Reviewer’s report

Title: Specialty choice determinants among Mexican medical students A cross-sectional study

Version: 0 Date: 08 Jul 2019

Reviewer: Francisco Bonilla-Escobar

Reviewer's report:

Thank you for opportunity of reviewing this article. It is well-written and the methodology is sound. The topic is one of high importance for the medical education field and of relevance for postgraduate medical education training.

With regards of the whole document:

1. Replace "developing countries" with "low- and middle-income countries"

2. The article will be improved with a proofreading process made by a native english speaker.

3. Some additional methodological aspects are required like a sedimentation diagram, the validity of the instrument, and relevance of the results and the survey for stakeholders.

Specific comments are mentioned below:

1. Abstract:

1.1. Move the "The instrument Cronbach's alpha was 0.8." towards the begining of the results description.

1.2. From the described results it is not clear how the authors get to the conclusion that states: "by the undergraduate experience, the desire to study a subspecialty and other factors."

2. Background:

2.1. Grammar revision required. i.e.: The person used in this sentence is not sound "The trajectory of health professions students is fraught with"
3. Methods

3.1. Questionnaire: was face validated? who put the survey together and based on which criteria it was considered that the questionnaire was complete (content validity)?

3.2. Factorial analysis is clearly described. However, was there any subgroup analysis of the population with regards of their preference towards a specialty (any) or comparing those with and without intentions of going through a residency training?

3.3. Please add the ethical approval code or ID of the document.

4. Results

4.1. Please do not begin a sentence with numbers or percentages.

4.2. Move this to the discussion: "These dimensions resemble the Bland-Meurer classification: personal values that develop and change during the undergraduate training (F1), career needs to satisfy (F2), and perception of specialty characteristics (F3). This confirms the suggestion that students choose a specialty based on a "package" or "cluster" of characteristics, rather than single features or interest in the specialty (Weiss et al., 2017)."

4.3. Please add a sedimentation graph to show the potential number of groups of variables.

5. Conclusion

5.1. This conclusion "The specialty choice decision is made usually during the last years of undergraduate training." is not coming from the results of study.

5.2. A statement describing how the factorial analysis results can be used by stakeholders in order to improve medical training is required.
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?
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I am able to assess the statistics

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