Reviewer’s report

Title: Risk perception of blood transfusions - A comparison of patients and allied healthcare professionals

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Reviewer: Brian Custer

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The manuscript submitted by Graw and colleagues reports on the findings from a risk perception survey of allied healthcare workers, known as "non-academic healthcare professionals" in the manuscript and patients. The objective was to assess differences in the understanding of risk perceptions between these two populations. The findings show higher levels of concern about infectious threats in patients compared to allied health professionals. The general findings are that perceptions of risk are elevated in both groups in excess of the actual true risks in transfusion in the current era. Overall the manuscript is well written. However, there are some concerns about the data presented relative to the stated purpose of the manuscript in the introduction.

1. Abstract. The final sentence of the conclusion doesn't really follow from the data presented in the abstract or manuscript because physicians were not included in this study. Please revise.

2. The use of the term "non-academic health care professionals" in the title and throughout the manuscript is not ideal. A better term to use throughout the paper would be "allied healthcare workers". It is certainly true that some allied healthcare workers have academic appointments and also that some physicians should not necessarily be classified as "academic".

3. Although much of the introduction is focused on the idea that non-physicians are increasingly used as deliverers of healthcare including communications with/consenting of patients on procedures, the manuscript doesn't really provide insights into the consenting process and whether allied healthcare workers can serve as the group who consents patients for transfusion. To truly assess this topic a direct comparison of differences in risk perceptions of allied healthcare workers and physicians would be necessary. Consider revising the introduction to focus on the need to simply understand differences in risk perceptions between patients and caregivers.

4. The group of "non-academic healthcare workers" is not defined. Who are these allied healthcare professionals who participated in the study? What healthcare roles do they have? Are they all nurses or other staff? Table 1 needs to include more details on the study populations, including the types of patients included (clinical reasons for hospitalisation) and the roles of the allied healthcare workers.
5. Were the patients included in the study all transfused, or at risk for transfusion?

6. Table 4. The multivariable models are interesting, but it is unclear what substantive contribution they make to the analysis. The summary sentence of section 3.6 (page 11) seems sufficient to convey the meaning of these models.

7. Page 8. 185 of 202 caregivers is 91.6% not 91.8%.

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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