PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Working conditions in primary healthcare during the COVID-19 pandemic: an interview study with physicians in Sweden
AUTHORS	Fernemark, Hanna; Skagerström, Janna; Seing, Ida; Hårdstedt, Maria; Schildmeijer, Kristina; Nilsen, Per

VERSION 1 – REVIEW

REVIEWER	Peart, Annette Monash University, Department of General Practice
REVIEW RETURNED	05-Aug-2021

GENERAL COMMENTS	Congratulations on completing this important research during COVID. I have a number of recommendations that I hope will assist with improving the quality of the manuscript. These are related to your Methods, Results, and Discussion sections. Methods: 1. Please indicate why you only recruited from 6 regions of Sweden and not the 21 regions. Would this not have provided more diversity in your sampling? 2. How much compensation did you provide to participants, and why did you decide to include this after recruitment? 3. What is the theoretical framework for your study? This will help to justify why you chose the topic and the interview questions. 4. While you appropriately chose qualitative methods, which methodology were you drawing upon? This in part relates to your theoretical framework. 5. Please provide more explanation for why you chose the data analysis method. Results The evidence for your themes needs to be clearer. Please check through your results section to ensure the evidence (data) supporting your themes is there. This is more than writing a summary of what was said. There are parts of your Results section that needs more evidence (data) to support your themes. Discussion Your discussion needs to be outline the unique contribution of your study. Otherwise, this manuscript is another manuscript highlighting the difficulties of working during COVID. To do this, sometimes it is helpful to read through your Results/Discussion and think, 'so what?' What is it about your study that sets it apart from other interview studies of GPs? Being clear about this will help your manuscript to stand out.

REVIEWER	Kain, Nicole University of Alberta, Faculty of Medicine and Dentistry
REVIEW RETURNED	18-Aug-2021

GENERAL COMMENTS	This is an important contribution to the emerging field of healthcare professionals' experiences during the Covid-19 pandemic. In my own anecdotal experience with colleagues, it appears that primary care physicians in Canada are experiencing similar changes in working conditions. My main concerns lie within the methods section - specifically, on page 6, I would recommend to remove the statement "A qualitative approach was chosen." This is repetitive after the first sentence under study design and setting. More detail as to why this approach was taken - and comparing to other qualitative approaches like phenomenology and grounded theory - would help to bolster this section in terms of trustworthiness. "Individual interviews were considered the most relevant method to obtain information of how the pandemic has affected the daily work and consequences for the work environment in primary healthcare." A source would be beneficial as to why these were considered the most relevant method. Additionally, it would be helpful to read the authors' backgrounds/experiences in qualitative research methods in this section as opposed to near the end of the manuscript. It would be helpful to know what kind of compensation was offered to participants (e.g. how much $$ - is it worth one hour of a primary physician's time?) The participant recruitment section also seems somewhat disjointed/hard to follow. I'm not sure it could be easily replicated as it is currently written. Finally, why were member-checks not conducted with participants? E.g. simply confirming that the authors "were on the right track" in terms of thematic interpretation, might help to improve the trustworthiness of this section. Given attention to these minor changes, I think this paper will be an important publication in BMJ Open. Thank you for the opportunity to review it.

REVIEWER	Turner, Andrew University of Bristol
REVIEW RETURNED	23-Aug-2021

GENERAL COMMENTS	This article examines how primary care physicians were coping with the covid-19 pandemic in Sweden at the end of 2020 when patient demand began to return to more normal levels. The paper reports results from qualitative interviews with 11 physicians and focuses on changes to their ways of working and their workload. It is important to document the changes that were put in place in response to the pandemic and to examine the impact of those changes on staff. Overall, this is a good article. I have made some suggestions for improvements below: 1. Methods - Study design and setting

