

Review of: "Perceptions and Attitudes about COVID-19 Vaccines Regarding Vaccine Intention and Hesitancy of Attendants of a Healthcare Center in Northern Cyprus"

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Potential competing interests: No potential competing interests to declare.

The authors provide a study of vaccine hesitancy in Northern Cyprus, which is important given its evaluation of vaccine hesitancy in understudied countries. The article contributes additional data in a crucial and ongoing study about vaccine hesitancy. While this article has merit, the authors need to elaborate on their findings, particularly to reasons why their data differs from previous studies. This includes a thoughtful discussion of factors that are unique to Northern Cyprus as well as limitations in their methodology. Indeed, if this work is to make a unique contribution to the field of vaccine hesitancy, then it should aim to discuss how its results fit into the context of its unique geography and demographics (i.e., the Northern Cyprus population).

Introduction

- "A total of 13,355,264,024 vaccine doses..."- I suspect this refers to the COVID-19 vaccine. Please specify.
- "people with a complete initial vaccination protocol"- Does this mean people that have completed the COVID-19 vaccination series?
- "Vaccine hesitancy rates..."- Which vaccine or vaccines are being referred to?
- "midwives in Cyprus reported"- For studies regarding COVID-19 vaccine hesitancy, the timing of the survey is crucial given frequent and often rapid changes to how the pandemic is managed and perceived, as well as evolving information regarding COVID-19 and COVID-19 vaccines. Therefore, please mention the date of the survey when mentioning all studies related to COVID-19 vaccination rates.

Methods

- "central healthcare facility"- What kind of healthcare facility is this? Clinic? Hospital? Regional medical center? Does it have inpatient and outpatient capabilities?
- "people aged 15 years and above....were recruited"- What kind of healthcare facility is this? Clinic? Hospital? Regional medical center? Does it have inpatient and outpatient capabilities?
- "A total of 428 patients and their companions"- Were these patients all receiving the same services from the medical facility (e.g., primary care)? Were patients across multiple settings recruited (inpatient, outpatient)?

What is meant by "companions"? Spouse? Significant other? Whoever attended the clinical appointment with them? And

are there 428 total participants, or 428 participants who were patients + an (unspecified) number of "companions"?

- Please include a copy of the questionnaire in the supplemental section.

Results

- "The majority of participants were citizens..." - Please provide the exact number here
- "68.9% being under 45 years, and 52.3% of the total sample were women"- Is this reflective of the population of North Cyprus?"- Is this reflective of the population of North Cyprus?
- "Economic status of household"- How were these income categories defined?
- "with chronic disease and the others"- Others without chronic disease?
- "No difficulty in accessing the vaccines"- Was the opportunity for those who did have trouble accessing the vaccine to respond?
- "Junior high school and below", "High school and above"- Why were these educational levels selected to stratify this population? Many studies comparing education and COVID-19 vaccination will use groups with and without university education. Why use junior high/high school as the dividing line?
- "found to be statistically significant"- How so? Which group was more likely to obtain vaccine information from social media and the internet? Also, please provide the statistical results.
- "aged 40 years and below"- The questionnaire delineates age differently. Why was 40 years chosen here as the age divide between participants? Was there any statistical significance between the age groups as described in the questionnaire?

Discussion

- "The one-dose rate is much higher than the world average of 70%"- This is an interesting finding. The authors need to discuss why this might be, including factors that are unique to Cyprus as well as limitations from their study methodology.
- "low and middle income countries with 80.3%"- It is important to note how the populations in these surveys were sampled. This survey does have a risk of a selection bias towards persons who are seeking medical care, which may result in them being more amenable to medical interventions such as COVID-19 vaccination. Therefore, if the surveys mentioned in the participants in the studies mentioned here were recruited differently, it could affect vaccine acceptance rates. Obviously, there will be no perfect replication of population sampling across different studies, but I find the relatively high vaccination rate observed here compared to previous studies worthy of more analysis by the authors.
- "Suspicion about safety/potential vaccine harms...were among the main predictors of both vaccine acceptance and vaccine hesitancy"- Does this refer to the findings in this study or another study? The wording suggests it refers to data in this study, although the citation provided suggests otherwise.
- "Variables such as trust in authorities...affected vaccine acceptance positively"- Is this referring to data from this study or the cited study?
- "the rate of participants who were hesitant about vaccines was lower than those indicated in the literature"- The authors

need to elaborate on why this might be. Were there demographic differences in this study compared to those cited that could have influenced changes in vaccine hesitancy? Unique vaccine promotion campaigns in Cyprus? Differences in survey timing?

- Useful summaries of COVID-19 vaccine studies are provided both here and in the Introduction. However, there is little or no elaboration on why observed differences between these studies might exist.

Furthermore, the authors note in the Introduction that the unique aim of this study is to survey participants in Northern Cyprus. However, there is little to no discussion about factors unique to Northern Cyprus or differences between Northern Cyprus and Cyprus that might be relevant to vaccine hesitancy.

Conclusion

- This conclusion is more a summary of results that were already discussed in previous sections than a unifying thought (or thoughts) with recommendations for future studies and/or practices to address vaccine hesitancy. The authors need to provide more than a summative statement but reflect on the implications of their research in this section. Furthermore, the authors need to discuss the limitations of this study (preferably at or near the end of the Discussion section).