscript:

Methods, data-analysis section, line 130-147:

"Focus groups data were analysed by means ... to answer each of the two research questions. "

Results section, line 164-277:

We made several changes to the subparagraph "Factors contributing to the vitality and resilience of healthcare workers during COVID-19". In particular, the previous themes are now renamed subthemes, and the four quadrants represent/are renamed as the main themes.

2. In the manuscript it is unclear whether the team conducted focus groups or interviews

We used both focus groups and interviews, due to logistic reasons. This was indeed not clear in the text and we have adjusted this in the revised version of the manuscript.

Changes made to the manuscript:

Methods section, line 157-161:

"Because of thein the focus groups and interviews (see table 1)."

3. The conceptual model was quite confusing and looks more like a thematic map

Again here, we understand the confusion. The “model” presented in fact is our final thematic map. We now refrain from using the word “conceptual model” and have replaced this throughout the new version of the manuscript with “thematic map”.

Changes made to the manuscript:

Throughout the manuscript, “conceptual model” is replaced by “thematic map”.

4. The qualitative analyses lacked depth and interpretation of the data.

Refraining from presenting the quantitative results provides us with the opportunity to expand the presentation and interpretation of the qualitative analyses. Given the word count limit, we expanded the methods section to explain in more detail which approach we took and how we performed the analysis. We adjusted the results section by making a clear distinction between the two research questions addressed in this study. Regarding the first research question, we added paragraphs first explaining the main themes, and expanded parts of the previous presented results, for instance by adding quotes. Furthermore, we now also present a thematic map resulting from the analysis of the second research question. In the discussion section of the manuscript, we rewrote the first paragraph to provide an account of our findings that is better embedded in the existing (not necessarily COVID-19 specific) literature.

Changes made to the manuscript:

Results section, line 164-277:

We made several minor and major changes to the subparagraph “Factors contributing to the vitality and resilience of healthcare workers during COVID-19”.

Results section, figures:

We added figure 2.

Discussion section, line 320-345:

“Data-analysis resulted in a thematic map..... areas for organisational interventions (figure 2).”

5. Under the 'organisational interventions' section, I thought these three suggestions would work better as the themes than the 14 'themes' described above.

We understand that this remark may be the result of how we presented our results in the previous version of the manuscript. We now present our results with a clearer demarcation between research question 1 and 2. The 14 themes, in fact are the subthemes, that result from the data-analysis for research question 1. We renamed them in subthemes. The four quadrants, as already described in the previous version of the manuscript, in fact are the themes (for research question 1). We adjusted this in the revised manuscript. The three suggestions under ‘organisational interventions’ indeed are at the level of themes, but then related to answering the second research question. In the revised manuscript, we provide a thematic map showing that these three indeed are at the thematic level.

Changes made to the manuscript:

Methods section, line 146-147:

“Based on this analysis, to answer each of the two research questions”.

Results section, line 164-277:

We made several changes in the subparagraph “Factors contributing to the vitality and resilience of

healthcare workers during COVID-19". In particular, the previous themes are now renamed subthemes, and the four quadrants represent/are renamed as the main themes.

Results section, line 280-285:

"Analysis of the focus group and interview data on which interventions The thematic map is presented in figure 2, and the main themes with their subthemes are addressed the text below".

Results section, figures:

We added figure 2.

-Quantitative methodology

1. *There was no description provided for what quantitative statistics were used.*
2. *The survey measures were not described in enough detail*
3. *I could not understand either Figure 2 or 3 and there was very little description of the actual results in the results section.*

As described in the introduction of this rebuttal, we omitted the quantitative results in this report completely, which makes the questions above not actual anymore.

-Discussion

I found the interpretation of the findings and the discussion quite short. It would have benefited from a more thorough discussion of existing literature around supporting healthcare professionals (not specifically related to COVID).

We rewrote the first paragraph of the discussion. We now embed our finding in existing literature on job demands and resources, and make reference to other COVID-19 related literature. Due to word count limits, we had to delete another (smaller) part of the discussion and could not further lengthen the discussion.

Changes made to the manuscript:

Discussion section, line 320-345:

"Data-analysis resulted in a thematic map..... areas for organisational interventions (figure 2)."

Discussion, line 354-355:

"Similarly, the study by Dopelt et al. (2021)....disappointment in healthcare workers."

Overall I feel like the authors have tried to do too much in one manuscript and the result is the methodology and findings are incomplete in both the qualitative and the quantitative sections.

As mentioned above, we also got the feeling that we try to do too much with incomplete quantitative data. We therefore refrain from reporting this quantitative data, other than mentioning that we did collect, but that the response rate was not large enough to draw valid conclusions. This has provided space to address the methodology and results of qualitative data in more detail.

VERSION 2 – REVIEW

REVIEWER	Dopelt, Keren Ben-Gurion University of the Negev, Health Policy and Management
REVIEW RETURNED	31-Jan-2022

GENERAL COMMENTS

The paper is very interesting, and it seems that after the corrections the paper is more focused and suitable for publication.