Reviewer's report

Title: Depression, anxiety, and suicide among Vietnamese secondary school students and proposed solutions: a cross-sectional study

Version: 2 Date: 10 August 2013

Reviewer: Mary C Smith Fawzi

Reviewer's report:


The manuscript reports on an urgent health need among Vietnamese youth. I have reviewed the manuscript, and there are some changes I think need to be made before the article can be accepted for publication.

I would consider these all major compulsory revisions. If the authors choose not to make the revision, then they should provide justification.

Abstract:

1) For the ‘methods’ section, typically you would not refer to a study as ‘It applied’… I think it might be better to say: ‘A semi-structured questionnaire was used to assess anxiety, depression, suicidality, and potential solutions based on feedback from youth.’ It is semi-structured since the potential solutions are obtained through open-ended questions. You can describe in more detail the CES-D in the manuscript (which you do provide).

2) For the ‘results’ section, you might state: ‘The prevalence estimates of symptoms reaching a threshold comparable to a diagnosis of anxiety and depression were 22.8% and 41.1%, respectively.’

3) For the ‘results’ section, you may want to state the following: ‘attitudes of parents and teachers needed to change, reflecting a more supportive rather than punitive approach.’ I’m not sure this is what you mean, but it would be good to mention briefly the changes the students were referring to.

4) For the ‘conclusions’ I would replace ‘suicide ideation’ with ‘suicidal ideation.’

Background:

1) The second sentence in the first paragraph is not clear; it should be restated/clarified.

2) For page 4, specify the location of where study [10] was carried out.

3) For page 4, 1st paragraph, I would replace ‘attempt to suicide’ with ‘attempt to commit suicide.’
Methods:
1) For the first sub-heading I would rephrase as ‘Study design and population’ to avoid redundancy.

2) For the second paragraph in the methods, I’m not sure what you mean by ‘purposive cluster sampling’. It appears that you randomly selected youth from each school. In this regard, I would remove this design term and just state that you selected 3 secondary schools to reflect urban and rural areas, with the additional detail you provide on stratification.

3) It is unclear what is meant by: ‘Next, three among all grade 10-12 classes.’ Are you referring to 3 students or 3 classes?

4) Under ‘data collection,’ it’s not clear what is meant by ‘student’s upbringing.’ Please clarify this.

5) Under ‘data collection,’ please correct the title for the CES-D to ‘Center for Epidemiologic Studies Depression Scale.’

6) In this same paragraph, I would replace ‘with a range of 0-60’ to ‘with a range of total scores from 0-60’ to make it clear to the reader.

7) For the 3rd paragraph under ‘data collection’ spell out what K-10 is.

8) In the same paragraph, replace ‘receiver-operation characteristic’ with ‘receiver operating characteristic.’

9) In the same paragraph, 31.3% is reported as the sensitivity, but for an AUC of 0.72 I’m wondering if this is accurate. The authors may wish to check this.

10) In the 4th paragraph under ‘data collection’ instead of stating ‘Likert-type scale’ I would say ‘Likert scale.’

11) In the same paragraph, I would replace ‘worry about grade’ with ‘worry about grades.’

12) In the same paragraph, I would indicate what the sensitivity and specificity estimates of the ESSA are.

13) In the statistical analysis section, in the first sentence, I would replace ‘sample population’ with ‘study population.’ Typically you would refer to either ‘sample’ or ‘study population.’

14) In the same paragraph, you refer to ‘physically and emotionally abused.’ But in other sections of the manuscript you refer to ‘physically or emotionally abused.’ Please be clear which one it is (either ‘and’ or ‘or’) and be consistent throughout the manuscript.

15) In the same paragraph, I would replace ‘often being physically and emotionally abused’ with just ‘being physically and emotionally abused.’
16) In the same paragraph, I would replace ‘and among others’ with just ‘among others.’

17) In the same paragraph, I would replace ‘staffs’ with ‘staff members.’

18) In the same paragraph, I would replace ‘study results’ with ‘academic performance.’ I would make this global change throughout the text.

19) In the same paragraph, the p-value should be less than 0.05 and not less than or equal to 0.05.

Results:
1) It’s unclear what the difference is between participation rates (36.4% and 63.6%) and the response rate (33%)? You should have one overall participation rate, i.e. among those whom you invited to participate, what percent agreed to participate. Then break that down be girls/boys as well.

2) Also, you would mention that response rates were around 33%; this needs to be an exact percent.

3) In the ‘Mental Health’ section, for anxiety and depression, it should be clear if these are point prevalence, 2-week prevalence, or lifetime prevalence estimates.

