Professor Jin-Lei Wang
Editor-in-Chief
World Journal of Clinical Cases
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Dear Prof Wang,

We wish to thank you for the opportunity to revise our manuscript, **"The effect of patients' COVID-19 vaccine hesitancy on hospital care team perceptions".** We also thank the reviewers for their interest and in-depth review.

Revisions in the manuscript are shown using Track Changes. Following this letter are the reviewer's comments with our responses in italics and reference to the text in red.

In accordance with the reviewer's suggestions, we emphasized the research hypothesis, modified the discussion and conclusion and revised study limitations with possible solution approaches.

We hope that the revisions in the manuscript and our accompanying responses will be sufficient to make our manuscript suitable for publication in your respected journal.

Sincerely,

Inbar Caspi, MD, on behalf of all authors.

Reviewer 1

1. The author has a good idea, but the content of the preface still needs further explanation, and its importance and necessity are not fully demonstrated.

Thank you for this insight. The COVID-19 pandemic created a highly stressogenic work environment for HCT, due to functioning with heavy protective equipment while caring for patients who may rapidly deteriorate and may need constant breathing aid, many of them to the extant of mechanical ventilation. Under those circumstances, vaccine hesitancy despite obvious proven benefits creates fertile ground for the development of frustration among HCT. Our main concern is that ongoing negative feelings towards these patients can eventually hurt their quality of care. The importance and necessity of our research is by evaluating for the presence of negative perceptions towards unvaccinated patients and raising awareness to this issue. By doing so, we want to promote early intervention, which will hopefully prevent the negative effect on the quality of care and patient-physician relationship. We modified the introduction (end of introduction section) *and the discussion (*fifth paragraph*) to better emphasize this point.*

2. It is recommended to add the results of meta-analysis to make the article more full and readable.

We are sorry to not fully understand this remark by the reviewer. Our study is a prospective novel study using structured questionnaires in multiple centers across Israel. Unfortunately, preforming a meta-analysis was beyond the scope of this research and was not our intention. Moreover, we now performed an additional review of the literature and found the following major studies. A meta-analysis by Cénat et al regarding vaccine hesitancy demonstrated higher hesitancy in females and in rural versus urban areas [1].An additional meta-analysis by Robinson et al found that being female, younger, of lower income or education level and belonging to an ethnic minority group were associated with vaccine hesitancy[2]. We therefore only found previous literature on predictors for patient's vaccine hesitancy, while our study focused on its effect on HCT and their perceptions regarding these patients, independently from patients' baseline characteristics. Therefore, our work is unique in the field of vaccine hesitancy and preforming a meta-analysis will be not applicable.

3. For the discussion part, the author also needs to add appropriate content, and the discussion part has too little content.

Thank you for the important emphasis. The discussion section was thoroughly revised and modified, and now includes an elaborated content regarding the negative impact that bias and discrimination among medical professionals has on patient care, as well as a more in-depth description of the study limitations.

Reviewer 2

The study's title, abstract, key words, and introduction sections are all coherent and acceptable. However, it would be preferred that authors state the actual study design from the get-go, as it appears to be rather vague right from the get-go.

Thank you for highlighting this issue. We emphasized the study design as a prospective study using structured questionnaires in both the article abstract *and the* methods section (under "study design", first line in the paragraph)*.*

[Hypothesis] It is preferable that authors clear indicate by specifically conveying what their is by using the vernacular "hypothesis." This communicates to the reader what they aim to accomplish; consider rephrasing the sentence in your thesis statement. As it is conveyed in your manuscript—due to the wording--one can't help wondering whether the aim is to investigate the "quality of care delivery" versus merely the "impressions of providers" which presumably influence the actual delivery of care to this noncompliant patient population. Please consider restructuring the hypothesis statement.

