

Peer Review File

Article information: <http://dx.doi.org/10.21037/jphe-20-89>

Reviewer A

Thank you for addressing this important topic.

Your contribution is significant and important to readership. However, the manuscript has concerns as reported below, so please consider revision.

Comment 1: Remove abbreviations from the abstract (....1st, 2nd, TV

Reply: Thank you for the comment. The abbreviations 1st, 2nd, 3rd, 6th and TV has been removed from the abstract and full meaning of each abbreviation has been provided.

Comment 2: Provide a clear definition of Putative Factors.

Reply 2: The authors are grateful for the comment. Because we considered COVID-19 infection as novel, we used the term 'putative factors' to indicate 'proposed or assumed' but not 'definite' factors that may affect the KAP of college of science students

Comment 3: Both second and third sections of measurement instrument were labelled second section, please, change to third section.

Reply 3: The authors are grateful for the comment. The statement has been corrected (please see pp. 5 line 161-168)

Comment 4: Novel Coronavirus, COVID, COVID19, COVID19 infection, Coronavirus disease 2019, COVID19 pandemic write consistently.

Reply: The authors are grateful for the comment. This has been corrected. That is, COVID-19 infection and where appropriate COVID-19 virus has been consistently used throughout the manuscript.

Comment 5: Covid-19 Always use UPPERCASE letters

Reply: Thank you for this notification. This has been corrected (please see pp. 4 line 111)

Comment 6: Editing in term of

A. Wording and grammar, there some limitations there are

B. Çalışkan et al. 2020 Add brackets (2020)

C. Be consistent in writing approach according to journal format, the author sometimes used British English "s" where some words were written in American English "z"

analyze and summarise, organized, generalised,

D.COVID-19 should be described as the "COVID 19 virus".

Reply: The authors are grateful for the comment. Editing in terms of grammar, language, and wording has been carefully edited and presented in the revised manuscript.

Comment 7: In introduction, its recommended to highlight the academic institutions infrastructures to deal the COVID-19. And the importance of restoring conventional learning for health science, and to address the E-learning experience as an alternative.

Reply: Thank you for the comment. We have highlighted the institution's Infrastructure and their close affiliations that have the adequate capacity to deal with the COVID-19 in the main manuscript (pp. 5 line 150-153).

Comment 8: Extensive description of the setting, shorten it

Reply: The authors are grateful for the comment. The description of the study setting has been shortened accordingly, to include only relevant information (please see pp. 5 line 143-149)

Comment 9: Questionnaire link was distributed to the respondents, how you control it was not distributed to others.

Reply: The authors are grateful for the comment. The questionnaire employed in the present study provided a preamble for students to tick and indicate whether they were Health Science students before they proceeded with the question after they have provided consent to partake in the study.

Comment 10: Highlight how informed consent was obtained from students.

Reply: The authors are grateful for the comment. Students were informed about the background and objectives of the study on the first page of the Google Forms. All CHS students in KNUST that agreed to participate in the study were instructed to complete the questionnaire once. Informed consent was obtained from students on the first page

of the forms, before proceeding with the questionnaire (see page 7 line 215-219)

Comment 11: Students who mostly obtained of COVID-19 from official government sites students who mostly obtained of COVID-19 information from official government sites

Reply: The are grateful for this notification. The sentence has been revised. Please see page 10 line 294

Comment 12: Last paragraph of discussion is confusing, rewrite

*Reply: The authors are grateful for the comment. The sentence has bee revised. It now reads “The present study explored the willingness of students, to accept national call, in joining frontline rescue team for COVID-19. It was noted that, about 30% were not certain and 7% were not willing because of the perceived severity of the pandemic”
Page 15 line 402-404.*

Comment 13: Recommendations are missing

Reply: The authors are grateful for the comment. Recommendation has been inserted. Pls see page 15 line 417-425.

14.Participants section and how to access them is missing from methodology

Reply: The authors are grateful for the comment. Under the sampling technique section, we indicated the sampling frame as College of health science students and we could reach them via the class media platform (which is an official media platform for formal and in formal communications between students and lecturers. And it is specific for each department and class group). See page 5 line 155-165

Comment 15: Demographic data indicates age starts from 15, who and why as the participants are all in collages.

Reply: The authors are grateful for the comment. There has not been minimum age requirement for education in Ghana. For most part, a 15-year-old is supposed to be in high school but it is also ubiquitous to see such age groups in colleges in Ghana. And this could account for the minimum age of 15 years observed in this survey.

Comment 16: Rewrite some survey questions more clearly. Ex: If anyone has a fever, cough and difficulty breathing seek medical care early and share previous travel history with the health care providers

“Are you worry about contracting the COVID 19 virus”

Reply: Thank you for the comment. We have revised it accordingly. (See supplementary appendix. Table S1-3)

Comment 17: Some questions have not a confirmed correct answer, Ex: the incubation period of the novel coronavirus, who authors have decided the correct answer in the scoring.

Reply: The authors are grateful for the comment. We have indicated in the questionnaire scoring section that each section was scored based on the recommended option at the time of the survey, which has also not changed since and some sections were scored based on answers that reflected what is known in literature and practice. Please see page 7 line 201-212

Comment 18: Survey questions add question mark “?”

