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# Burnout Assessment Among Physicians and Medical Students: Comparing Time-Periods of Coronavirus Disease Outbreak in Shiraz

Yaser Sarikhani, Kiana Khatami, Mohammad Salehi-Marzijarani, Alireza Estedlal, Gholam Reza Sivandzadeh, Pariya Kouhi, Saeed Shahabi, Leila Zarei, Seyyed Taghi Heydari, Kamran B Lankarani

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## About this report

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## 1 Original submission

1 comment · 26 Jun 2021

### Associate Editor

MAJOR REVISION 26 Jun 2021

Dear author
Please revise the manuscript based on the reviewers' comments. There are important concerns about this study. In addition to the minor revisions that need to be addressed in the main text, the discussion and methods require major revisions.
Before the manuscript can be considered for publication, please respond to the following comments:
1- Is the purpose of the study to assess the effects of time on burnout or to estimate the prevalence of burnout?
2- Why did you use these time periods?
3- What was your rationale for combining residents and interns as well as physicians and specialists? These two groups are different from each other, so you cannot combine them unless you have a reason for combining these groups.
4- The title and the purpose of the study are not aligned.
5- The result corresponding to the main purpose of the study is not explained in the findings section of the abstract.
6- The conclusion of the study is not in line with the results of the study.
7- The keywords are not correctly selected.
8- Please name the questionnaire in the methods section of the abstract.
9- sars-cov 2 should be spelled out in full at first mention.
10- The first 7 lines of the introduction are not understandable and should be checked for grammatical errors.
11- It seems that this study is about assessing the prevalence of burnout in physicians, but this is not stated precisely in the introduction.
12- The sampling method is not correct. Were the participants in the three periods the same or different? How did you select the participants (in terms of both the sampling method and sample size) to be included in different time periods? How can you confirm that this sampling is not biased (due to apathy resulting from severe burnout or good well-being and willingness to participate)? What was the rationale for this sample size in each period of time? What was the rationale for the sample size estimation in the study?
13- There are grammatical errors in the statistical methods section of the study.
14- Please write covid-19 consistently throughout the text.
15- In line 145, what is the meaning of EP?
16- I suggest rewriting the discussion section completely because it is disjointed and disorganized and is not written scientifically. Please state the main findings at the beginning of each paragraph and then discuss them in relation to other study results or your own suggestions.
17- I also suggest rewriting the conclusion section completely, as it is not written scientifically (for example, some references are cited in the conclusion section) and is not based on the main findings of the study.

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# Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

**Dear Editor of Shiraz E Medical Journal**

Thank you for giving me the opportunity to submit a revised draft of my manuscript titled **Burnout assessment among physicians and medical students: comparing time-periods of coronavirus disease outbreak in Shiraz** to *Shiraz E Medical Journal*. We appreciate the time and effort that you and the reviewers have dedicated to providing your valuable feedback on our manuscript. We are grateful to the reviewers for their insightful comments on my paper. We have been able to incorporate changes to reflect most of the suggestions provided by the reviewers. We have highlighted the changes within the manuscript.

Here is a point-by-point response to the reviewers' comments and concerns.

Reviewers' Comments:

Reviewer 1:

Title:

1- Burnout assessment or investigation of burnout is better.

- Based on the comment of the respected reviewer we modified the title of the article.

Abstract:

2- Include name of the questionnaire.

- Based on the comment of the respected reviewer we added name of the questionnaire to the methods section of the abstract.

3- Analysis of covariance is true.

4- Start your findings with appropriate descriptive statistics. For example mean ± SD of burn out (out of XX).

- Based on the comment of the respected reviewer we added some descriptive data to the results section of the abstract.

5- In addition to OR, report confidence interval or exact P-values.

- Based on the comment of the respected reviewer we added p-values to the result section of the abstract.

Methods:

6- There was no information about sample size calculation. Why 220 and 212?

- Based on the comment of the respected reviewer, we reached the sample size in each group based on the participation rate of the physicians. In this regard, we added some information to the second paragraph of the method section.

7- Describe random sampling procedure step by step in details.

- Based on the comment of the respected reviewer, it should be noted that due to the lack of the cooperation of physicians, we were not able to apply a sampling framework in this study, so we used a convenience sampling method to recruit participants. Therefore, we modified information on the sampling method at the methods sections of the abstract and the main text. Moreover, we added limitation of the sampling method to the limitation subsection of the manuscript.

8- How about validity and reliability of the tool in Persian?

- Based on the comment of the respected reviewer we added some information on the validity and reliability of the burnout questionnaire to the method section of the manuscript.

9- How about scoring, range of total score and each dimension of the questionnaire?

- Based on the comment of the respected reviewer we added some information about the scoring of the BMI to the third paragraph of the method section. Although, we have already explained the scoring of the questionnaire dimensions at the fourth paragraph of the method section.

10- Method of variable selection in regression modeling is not clear.

- Based on the comment of the respected reviewer we added some information about the variables were included in the model to the statistical analysis subsection of the methods section.

Results:

11- Report exact P-value in the text.

- Based on the comment of the respected reviewer, we mentioned the exact P-values in the text.

12- In Tables 1 and 2, remove time periods. Compare descriptive statistics in two groups.

- As we mentioned above and in the last paragraph of the introduction and the first paragraph of the method section this study was carried out with the aim of comparing burnout among physicians in different time intervals from the onset of the COVID-19 outbreak. Therefore, analysis of the burnout based on the time is according to the study objective.
- Moreover, to avoid data duplicate, we provided descriptive data within the table 1.