Thank you for your influential remarks regarding this topic. We agree with your important observation. We hypothesized that vaccine hesitancy by the patients can affect the perceptions of medical health team regarding them, and this could potentially lead to a harmful consequence with lower quality of care. We aimed to point out this issue, since early detection of negative feelings might alleviate them from escalating and prevent potential deterioration in treatment. This assumption was the basis of our research, but we focused on examining the perceptions of providers (hence- their impression) and not the quality of care directly, which should be assessed in further research. We made the modifications of rephrasing our hypothesis in the abstract, introduction and discussion sections.

[Written Work] The overall quality of this manuscript is solid with respect to organization and presentation in its pose throughout. However, there are a handful or spelling, grammar, and misnomer words; these are highlighted in "red" for authors to review and consider (see attached version of your original manuscript). I suggest correcting these areas appropriately to polish up the work worthy of publication in the journal. - Capitalized "I" "internal medicine department" or "the department of Internal Medicine".

Thank you for this highlight. A thorough revision was made including special attention to the eras highlighted in red and the appropriate corrections have been made. We included an additional review by a native English speaker experienced in writing, with confirmation attached to the article.

- The conclusion is verbose; usually the conclusion is the 'key point' or 'take home message' which should be iterated in 1 or 2 sentences. Consider moving the other thoughts and formulate a final paragraph to be included under the discussion section and modify accordingly.

Thank you for the important emphasis. The discussion *section was edited accordingly, and the* conclusion *was shortened and modified.*

[Limitations & Future Direction] Potential reporting and selection biases from participants by use of questionnaire tools in the study were reported by authors as limitations. Please consider how might you address these concerns in terms of future research direction to better substantiate your findings.

Thank you for the important remark. To address those concerns, further research should try and assess the effect of patients' COVID-19 vaccine hesitancy on their hospital care team perceptions in a direct manner and not thorough the use of questionnaires. Through that, both the selection and the report bias will not be a

concern since they are derived from the use of questionaries. It could be challenging to assess this issue in a direct manner and calls for creative solutions. Possible options can be observational studies inside designated departments with the inclusion of all consecutive patients or comparing objective measures to evaluate whether there is an effect on the quality of care. Furthermore, it can be assumed that since the report bias is a concern in both study groups it has a relatively negligible influence on our final results. We made the modification in the discussion section address this important issue (limitations).

[STROBE Statement] Authors have NOT indicated on the statement checklist where precisely the required information has been reported/written in the prose of the manuscript. Please indicate accordingly by using 1)page and/or 2) line numbers (to indicate precise location) in sequence and indicate precisely on the accompanying STROBE checklist. Example: "Title and abstract"   Pg.1, Lines "x" thru "y"

We agree with the reviewer and apologize for our mistake. We now include a revised STROBE statement with the specific page, paragraph and lines if needed.

[IRB approval & Consent forms] Signed consent form and IRB approval documentation (report just #) are in a foreign language; if journal require that all supporting documents MUST be in English, then authors need to rectify this situation. Furthermore, authors are only required to provide the reference number indicated in the IRB document. I leave this to the chief editor of the journal or final decision.

Thank you for this concern. According to the journal's guidelines, the informed consent form should be prepared in the official language of the author's country.

[Certificate of Non-native speakers of English] Authors only provided a statement which has been signed by a co-author; if journal requires an official documentation by way of a certificate issued showing proof that the manuscript was indeed reviewed by an officially licensed certification professional. I leave this to the chief editor of the journal or final decision. Again, I leave this to the chief editor of the journal or final decision.

Thank you for this concern as well. We now included an additional certification after the review of an external English speaker reviewer with experience in this field.

References:

1. Cénat JM, Noorishad PG, Moshirian Farahi SMM, et al. Prevalence and factors related to COVID-19 vaccine hesitancy and unwillingness in Canada: A systematic review and meta-analysis. *J Med Virol*. 2022. doi:10.1002/JMV.28156

2. Robinson E, Jones A, Lesser I, Daly M. International estimates of intended uptake and refusal of COVID-19 vaccines: A rapid systematic review and meta-analysis of large nationally representative samples. *Vaccine*. 2021;39(15):2024-2034. doi:10.1016/J.VACCINE.2021.02.005