Reply: Question marks have been added to survey questions. Please see supplementary appendix.

Comment 19: In discussion part, comparison in term of KAP among specialties was not addressed

Reply: The authors are grateful for the comment. Section has been inserted to compare KAP among specialty. Please see page 14 line 369-392.

Comment 20: The widely difference between students’ numbers according to specialty could not reflect an accurate and real results.

Reply: The authors are grateful for the comment. First, the number of students in each specialty are disproportionally distributed (This is the results of the proportion of students admitted per year). Besides, the sampling method took the form of randomisation and by ethical standards, participation was voluntary. Thus, the sample size and its proportional distribution was a representation of specialty, which we believe reflect accurate findings; unless there are another dispute to clarify.

Reviewer B

I would like to congratulate the authors for their excellent work. The article presents an important reflection on the Covid-19 pandemic, presenting fundamental questions for the moment of resumption of activities around the world. The article is also particularly relevant for presenting the Ghanaian perspective, a context that is still little present in international scientific journals.

The text presents a good logical cadence and accessible language, with current and

acknowledged references for the field of public health.

The knowledge, attitude and practices (KAP) indicators present important information about the behavior of young university students in the field of health and sciences and also allow us to reflect on the sources of information used by them. Such information is an important support for governments, health professionals and civil society as a whole to develop strategies to resume formal education and health education activities and public policies. In a context of uncertainties across the planet, diverse perspectives and innovative perspectives are essential.

Reply: The authors are grateful for the commendations.

Reviewer C

Dear Authors

The results of this manuscript will help understand the current status of college students' self-care knowledge about the COVID-19 epidemic, and will help make adjustments when implementing health education for young people in the future. However, the publication of research results requires more precise explanation and description in order to make readers understand. Therefore, the following suggestions are provided and the author is asked to respond and adjust:

Comment 1: About the content of Abstract: The result target mainly discusses the answer of the research, and its number does not necessarily represent the main core of the research. It is recommended to state the most important findings of the manuscript.

Reply: The authors are grateful for the comment. The abstract has been revised to include the most relevant findings. The main objective of the study was to tackle on putative factors associated KAP among health science students. This, we believe is essential to address some questions related to information coverage among students, their preparation (derived from attitude and cues to actions) and response towards measures to prevent the spread of the virus. We believe all this information were captured in the abstract earlier, although we have revised it accordingly.

Comment 2: About Introduction: A good manuscript requires a good discussion in the introduction. Although the author describes the current situation of the current research area. However, the international research content related to the manuscript research is not substantial and quite lacking. Therefore, it is recommended that the author must supplement relevant research to explain and discuss the importance of this research.

Reply: The authors are grateful for the comment. The introduction section has been revised to include international research on the output and relevance of health science students in the COVID-19 situation (pp. 4 line 116-131).

Comment 3: About the research method: Although the researcher stated the source of the questionnaire. However, the object of the questionnaire is still different from the region. Therefore, it is recommended to provide the reliability and validity analysis results of the questionnaire to improve the value of the research. (E.g. EFA or CFA or content check validity)

Reply: The authors are grateful for the comment. Content check validity analysis has been conducted and the appropriate reliability indices (Cronbach's Alpha and inter-item correlation values) has been inserted. Please see page 6 line 194-199.

Comment 4: Good research results need to be presented in a scientific way. There are many ways to present it. However, in the manuscript, it seems impossible to clearly explain the main structure of the research, what research theory and research methods are used for data analysis. This will be a major test for the presentation of future scientific research results and reference value of the manuscript. (line 87-138?)

Reply: The authors are grateful for the comment. We indicated in the method section that the study used a descriptive cross-sectional study approach. The sampling frame were college of health science students in KNUST. A close-ended questionnaire was designed based on previous works and carefully appraised by researchers to ensure objective achievement. For the sake of lock down situations, we used electronic link via class media platforms to assess the students. Analysis of the data was done using SPSS. Frequency Table were used to summarise the response. Inferences of the data was done using t-test and analysis of variance to compare KAP score within categorical variables. We also used logistic regression analysis to determine the association between student's characteristics and KAP levels.

Comment 5: About Discussion content: Although the author will further explain all the analysis results. But the content of the description does not get much explanation. In addition, all discussions also require reliable solutions, and supplementary explanations are recommended. For example: Lines 285-294 indicate that the manuscript finds that the research object lacks professional knowledge of the relevant course. When should this course be conducted?

Reply: The authors are grateful for the comment: The discussions has been modified to include reliable solutions, and supplementary explanations. Example of such insertions include page 13 line 353-357; page 14 line 381-384, etc.

Comment 6: The manuscript is a very meaningful study. The research results indicate that the research subjects need to take a health education course, so what are the reasonable suggestions? For example: What are the suggestions for research subjects, institutions, and national organizations?

Reply: The authors are grateful for the comments. We have included reliable and evidenced-based recommendations in the revised manuscript. For example, in page 15 line 406-412 we added that "More importantly, considering the level of knowledge

and attitudes in addition to the education background of health science students in relation to related studies, they can be considered as part of the Education's Ministry and Government strategic plans to resume schooling. This will be beneficial in areas of community awareness about the seriousness of the pandemic, monitoring and promoting community adherence to preventive protocols and even in testing and treatment (for final year students preferably).