Reviewer’s report

Title: Aspirations to become an anaesthetist: longitudinal study of historical trends and trajectories of UK-qualified doctors' early career choices and of factors that have influenced their choices.

Version: 0 Date: 18 May 2017

Reviewer: Timothy Long

Reviewer’s report:

General: This is an interesting topic for anesthesia providers. I believe the manuscript could be structured to present the findings in a more cohesive way. For example, the reader gets lost thinking that it's a manuscript comparing percentages of men vs women pursuing anesthesia over time, differences in attrition rates, factors important to men vs women in selecting anesthesia, or factors important in selecting anesthesia compared to other specialties. I think the aims need clarification and the results and discussion need to focus on these aims.

Abstract

Results: Ensure that you are highlighting your most important results and that they correspond to the results presented in the full manuscript (i.e. in the same order). You can probably accomplish this in one or two paragraphs rather than four.

P2 L45-47: This is misleading and implies that men are more influenced by a career with acceptable hours than women, which is not what your findings demonstrate. Comparisons were done separate for men and women comparing anesthesia vs other specialties.

Background

Please restructure to more succinctly provide background and end with the aims of the study. The aims are hidden in the middle of this section.

P3 L45: It's not clear that you actually assessed factors leading "out of anesthesia"

P3 L51: You are providing results here

Results

P6 L24: Please clarify "Additional information 1 Table shows the numbers on which figure 1 is based."

P6 L28: "Throughout the years…." Please clarify - does this refer to the period from 1974 to 2012?
P8 L6-8: "Men were significantly more likely…." There are not statistics to support this - do you mean this is statistically significant? "….but differences between them were generally small." Please clarify, this is confusing.

P9 L15-17: "Men (but not women) anesthetists were more influenced than those….." - this is slightly misleading as no comparison is done men vs women. Is there a difference between the percentage of men vs women that find this factor important? This would be a more relevant comparison.

Table 3: Although interesting comparing factors vs other specialties, it may be equally interesting to compare men vs women on each of the factors listed for anesthesiology only.

Discussion

P10 L38-40: "A higher percentage of women than men rated opportunities for career progression highly." This is not accurate as it was 32.9% for men and 30.4% for women and there were no statistics performed. You can only say that compared to other specialties, women in anesthesia listed this as an important factor.

P10 L40-42: Same as above. You cannot say a higher percentage of men than women rated this as an important factor.

P10 L57: It appears that the attrition rates are inferred from table 2. Can you clarify in the results? Any comparisons between men and women in attrition?

P11 L53-55: "Women anesthetists in our study were positively influenced by career promotion…." Men were too - the implication with the way this is worded is that women were influenced and men were not, which is inaccurate.

Conclusions:

Summarize key findings in 3-4 sentences.

P12 L21-24: It's not clear that the factors that attract men and women to the specialty are any different.

Figure 1:

Not clear what comparisons were done that are statistically significant. Can you make it more clear in the figure? Also, can you clarify the three sections? I'm assuming the first pair in year 1, the 2nd pair is year 3, and the third pair is year 5.

Figure 2:

I don't think this figure adds much. Are there statistically significant differences in these responses?
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.

Unable to assess

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

No

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 recommend additional statistical review

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

Acceptable

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