

Peer-review Comments and Author Responses

Reviewer 1

1. Specification of the post-hoc test if the ANOVA/Kruskal Wallis tests are statistically significant.

We will use ANOVA/Kruskal Wallis to analyze the usability difference between countries. If there are differences, we will use Bonferroni post hoc tests ($p < 0.05$).

2. I suggest a review of the entire protocol looking for typos.

All text has been corrected by looking for typos.

3. In the Abstract, authors should only include essential information about the statistical analysis and include other relevant information about the protocol.

We have reformulated the summary to make it more attractive. “Introduction: Even with the increased use of telehealth from the COVID-19 pandemic onward, there is a lack of knowledge about its usability for patients with non-communicable diseases from the point of view of the health professional, which is the main objective of this study. The secondary objectives will be to describe the user's profile, discuss the usability of telehealth in different contexts and correlate it with the characteristics of the user's profile. Method: Protocol of the cross-sectional, prospective, multicenter, international study involving Brazil, Ghana, Honduras, and the United Kingdom. We will evaluate the usability of telehealth systems with an electronic form with the usability questionnaire of the Usability Scale System (SUS). The study has obtained ethical approval in each country and will be carried out independently. The context of use will be considered for this analysis, such as country and geosocial conditions, age, gender, profession, user experience. We will analyze usability (continuous dependent variable) with simple statistics with measures of central tendency. We will use ANOVA/Kruskal Wallis to analyze the usability difference between countries. If there are differences, we will use Bonferroni post hoc tests ($p < 0.05$). We will use the Pearson/Spearman correlation coefficient to correlate the characteristics of the user's profile with usability. If the dependent variable data are normally distributed, we will use linear regression to correct for known confounders. Discussion: Studying the usability of a system allows for understanding the subjective factors that determine its practical use, improving the experience of human-computer interaction. Funding: WUN RESEARCH PROJECTS. Keywords: healthcare professional, telehealth, non-communicable diseases, usability, COVID-19 Pandemic.”

4. When discussing potential bias, attrition bias does not appear to be an issue in a cross-sectional study. The authors could clarify this point. It is also interesting to discuss the limitations of this specific project.

Observational studies are those in which the researchers do not interfere with the research participants; that is, the researcher's action boils down to registering, classifying, accounting, and statistically analyzing the results.

Attrition bias refers to the unequal loss of participants across groups in a study. Attrition occurs when participants leave a study. This type of bias occurs in intervention studies

and is less observed in observational studies. In the case of our study, we will carry out a survey, so we will not have selection bias. The participant is invited to participate in the study and is only included when he responds to the questionnaire. We will continue to collect until we reach the sample number calculated in each country.

We included the topic limitations of the study in the protocol.

One of the limitations of this study will be the difficulty of comparing different characteristics. Different professions, different countries, different contexts of use, different levels of experience with telehealth, different telehealth systems, and different telehealth modalities can make it difficult to compare results in different countries. In this way, we will describe different contexts of use that will serve for discussion and the generation of hypotheses.

5. Could the authors clarify if approval from an ethics committee is required or if it was obtained on sites other than the Brazilian site.

The study will follow the ethical standards of each country. The study will be conducted independently on each site, with recruitment starting with the approval of the research ethics committees. In Brazil, the research protocol was approved by the Federal University of Minas Gerais (UFMG), approval opinion CLM 007-2022, and by the ethics committee in research involving human beings (CEP-UFMG CAAE: 56604122.5.0000.5149), approval opinion number: 5.380. 538. Approved in Honduras registration N° IRB 00003070. Approved in Ghana ID NO: GHS-ERC 04/19/22. Approval in UK ERGO/Ethics number: 72962.

Reviewer 2

6. I believe that it would be better in terms of homogeneity to standardize the technological requirements for each professional listed to perform a teleconsultation and then consider classifying the different types of professionals who may tend to respond differently due to their professional training.

Dear reviewer, this study is a cross-sectional study whose protocol was built together with researchers from the countries included. Our main objective is to understand usability from the perspective of healthcare professionals who used telehealth systems to patients with non-communicable diseases from the COVID-19 Pandemic onwards. Health professionals from different categories will be included, with different levels of experience in telehealth and in different contexts, which is a potentiality and a limitation of the study. We will describe these characteristics in the results. However, it is not our objective to define previous characteristics, in addition to those listed, which are being a health professional and having used telehealth to care for patients with non-communicable diseases from the COVID-19 Pandemic in primary care. Your question is very interesting. We hope to discuss it with the results.

7. I believe that the intervention would be better evaluated in relation to patients who do not have the opportunity to attend the telehealth intervention, even if they participate in a personal interview, this will give you the starting point to compare whether telehealth is useful in solving non-communicable diseases application. If you decide to take this into account, the statistical analysis will have to be revised.

The research will aim to analyze the health professional's perspective on the usability of

telehealth systems for non-communicable diseases from the COVID-19 Pandemic onwards. Usability allows describing the characteristics of a certain product, that is, if it is easy to use, easy and quick to learn, if it does not cause errors (and if they do occur if they are easily solved), and if it offers a high degree of satisfaction for users. Therefore, it is a construct of who used the product, which is our interest.

8. Health professionals have different types of training. Some of them are doctors, others are nurses, physiotherapists and other rehabilitation professionals such as occupational therapists or speech therapists. For each of these professionals there may be different types of instruments needed to conduct a good quality interview, so I believe that, to offer a more homogeneous intervention to all these types of professionals, there should be standardized requirements for the different types of professionals. The nurse or physiotherapist may need different types of tools to carry out a consultation with quality standards, such as different computer programs that contain exercise videos or examination methods that can help different health professionals, considering that these different professionals may have to deal with people who come from different socio-cultural and educational levels.

Health professionals from different categories will be included, with different levels of experience in telehealth and in different contexts, which is a potentiality and a limitation of the study. We will describe these characteristics in the results. However, it is not our objective to define previous characteristics, in addition to those listed, which are being a health professional and having used telehealth to care for patients with non-communicable diseases from the COVID-19 Pandemic in primary care.

Your questions are very interesting. This makes the study results more exciting. We hope to have excellent contributions with our results. We included the topic limitations of the study in the protocol. One of the limitations of this study will be the difficulty of comparing different characteristics. Different professions, different countries, different contexts of use, different levels of experience with telehealth, different telehealth systems, and different telehealth modalities can make it difficult to compare results in different countries. In this way, we will describe different contexts of use that will serve for discussion and the generation of hypotheses.