13- In a table investigate association between burnout and demographic variables.

- According to the aim of the study we have already provided analytical outputs on the association between burnout and demographic characteristics of the participants in tables 3 and 4.

14- In Tables 3 and, univariate logistic regression doesn't make sense. Remove related columns.

- Based on the comment of the respected reviewer, we removed the results of univariate regression from tables 3 and 4.

Reviewer 2:

Dear authors

This manuscript is acceptable.

1- It is recommended that refer to Cronbach's alpha score in method section.

- Based on the comment of the respected reviewer we added some information on the validity and reliability of the burnout questionnaire to the method section of the manuscript.

2- In discussion, it is better for more explanation about reasons the increasing burnout during June-July.

- Based on the comment of the respected reviewer, we tried to provide some evidence regarding the issue in the discussion section.

Associate Editor's Comments:

Associate Editor 1:

Dear author

Please revise the manuscript based on the reviewers' comments. There are important concerns about this study. Besides of the minor revisions needed to be acknowledged and responded in the main text, discussion and methods needs to be majorly revised.

Before considering the manuscript for publication please respond the following comments:

1- Is the purpose of the study to assess the effects of the time on Burnout or to estimate the prevalence of burnout?

- The aim of the study was to compare the prevalence of overall burnout and its related sub-dimensions (using MBI) among Interns-Residents and general physician (GPs)-Specialists in 3 different periods of time since the beginning of the COVID-19 Pandemic. Therefore, we corrected the objective statement of the article at the end of the introduction section.

2- Why did you use this time periods?

- In this study we tried to compare burnout among physicians in different time intervals from the onset of the COVID-19 outbreak. Therefore, we added some information to the introduction and the method sections of the manuscript to improve clarity.

3-What was your rational for combining the residents and interns as well as physician and specialists? These two groups are different from each other so you cannot combine them unless you have a reason for combining these groups.

- Based on the preliminary analysis, there were no significant differences between interns and residents and also physicians and specialists in the outcome variables. Therefore, in order to

avoid redundancies, we merged the groups based on their analytical outcomes.

4-The title and the purpose of the study are not in the same line.

- We tried to correct the objective statement of the introduction section based on the title of the study.

5-The result of the main purpose of the study is not explained in the findings of the abstract part.

- Based on the comment of the respected editor we amended the findings part of the abstract to explain the main findings of the study.

6-Conclusion of the study is not in line with the results of the study.

- Based on the comment of the respected editor rewrote conclusion part of the manuscript.

7-Keywords are not correctly selected.

- We checked the keywords against the thesaurus of the MeSH database and made necessary changes.

8-Please name the questionnaire in the method of abstract.

- We mentioned the name of the questionnaire in the abstract.

9-SARS-COV2 should be explained completely in the first presentation.

- We provided the complete form of all abbreviations at their first presentation.

10- First 7 lines of the introduction are not understandable and should be checked for grammatical errors.

- Based on the comment of the respected editor, we checked the whole document for grammatical and editing errors.

11- It seems that this study is about the assessment of prevalence of burnout in Physicians but in the introduction it's not referred precisely.

The aim of the study was to compare the prevalence of overall burnout and its related sub-dimensions among Interns-Residents and general physician (GPs)-Specialists in 3 different periods of time since the beginning of the COVID-19 Pandemic. Therefore, we corrected the objective statement of the article at the end of the introduction section.

12- The sampling method is not correct. Are participants of the three periods were the same or were different? How did you selected the participants (for both and sampling method and sample size) to be included in different time periods. How you can confirm that this sampling is not biased (for the apathy resulted from sever burnout or good wellbeing and willing to participate?) what was the rationale for this sample size in each period of time? What was the sample size estimation rational in the study?

- Based on the comment of the respected editor and the reviewers, we added some information on the sampling to the method section of the manuscript. However, it should be noted here that the samples recruited at different time intervals were different. Furthermore, as we mentioned above and explained in the manuscript, because of the lack of appropriate cooperation of the physicians we were not able to apply a sampling framework and the samples were selected using a convenience sampling method based on the inclusion criteria and willingness to participate in the study. Therefore. We explained the problem as one of the limitations of the study in the limitation subsection of the manuscript.
- Furthermore, we were aware of the potential impact of some participants' willingness and mood on the results of the study. Therefore, we also explained it in the limitation part of the manuscript.

13- There are grammatical errors in the statistical method of their study.

- Based on the comment of the respected editor, we checked the whole document for grammatical and editing errors.

14- Please write the covid-19 uniformly in the entire text.

- Based on the comment of the respected editor wrote the phrase "COVID-19" uniformly throughout the manuscript

15- In line 145 what is the meaning of the EP?

- Based on the comment of the respected editor, we corrected the error in the text.

16- I suggest to rewrite the discussion part completely because it is written disrupted and disorganized and is not written scientifically. Please point out to the main findings in the first part of the each paragraph and then discuss it with the other study results or on your own suggestions.

• Based on the comment of the respected editor rewrote the discussion part of the manuscript.

17- Also I suggest to rewrite the conclusion part completely as it is not written scientifically (for example some references are cited in the conclusion part) and is not based on the main findings of the study.

• Based on the comment of the respected editor rewrote the conclusion part of the manuscript.

## 2 Revision 1

1 comment · 13 Sep 2021

### Associate Editor

ACCEPT 13 Sep 2021

All changes were made correctly.