Reviewer’s report

Title: Prevalence and correlates of suicidal ideation in Korean firefighters: A nationwide study

Version: 0 Date: 13 Aug 2019

Reviewer: Johan Siqveland

Reviewer's report:

"Prevalence and correlates of Suicidal ideation in Korean Firefighters a nationwide study"

Overall evaluation: A well written manuscript describing the prevalence and correlates of suicidal ideation in a very large and representative sample of firefighters.

Even though the manuscript is well organized and well written the authors may not have English as their first language, and some more language editing is needed. I have marked some of the areas in need of editing below.

The authors rightly assert that further understanding of suicidal ideation is important for improving suicide prevention efforts. However the problem with this study is how suicidal ideation is measured. I have made some more detailed remarks on this below but the main problem is that assessing suicidal ideation with one question and in addition dichotomizing this item is not a very good way of measuring suicidal ideation. I am concerned that this outcome measure does not assess a phenomenon well worthy of investigation. The manuscript needs to make a much stronger argument for the idea that people who report suicidal ideation at least rarely in the last year is worthy of further investigation and possibly intervention. Also some more information about why this dubious outcome measure where used in a study where other phenomena such as depression and PTSD are way more solidly assessed.

More detailed comments to address:

L 24 "an increased", not "the increased"

L27 within one year: is that recent?

L35 language

L 48-49 What is the current suicide rate in Korea?

L56 please provide reference

L58 inset in text where these numbers come from

L58 language
L69 language
L83 language
L92 please provide rationale for working outside as risk factor for suicide
L108 avoid causal language in Cross sectional studies

In methods: how were missing data handled?

L 137- 143

1. Why were the outcome variable assessed with only one item?
2. Why did the authors choose to dichotomize this variable, and thereby losing sorely needed variance?
3. Why were "rarely" used as the cut-off for suicidal ideation, rather than sometimes?
4. Would changes in 2 and 3 above change any of the conclusions in this study?
5. Could the authors provide a reference showing that rare suicidal ideation is related to completed suicide?

L 241- 260 These two paragraphs are largely overlapping; authors should consider deleting the first.

L253 Language

L258 very narrow CI for emotional labor, is this correct?
L266 what are these numbers in the general Korean population?
L276 are there differences between US and Korea in the general population?
L290 Careful with causal language.
L338 the cross sectional design not only "may" limit, it does limit.

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

Yes

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

Yes

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

Yes

**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.

I am able to assess the statistics

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

Needs some language corrections before being published

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests
I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal