Reviewer’s report

Title: Critical Care Rotation Impact on Pediatric Resident Mental Health and Burnout

Version: 0 Date: 04 Aug 2017

Reviewer: Victor Mogre

Reviewer's report:

In this study authors aimed to investigate the prevalence of burnout and depression as well as other relevant variables among pediatric residents following a pediatric intensive care unit rotation. Authors adopted a prospective design measuring burnout and depression at the beginning and end of the rotation. The manuscript is well written but I believe a few issues need to be revised or rectified. Find these below, presented in accordance with the sections of the manuscript.

Background

As part of the background authors should briefly describe the kind of learning theory this study could be situated-in taking cognisance of the variables investigated.

Methods

1. Could provide a brief description of the setting of the study?

2. Given that authors adopted a prospective design, they should do well to include a duration of the PICU rotation.

3. Authors should provide more information on how participants were recruited to participate in the study. In addition, further information should be provided on how the survey was administered and where and how participants filled the survey instrument. Did participants fill the instrument together in a room or they were allowed to take it away to be filled at their leisure time and returned on a later date. How early or late did participants fill the survey before they begun the begun the PICU rotation?

4. Did authors collect demographic data? If yes they should indicate what kind of demographic data was collected.

5. How valid and reliable are the survey instruments for assessing these variables among pediatric residents?
Results

1. Authors should not begin sentences with figures. The figure should be spelt out fully. For instance "24 residents completed the prerotation surveys" should be revised to "Twenty-four residents completed the pre-rotation surveys".

2. The titles of the tables appear two wordy and crowded. Authors should revise them to make them brief and comprehensible. The cut-offs for the variable found in the titles of the tables could be included in the statistical analysis section of the manuscript.

3. There is also no need to indicate 'primary outcome' in table 1 as this has been presented in the methods section of the manuscript.

4. This statement "Results are reported as total number who screened positive with percentage of total group in parentheses; n (%)" could be presented as a footnote below the table. Much better authors could delete it since it has been presented in the statistical analysis section that results are presented as frequencies and percentages. These comments apply to both tables.

5. In table 2, there is no title for column one. Authors should include the title.

Discussion

1. Authors should do well to indicate some strengths of the study.

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:

Acceptable

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