	On page 4, the article states: "We used a qualitative approach based on 11 semi-structured interviews with physicians from different primary healthcare units in four regions in Sweden. A qualitative approach was chosen." The second sentence "A qualitative approach..." can be deleted. 2. Methods - recruitment of participants On page 5, the article states: "Five of the six regions we approached responded that they would like to participate. One other region did not respond to invitations sent via email. Thus, healthcare workers from primary healthcare units in four regions participated in the study" I'm not clear on how "thus... four regions participated" follows from what is described. It reads as if five responded positively. However, I think these details about the process are unnecessary. Instead, I think you can simply state that 'six regions were approached and four agreed to participate', while adding that 'those not participating were non-responsive to your requests, didn't have capacity, etc etc.' 3. Methods - recruitment of participants Similarly with the description on lines 24-40 on page 5. This detail is also unnecessary and instead you could state that 'ways that staff were approached to take part varied by region, depending on their local processes, while adhering to our purposeful sampling strategy of different locations and size of the primary healthcare units...' If some or all of this information is included to fulfil the COREQ reporting checklist, you could consider moving this information into the checklist itself (as opposed to the checklist referring back to the text). 4. Methods - recruitment of participants Also on page 5, you state that you are reporting only physician data in this article and note that data from other staff is reported elsewhere. This needs some further justification, I think. It would, on the face of it, be interesting to see them compared within the same article. 5. Methods - Data collection You may want to consider including the topic guide as an appendix. Again, this would allow you to remove some unnecessary details from line 26-28 on page 6. 6. Methods - Patient and public involvement

	You state "No patient involved" in the Patient and public involvement section. Could you make it clearer that you mean there was no involvement of patients or the public in the design, analysis or interpretation of findings, etc, and that you do not mean there were no patient participants in the study. 7. Discussion In relation to the reference to Guest et al - This was new to me and I read their paper with interest. I'd be cautious about taking Guest et al as good evidence that 12 interviews is an acceptable rule-of-thumb. They derive 12 from a single study they conducted and they are rightly cautious about the generablisability of this figure. Rather than relying on a figure such as 12, I think this article would be on stronger ground if it discussed how the sample of 11 physicians related to the various features Malterud et al (who you also reference) suggest determine the 'information power' of a sample. 8. Conclusion You could potentially draw out more concrete implications of the findings. For example, what should be improved for future pandemic situations / crises? What should be retained in the future? One example that occurs to me from your results: dissemination of curated top-down guidance that is practically useful but not overwhelming would be useful in similar situations in the future.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1
Ms. Annette Peart, Monash University
Comments to the Author:
Congratulations on completing this important research during COVID. I have a number of recommendations that I hope will assist with improving the quality of the manuscript. These are related to your Methods, Results, and Discussion sections.
We appreciate that you consider our research important and we find your comments valuable in improving our manuscript.

Please indicate why you only recruited from 6 regions of Sweden and not the 21 regions. Would this not have provided more diversity in your sampling?
We sought a purposeful sample of diverse primary healthcare centres, e.g., recruiting from rural and urban areas, to obtain an information-rich sample. It is possible that the data would have been even more diverse if we had included more regions than we did, but Sweden’s 21 regions are expected to

deliver the same quality of care. We considered the number of regions included to be sufficient since the data cover large parts (and geographical areas) of Sweden.

How much compensation did you provide to participants, and why did you decide to include this after recruitment?
The compensation was SEK 1000 (i.e. Swedish kronor), which is approximately 116$. This was intended to be an estimate of 1.5 hours of worktime for the interviewees. It should be noted that no individual compensation was paid. Instead, the economic compensation was paid to the participating primary healthcare centers. It was made clear to the participating units that compensation would be paid before the interviewees were recruited. This information has now been added to the manuscript, please see “Methods, recruitment of participants”.

What is the theoretical framework for your study? This will help to justify why you chose the topic and the interview questions.
The study is based on an inductive approach due to the unexplored nature of the topic we studied and the limited available knowledge about the phenomenon. We argued that an open-ended, explorative approach was most suitable under these circumstances. Nevertheless, the study was informed by existing knowledge and research conducted by our group, e.g. concerning work environment theories such as the Effort-Reward model and the Job Demand Control Support model.

While you appropriately chose qualitative methods, which methodology were you drawing upon? This in part relates to your theoretical framework.
The study was drawn upon the conventional content analysis method according to Hsieh and Shannon, since we were aiming to describe experiences and not going further into, or beyond the data. Since this study is explorative, with an inductive approach we did not have an established theoretical framework. As to our understanding, theories and comparisons are made in the discussion part when using the conventional content analysis.

