Reviewer’s report

Title: The impact of the Paris terrorist attacks on the mental health of resident physicians

Version: 0 Date: 16 Sep 2018

Reviewer: Reviewer 2

Reviewer’s report:

PEER REVIEWER COMMENTS: To view the full report from the academic peer reviewer, please see the attached file.

REVIEWER COMMENTS FROM REPORT: General statement:

The aim of the present study is to assess prevalence rates of posttraumatic stress disorder, anxiety and depression in "medical residents" after terrorist attacks in Paris.

Overall, the manuscript contains an important topic, which makes it suitable for publication. Nevertheless, the manuscript has some weaknesses which are listed below in a chronological order. In general, the manuscript is very short and should be lengthened (if not written as a short report), because some important information is missing. Furthermore, the manuscript should be corrected by an English native speaker to avoid phrases like "On the evening of Friday, November 13, 2015, terrorist attacks took place in sixth six different locations in and nearby near Paris" or "literature revue".

REQUESTED REVISIONS:

Title

The title contains the word "junior doctors", which is never used again in the whole manuscript.

Background section

Major points:

- The description of the latest research in this field on only one page is too short.

- It remains unclear, what the authors mean with "medical residents". Please clarify, whether the samples included all workers in the medical sector of the hospitals or only physicians or residents. The title contains "junior doctors", because in the manuscript is only written "medical residents". If the description of the sample is more specified, the literature research for this research field could also be adapted adequately.
- The authors wrote only one sentence about the prevalence of depression in "medical residents". To my knowledge, there has been conducted much more research in this field. Additionally, the current state of research with regard to the prevalence rates of anxiety and PTSD is missing completely.

Minor points:
- Line 44: Insert "people" after "129"

Methods section

Minor points:
- Please describe the participants in more detail. For me it was surprising that the sample is very young.
- Line 77: "The questionnaire … could only be filled once" -- content unclear
- Please add the protocol number of the Ethic Committee.
- Line 100: "it correlates well with the diagnosis of PTSD" -- please specify with regard to sensitivity and specificity
- Line 110: "Subscales anxiety and depression were found to be independent of each other" Please specify, what you mean with this sentence. From my research experience, anxiety and depression are never independent from each other, but correlate substantially up to .70. Furthermore, I have never seen an CFA that documented uncorrelated factors of the HADS. Please specify why you decided to use these statistical tests and give some references for that.

Results section

Major points:
- If the authors used the cutoff value of 33 for the IES-R, it should be corrected in line 143 into "IES-R ≥ 33" instead of "IES-R > 33" and rerun the analyses according to this.
- There is only one table containing a few comparisons between the exposed and the non-exposed group. Do the authors maybe have more data that could make the examination more multifaceted? Additionally, further analyses could be done by testing some sociodemographic predictors for the dependent variables.
- Why did the authors collect data about the individual history of trauma and psychiatric disorders and did not use these results for further analyses? If about 15% of the sample already have had a trauma in the past, this might be affecting the present symptoms.

Minor points:

- Please specify what is meant by "medical residency training". In Table 1 is written "residence seniority". Both terms are unclear.

Discussion section

Major points:

- Line 168: 6% is wrong. Sterud et al. reported at least 12%. Furthermore, the prevalence in 5 out of 7 studies was about 20%. That makes the interpretation of the results of the present study very difficult and should be discussed, because the prevalence rates of 18.5% found here is below the 20% found in other studies without the context of terrorist attacks. Nevertheless, the difference between the exposed and the non-exposed group is still evident.

- The results of the depression prevalence rates are not discussed at all in comparison to the general population. Please add. Furthermore, the question arises, why the prevalence rate was so low?

Minor points:

- Line 212: "We did not collect the psychological support that medical residents could have been provided since the attack" Did the authors mean: "We did not collect the psychological support that medical residents could have been used/accessed since the attack"?

Table 1

Major points:

- At least one number with regard to the mean age in the three different (sub)samples is wrong. If the mean age in both subsamples varies between 26.5 and 26.6, the mean of the whole sample cannot be 26.8

- The same is true for "residence seniority"
Minor points:

- What means "Medicine" in the column of "Speciality", since all participants work in the medical area?

- The use of an HADS total score was not mentioned in the Methods section before. Please add.

Page 21 → Validity and translation…

- "New instruments were adapted for use in the study setting through established procedures" → Please give a reference for the procedures used.

- PHQ for the assessment of somatoform symptoms should be named PHQ-15 as this is the right name.

- Please tell the readers the number of items in the PSQ and standardize the information given in all questionnaire sections.

- The cut-off given for the Lubben Social Network Scale is wrong, because participants with 12 points on this scale still are at risk for isolation! Please correct the results according to this.

- Where do the cut-offs for social support availability come from? It is referenced with number 8 in the list, but the researchers there did not calculate or use these cut-offs.

ADDITIONAL REQUESTS/SUGGESTIONS:

Please see comments above.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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