Author’s response to reviews

Title: Feminisation of the health workforce and wage conditions of health professions: an exploratory analysis

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Subject: Submission of revised manuscript
Dear Editors,

We would like to submit the third round of revisions of the paper entitled “Feminisation of the health workforce and wage conditions of health professions: an exploratory analysis,” by Geordan Shannon, Des Tan, Nicole Minckas, Hassan Haghparast-Bidgoli, Neha Batura, and Jenevieve Mannell, to Human Resources for Health Journal.

We thank you for the comments on the revised manuscript and have amended the manuscript accordingly. Please find our responses to the reviewer comments below.

All authors confirm to have read and approved this paper. We are willing to assign copyright to the publisher, if the article is accepted. The submitted manuscript has not been previously published, orally presented, or is under consideration elsewhere. Please direct all correspondence to Dr. Geordan Shannon.

Yours truly (On behalf of the authors),

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Reviewer reports:

Reviewer #2: Thank you for the opportunity to review the revisions of this manuscript. Many comments and suggestions have been made by the 3 reviewers.

My comments for this version primarily concern figure 2 and the presentation of the results.

1) In this R2 the authors included a "schematic" of their sample selection procedure. While this is a good idea, the execution and integration into the manuscript needs clarity and accuracy.

There are two sections in the manuscript that refer to the figure - in the methods L246/247 (a) and in the results, L304-307 (b).

   a) The figure itself needs to be improved. Why does it have to be a "schematic" and not show the actual steps of the selection in a flow chart.

   Something like this:

   a) Individuals who participated in the survey (n=)
   □ (down error)
   b) individuals in 25 countries that were included in analysis(n=)
      □
   c) individuals with complete wage data (n=)
      □
   d) individuals after excluding top/bottom 0.05% and other restrictions you may have applied (n=)
      □

   This leaves you with two samples that you used for the analysis:

   1) all occupations (n=) & 2) health care occupations (n=)
I strongly suggest revising figure 2, including the text (some suggestions outlined above). For example, the first box says "completed" however it is more accurate to say participated since we learn in other text boxes about the missing information in wages. There are also typos in the text boxes.

Thank you for these suggestions, the figure has been revised accordingly.

b) The text in the results states the sample selection procedure again, but mentions at the beginning of the sentence "final sample". However, it does not refer to the sample used in the paper, it refers to individuals who participated in the survey. The results section should talk about the sample analyzed and the other text belongs into the sample selection section in the methods. Beginning the results with the gender balance percentage would be good.

Thank you, this has been amended in the text (lines 251-254)

2) Analysis: Now that you statistically tested group differences, please name the statistical tests that you employed in the analysis section. You explain how the AAPC was computed but I am not clear how statistical significance was assessed.

We have clarified in the text, which now reads: “Annual percentage change (APC) is calculated using weighted least squares regression. AAPC represents a summary measure of the APC trend over a pre-specified interval of time, and is computed by taking the weighted average of annual changes over a period of multiple years. The Jointpoint Regression Program uses a Monte Carlo Permutation method as a test of significance in trend.”

3) Results:
I am having trouble with a) understanding the results presented in table 3 and b) following your results in the text with the tables presented.

a) Table 3, headers: gender ratios should include n & % in the heading, gender wage gap should include mean and SD, HPCC should include mean overall, mean for men and women
b) You introduce table 3 in line 319. In the text you are referring to Figure 3a, and 3b, sometimes referring to statistical significance levels that come from Table 3, without saying so. This continues for figures 4 and 5. For example, you begin by saying in line 330 "In lower- and upper-middle income countries, gender ratios in the general workforce increased between 2006 and 2014 (AAPCLMIC 11.8%, p<0.01; AAPCUMIC 4.3%, p<0.01) (Figure 3A)" However, the graph only show the ratios, while table 3 reports the AAPC that you are mentioning in the text. It seems to me that your text doesn't need figures 3, 4 and 5, so why not discuss table 3 and then say in text at the end of each section: graphical illustrations of the time trends are shown in figures 3 a and b etc.

Thank you for this suggestion. We have changed the location of the figures (now at the end of the results text) and have referred to Table 3 in the text.

Reviewer #3: I appreciate the substantial work the authors have done in responding to the (often contrary) comments provided by the three reviewers. In particular, I appreciate the addition of Figure 2, Table 3, and expanded/reconfigured limitations section. The paper has been significantly improved. I have no further suggestions.

Thank you for this feedback