Please provide more explanation for why you chose the data analysis method.
We have further clarified this in the method section, please see “Methods, analysis”. According to Hsieh and Shannon, conventional content analysis is suitable in studies where the aim is to describe a phenomenon characterised by a lack of existing theory and/or limited literature. The selected method was considered appropriate since there is limited knowledge about the working situation for primary care physicians during the pandemic and our aim was to explore this.

Results
The evidence for your themes needs to be clearer. Please check through your results section to ensure the evidence (data) supporting your themes is there. This is more than writing a summary of what was said. There are parts of your Results section that needs more evidence (data) to support your themes.
We have made several modifications to improve the reporting of the results, including more quotations to further support the themes. Please, see the “Result” section.

Discussion
Your discussion needs to be outline the unique contribution of your study. Otherwise, this manuscript is another manuscript highlighting the difficulties of working during COVID. To do this, sometimes it is helpful to read through your Results/Discussion and think, 'so what?' What is it about your study that sets it apart from other interview studies of GPs? Being clear about this will help your manuscript to stand out.
We have clarified this in the first part of the discussion.

Reviewer: 2

Dr. Nicole Kain, University of Alberta, College of Physicians and Surgeons of Alberta
Comments to the Author:
This is an important contribution to the emerging field of healthcare professionals' experiences during the Covid-19 pandemic. In my own anecdotal experience with colleagues, it appears that primary care physicians in Canada are experiencing similar changes in working conditions.
Thank you for the positive words. We agree, there are likely many similarities between Swedish and Canadian healthcare, as experienced by one of the research group members who has spent time as a postdoc in Canada.

My main concerns lie within the methods section - specifically, on page 6, I would recommend to remove the statement "A qualitative approach was chosen." This is repetitive after the first sentence under study design and setting.
We agreed with this comment and have revised accordingly.

More detail as to why this approach was taken - and comparing to other qualitative approaches like phenomenology and grounded theory - would help to bolster this section in terms of trustworthiness.
There is often a “smorgasboard” of different methods and approaches that might be selected and applied in any given study. We argued that conventional content analysis (CCA) was the most appropriate approach because this form of analysis is useful for analyzing large amounts of verbal data collected by means of interviews. Importantly, CCA allows a “closeness” to the empirical data, which was deemed important in our study. Our aim was to explore how the pandemic has affected the daily work and what the consequences were for the work environment in primary healthcare. In light of this, we did not believe GT was fully appropriate because we considered our study to focus on (more or less) temporary changes and consequences due to the COVID-19 pandemic. Developing a GT might suggest that the ambition would have been broader, for example to develop a theory on how crises are managed in primary healthcare. We have clarified this in the “method” section.

"Individual interviews were considered the most relevant method to obtain information of how the pandemic has affected the daily work and consequences for the work environment in primary healthcare." A source would be beneficial as to why these were considered the most relevant method.
Interviews using open-ended, explorative questions was the method that we felt was most closely aligned with the research question. We have clarified why we chose individual interviews in the manuscript, please see “Methods, study design and setting” Please also see the response to the previous question.

Additionally, it would be helpful to read the authors' backgrounds/experiences in qualitative research methods in this section as opposed to near the end of the manuscript.
We have clarified this under “Methods, analysis”

It would be helpful to know what kind of compensation was offered to participants (e.g. how much $$ - is it worth one hour of a primary physician's time?)
We agree and have added this information in the method section.

The participant recruitment section also seems somewhat disjointed/hard to follow. I'm not sure it could be easily replicated as it is currently written.
We have clarified this under “Methods, Recruitment of participants”

Finally, why were member-checks not conducted with participants? E.g. simply confirming that the authors "were on the right track" in terms of thematic interpretation, might help to improve the trustworthiness of this section.

We decided not to feed back information to the participants with member-checks since they described having a high workload and hardly having the time to participate in the study in the first place. Since the research group is multidisciplinary, multiprofessional (including two physicians working in primary healthcare) and located in different areas of Sweden, we believe the risk for missing important issues is fairly small. It should also be noted that the discussions of the interviews, the analysis and the findings took considerable time since the material was comprehensive and the analysis anything but straightforward. This extended period of discussion and reflection was important to ascertain trustworthiness.

Given attention to these minor changes, I think this paper will be an important publication in BMJ Open. Thank you for the opportunity to review it.
Thank you for the kind words.

