Reviewer's report

Title: Determinants of suicidal ideation: parallel cross-sectional analyses examining geographical location

Version: 2  Date: 15 April 2014

Reviewer: Kelly L Green

Reviewer's report:

Major Compulsory Revisions

1. Beginning in the methods section, the authors sometimes interchange suicidal ideation and suicidal behaviors when speaking about the specific analyses done in this paper. For example, on page 5, under “Sampling Strategies”, they state “…cross-sectional analyses to explore the determinants of suicidal behaviors…”. In this paper, the authors do not analyze suicide behavior data, so this is inaccurate. Suicidal ideation is not the same as suicidal behavior and data looking only at suicidal ideation should not be extrapolated to apply to suicidal behavior or death by suicide. The authors should edit the manuscript to ensure that the appropriate construct nomenclature is used throughout.

2. Authors interchange suicidal ideation and behaviors. Suicidal behaviors were not examined in the current study. If data on suicide attempts is available, it should be included. The WHO module includes lifetime and 12-month prevalence data for suicide plans, suicide attempts (also total number of lifetime attempts).

3. The authors state on page 13 that they did not analyze for the outcome of suicide attempts because of the small proportion of endorsement. However, Table 3 indicates that the percentages of lifetime suicide attempts were actually higher than those for 12-month suicidal ideation, which was used in analyses. Given that suicide attempts are a more robust predictor of death by suicide than suicidal ideation, this outcome would be particularly useful to examine.

4. Given how many tests were run (one regression per predictor-outcome pairing in each dataset), “partially protecting” alpha by setting a p value at <.01 does not adequately protect against Type 1 errors. The authors should use an appropriate strategy (e.g., Bonferroni correction) to ameliorate this, although this will likely result in a very small p value needed to achieve significance. Alternatively, the authors could consider grouping predictor variables into logistic regression analyses (i.e., physical health, psychiatric disorders, etc.) instead of running so many separate regressions. This would result in a less harsh cut to the acceptable p value when correcting for multiple analyses, in addition to providing information about which specific variables in a group are the strongest predictors.

5. On page 4, the authors state “This indicates the importance of mental disorder in suicidal ideation and highlights that the presence of mental disorder is likely to be necessary but not sufficient for the development of suicidal behaviors.” The
authors should consider revising this, as the literature suggests that particular symptoms may be more relevant to suicidal ideation and behaviors than merely the presence of a “disorder” (for example, hopelessness has been found to explain the relationship between depressive symptoms and suicidal ideation). Additionally, not all individuals who die by suicide have a mental disorder, so it cannot be a “necessary” component to suicidal behaviors.

6. Another limitation that should be added to the discussion is that the results can only point to associations, as data were cross-sectional, and not to causal pathways to suicidal ideation.

Minor Essential Revisions

1. In the “Characteristics” section, it would improve readability to rewrite in complete sentences

2. On page 17, 2nd line from the bottom, a space needs to be inserted between 99% and CIs.

Discretionary Revisions

1. It would be useful to include psychometric properties of the measures used.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.