4) In the ‘Anxiety’ section it is unclear what it means by stating 23% of students were ‘anxious.’ You may consider stating: ‘23% of students demonstrated anxiety symptoms as a clinically significant level.’ I would state this only if this is how the cut-off can be interpreted.

5) In the ‘Depression’ section rather than stating ‘classified as having depressive symptoms’ you could say ‘classified as having an elevated level of depressive symptoms.’

6) In the ‘Depression section’ rather than stating ‘18.7% of the students were categorized as having depression’ it should state: ‘18.7% of the students demonstrated a level of depressive symptoms comparable with major depressive disorder.’

7) In the second paragraph of page 9, instead of saying ‘natural parents’ it should say ‘biological parents.’

8) In the same paragraph, instead of saying ‘poor study results’ it would be better to state ‘poor academic performance.’

9) In the last paragraph on p.9, it’s unclear what is meant by ‘possible depression.’ Be consistent with wording and indicate the cut-off score here.

10) In the same paragraph, if the OR= 1.34, then instead of stating ‘reduced the odds ratios 34%’ it should state ‘reduced the odds by 34%.’

11) For the section on suicide, are there prevalence estimates lifetime or
one-year prevalence? Please specify the time frame.

12) For the section on improving mental health of students. It’s unclear what attitudes and behaviors of the teachers and parents are that should be changed. If it is a more supportive approach, etc., this should be specified.

13) In the same paragraph, I would suggest not putting parentheses around the word ‘strongly.’

Discussion:

1) The first sentence states ‘This study established...’ Typically you wouldn’t say ‘established’ but ‘demonstrated’ may be more appropriate here.

2) On page 12, note that there is a statement that says ‘adolescents and adolescents.’ This should be rephrased to avoid redundancy.

3) On page 12, second paragraph, it’s not clear what ‘higher average family background level’ is. If this is socioeconomic status, then it should be specified. Another interpretation here could be that the medical students are farther along in their studies, whereas, the secondary school students may still be unclear what may happen, causing potentially greater education-related anxiety.

4) Under the limitations section, instead of stating ‘screening test’ it is better to state ‘screening instrument.’

5) For the CES-D if there is a low specificity, it should be stated in this sentence.

6) It’s unclear what is meant by ‘cross-contamination’ here; I don’t think that this is a significant limitation in the study (since this would relate to all studies on depression), so I think you can take this out.

7) When discussion ‘linkages’ between covariates, it may be more appropriate to state that the temporal sequence of covariates and depression, for example, cannot be ascertained since it is a cross-sectional study.

8) In the last paragraph of the limitations section, it is not clear what is meant by low non-respondent bias. If you have people who have a higher level of depression and a higher level of abuse at home also not participating, then you may have a selection bias towards the null, potentially underestimating the associations that were observed.

9) Also, it states that ‘it is possible the selected populations are not entirely representative of the whole country.’ It may be better to state that ‘the study population was not representative of secondary school-aged youth throughout the study, given that some youth do not attend secondary school.’

10) Also, it is stated that the rates were similar to the national averages, but in the manuscript, the differences between this study and other studies among youth are highlighted; regional differences were part of this explanation. Therefore, I would take out that this is representative of secondary school
students in Vietnam as a whole.

11) One point that should be added in the limitations is that the cut-off scores were not validated among youth in Vietnam.

12) Another limitation is the low sensitivity of the anxiety measure (31%); this may result in an underestimate in the burden of anxiety.

Conclusion:

1) I think that the conclusion can be strengthened. It is an opportunity to advocate for increased access to mental health services for youth in Vietnam. I think that the point about feasibility of a web-based program sounds good and supported by the students’ points, but you also may want to point out that there may be a need for school-based counseling services, and that students mentioned they would access these services. Although this may not be immediately feasible, it could be considered a longer-term goal. Also, one possibility is training primary care physicians in mental health care so that it is feasible to increase access to these services without necessarily relying on the availability of psychiatrists or social workers. A protective factor in your analysis relates to the availability of a tutor. This can even be a volunteer arrangement with local university students, and wouldn’t necessarily cost extra money. Teachers and parents can also participate in psychoeducation programs; if they are more aware of their approach to the students and how it may be counterproductive, this may help to address some of the issues related to attitudes that the students raised and may allow for discussion of physical/emotional abuse, which in their perspective may be appropriate punishment for bad behavior or poor academic performance.

In a final note, the manuscript should be carefully edited; in particular there were a number of redundancies.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.