

Dear Editors and Reviewers:

Thank you for your letter and for the reviews' comments concerning our manuscript entitled "Are medical students ready for the COVID-19 pandemic?". Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portions are added directly into the new manuscript for your convenience to read. The responses to the reviewer's comments are as follows:

1. Title does not reflect the main hypothesis of the manuscript. The manuscript focuses on medical student willingness to volunteer for involvement in pandemic management, their understanding of certain aspects of the pandemic and what specialty they plan to go into. It does not focus specifically on whether they are "ready" for the pandemic. The title is very vague and misleading. At the time of the survey, the pandemic had had its major effect on China therefore whether they are or were "ready" is irrelevant. The title should focus on what useful information the survey brings to the table and what implications can be inferred from it. For example: "A look at Chinese medical student interest in COVID-19 pandemic involvement" or something similar.

Respond: Thank you for your precious advice about the title. After reading your advice about the title and the whole body of manuscript, we have rethought the core tip our manuscript tries to illustrate and decided to put more emphasis on "interest" instead of "ready", as you suggested, hence we finally, if I may, quoted the title presented above.

2. Abstract summarizes what the paper describes well. Avoid use of "exploit" in conclusion of abstract.

Respond: We have removed the "exploit" and replaced with proper word.

3. "public health" is not really relevant to the paper.

Respond: Considering your suggestion, we have made correction of it in "keyword" part and replaced it with "Public Health Emergency of International Concern".

4. Background section of the paper is well written. Significance of the study should be further elaborated on and why this survey provides useful information.

Respond: We have added some points in this part according to the suggestion.

5. The use of the statistical analysis tools for the survey results seems a bit of a stretch and should be reconsidered.

Respond: As you pointed out, in the original manuscript, Kruskal-Wallis test was applied for difference analysis between student-class and knowledge of COVID-19 and between student-class and evaluation of pandemic control in China. Logistic regression modeling was used for influencing-factor analysis of willingness to be a volunteer in the COVID-19 pandemic. After your suggestion, we rethought our reason of using logistic regression modeling to analysis influencing-factor. With all respect due, we thought it is necessary to use logistic regression modeling to find out some influence factors, and to use Kruskal-Wallis test to determine the difference between student-class.

6. Research objectives that the paper intro has set forth are achieved however whether these results are useful for progressing the field is another question.

Respond: Our study offered several information: 1) Chinese medical students' interest in COVID-19 relevant knowledge. It can be seen that students took most interest in "Prevention in life" and the least in "Diagnosis and treatment", which could imply that students themselves tend

to pay more attention on what are closer to their daily life, than the specialized knowledge. Schools and hospitals should take notice of such gap and take measures to narrow it. 2) what roles they want to play in the pandemic. Our study shows that most of medical students had preference in administration, than managing patients, which means administrative jobs can be more suitable for students volunteer population. 3) influencing-factor of willingness to be a volunteer. Although it is not so necessary for China government to utilize student population in this pandemic, it is interesting and useful to know what makes them unwilling to be volunteer, because removing these obstacles can improve students' interest of being volunteer, which is quite educational, and these negative factors can be a good notice to avoid potential hazard for those actual volunteers.

7. The interpretation of results in discussion section

Respond: We have added the corresponding part in discussion section.

8. Figure 2 is not necessary. Table 1 by itself is not useful. Info can possibly be added to another table. Table 2 also not super useful. Would be helpful to include the actual survey questions instead of table 2. Given how little is still known regarding SARS-CoV-2, it seems a little extreme to gauge readiness to participate in medical care during the pandemic based on early understanding of the virus.

Respond: Thanks to you for your good comments.

We have deleted the figure 2 and a part of table 2. In the table 2, we deleted the "How China responded to the COVID-19 pandemic" and reinterpreted the part of "Knowledge of the COVID-19 pandemic". The question attached by table 2 is actually "which aspect of COVID-19 relevant knowledge do you think you know best", which determines students' involvement in reading about COVID-19 upon they were self-quarantined at home and assesses which aspect of COVID-19 they will be most interested in when they followed news. Hence, after reading your suggestion, we thought this table should be elaborated in a way of "Interest level of Chinese medical student in COVID-19 relevant knowledge", rather than "Knowledge of Chinese medical student respondents' COVID-19 pandemic", which was written in the original manuscript and considered improper and inaccurate by ourselves.