Reviewer: 3

Dr. Andrew Turner, University of Bristol
Comments to the Author:
This article examines how primary care physicians were coping with the covid-19 pandemic in Sweden at the end of 2020 when patient demand began to return to more normal levels. The paper reports results from qualitative interviews with 11 physicians and focuses on changes to their ways of working and their workload.
It is important to document the changes that were put in place in response to the pandemic and to examine the impact of those changes on staff.
Overall, this is a good article. I have made some suggestions for improvements below:
Thanks for these words and valuable suggestions.

1. Methods - Study design and setting
On page 4, the article states:
"We used a qualitative approach based on 11 semi-structured interviews with physicians from different primary healthcare units in four regions in Sweden. A qualitative approach was chosen."
The second sentence "A qualitative approach..." can be deleted.
We definitely agree and have changed this. Another reviewer also commented on this.

2. Methods - recruitment of participants
On page 5, the article states:
"Five of the six regions we approached responded that they would like to participate. One other region did not respond to invitations sent via email. Thus, healthcare workers from primary healthcare units in four regions participated in the study"
I'm not clear on how "thus... four regions participated" follows from what is described. It reads as if five responded positively.
However, I think these details about the process are unnecessary. Instead, I think you can simply state that 'six regions were approached and four agreed to participate', while adding that 'those not participating were non-responsive to your requests, didn't have capacity, etc etc.'
At first, five regions responded positively but when we started to schedule meetings for interviews, one of these five didn’t respond at all. Your suggestions make the text easier to understand so we have changed accordingly. Please see “Methods” section.

3. Methods - recruitment of participants
Similarly with the description on lines 24-40 on page 5. This detail is also unnecessary and instead you could state that 'ways that staff were approached to take part varied by region, depending on their

local processes, while adhering to our purposeful sampling strategy of different locations and size of the primary healthcare units...'
If some or all of this information is included to fulfil the COREQ reporting checklist, you could consider moving this information into the checklist itself (as opposed to the checklist referring back to the text).
Again, a very good suggestion to make the text easier to follow. Another reviewer also commented on this section. We have changed accordingly to your suggestion.

4. Methods - recruitment of participants
Also on page 5, you state that you are reporting only physician data in this article and note that data from other staff is reported elsewhere. This needs some further justification, I think. It would, on the face of it, be interesting to see them compared within the same article.
It would indeed be interesting to compare the findings of our interviews but this was not considered feasible and it was not the aim of the study. Since the focus for this particular study only concerns the physicians in primary healthcare, we have now removed the information regarding the other staff categories.

5. Methods - Data collection
You may want to consider including the topic guide as an appendix. Again, this would allow you to remove some unnecessary details from line 26-28 on page 6.
We have considered this, leaving it to the Editor to decide whether the topic guide should be included as an appendix or not.

6. Methods - Patient and public involvement
You state "No patient involved" in the Patient and public involvement section.
Could you make it clearer that you mean there was no involvement of patients or the public in the design, analysis or interpretation of findings, etc, and that you do not mean there were no patient participants in the study.
We have clarified this in the “Methods” section under heading “Patient and public involvement”.

7. Discussion
In relation to the reference to Guest et al - This was new to me and I read their paper with interest. I'd be cautious about taking Guest et al as good evidence that 12 interviews is an acceptable rule-of-thumb. They derive 12 from a single study they conducted and they are rightly cautious about the generablisability of this figure.
Rather than relying on a figure such as 12, I think this article would be on stronger ground if it discussed how the sample of 11 physicians related to the various features Malterud et al (who you also reference) suggest determine the 'information power' of a sample.
Thank you for this important comment. We have now clarified matters regarding the issue of information power and rephrased the sentence referring to Guest, see page 18.

8. Conclusion
You could potentially draw out more concrete implications of the findings. For example, what should be improved for future pandemic situations / crises? What should be retained in the future? One example that occurs to me from your results: dissemination of curated top-down guidance that is practically useful but not overwhelming would be useful in similar situations in the future.
We are happy you highlighted this matter. We have now tried to make the implications more explicit, please see page 19-20.

VERSION 2 – REVIEW

REVIEWER	Peart, Annette Monash University, Department of General Practice
REVIEW RETURNED	15-Nov-2021

GENERAL COMMENTS	Thank you for taking the time to revise this paper.