We reserved Table 1 for better readability but it can be added to another table if you think it is necessary. Expect your suggestion.

In consideration of number of the actual survey questions, we didn't make an extra table to illustrate our questionnaire, but it can be offered as your wish.

9. Using biostats to interpret results of this survey seems somewhat unnecessary given the results do not have much useful information.

Respond: Our study is aimed to explore whether medical students take initiative to follow the progress of COVID-19 and Kruskal-Wallis test was used to analyze differences of interest in COVID-19 relevant knowledge between student-class. The results indicated that students showed preference to know COVID-19 daily life prevention than hospital settings. Furthermore, the senior medical students had higher scores than their junior class counterparts for interest in disease prevention. This suggests that younger volunteers, who still lacked sufficient working experience in hospital, have not been aware of the significance of disease prevention yet, thus indicating that more consciousness and knowledge about self-protection can be instilled into these younger students. On the other hand, logistic regression modeling was used to analyze influencing-factor of willingness to be a volunteer in the COVID-19 pandemic, which makes for finding out the possible reasons that some students are unwilling to be volunteers and helps remove obstacles.

Therefore, we thought Kruskal-Wallis test and logistic regression modeling could be reserved.

10. Units used are correct.

Respond: Thanks to you for your good comments.

11. References used are relevant. Some citations used in reference section have extensive author lists and could be considered cutting down.

Respond: Thanks to you for your good comments.

12. The manuscript is well organized and easy to read. Language and grammar are accurate and appropriate.

Respond: Thanks to you for your good comments.

13. Followed strobe

Respond: Thanks to you for your good comments.

14. Manuscript met the requirements of ethics In summary, the authors gather data by way of a survey to medical students of one university in China in order to gather information about understanding of facts regarding the pandemic, desire to be involved in management of the pandemic and future specialty plans. The idea of medical student involvement in the pandemic is an interesting and somewhat controversial one. There have been varying approaches to utilization of medical students in different regions of the world as mentioned in the discussion section. Focusing on data regarding how best to utilize medical students and student opinions on how best they are willing and able to help would be useful. Unfortunately, this survey and its interpretation does not accomplish this. The take away points from the survey involve demographics of those that state they are willing to participate which is not discussed in a way that advertises this as useful information. Additionally, survey shows knowledge regarding the pandemic and an interpretation that those without good knowledge would not be equipped to help in the pandemic. However, at the time of this survey, little was known even by experts about the virus so one would not expect medical students to know. Questions regarding how well-equipped medical students are to participate in pandemic management should be approached in a different manner. The last main point of the survey was the specialties that medical students were choosing. There is a huge confounder in that there is no way to know to what extent medical student's plans to specialize in a specialty relevant to the pandemic was altered by the pandemic. This paper takes the results of the medical student survey and tries to analyze it in a way that informs decisions on whether medical students are ready and able to be used as part of the work force. It also even suggests ways to try and manipulate more medical students into being willing to be a part of the work force. The survey provides interesting information about a large group of individuals in a unique position in the pandemic and can be useful to general public if presented in a different light and aim of the paper is altered. The paper can be reformatted in a way to plainly just represent the data on medical student interest in the pandemic, involvement in reading about the pandemic, interest in joining the work force and how many plan to specialize in relevant specialties. Removing the entire discussion aspect of what all of this means regarding whether they are "ready" to join the work force. I do not think one can jump to that conclusion based on this survey data. Instead it can be provide a look at this unique population having a unique experience as a medical student during a pandemic and what can possibly be expected in the future regarding what specialties they may go into.

Respond: Your suggestion gave our team a lot of inspirations. We have deleted the corresponding aspect regarding whether they are “ready” to join the work force and reformatted in a sequence of “Involvement in reading about COVID-19 ”, “Attitude towards volunteering in pandemic ”, “COVID-19 pandemic and career preference”.

In all, your comments are quite helpful and inspire us to re-examine our writing logic. To conclude, we reformatted logical sequence and emphasized “interest” rather than “readiness”. Thank you for reading the letter with patience and anticipate your reply!

Kind Regards

Xiao Long