Peer Review Report

Review Report on Inequalities in trust levels and compliance with physical distancing during COVID-19 outbreaks: Comparing Arab minority and Jewish populations in Israel

Original Article, Int J Public Health

Reviewer: Daniel Ludecke Submitted on: 01 Dec 2021

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EVALUATION

Q 1 Please summarize the main findings of the study.

The study sought to understand the associations between trust in information sources about COVID-19 and the adherence of public directives, in particular physical/social distancing. Main findings were that adherence decreased over time, and that adherence differed between people depending on their ethnic background and other social factors.

Q 2 Please highlight the limitations and strengths.

A limitation is that it is no longitudinal study, so individuals were not explicitly followed-up. One of the strengths are the well-established measures used in the analysis and the opportunity to compare vulnerable groups to the rest of the population.

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Introduction

- Lines 36-38: Are there any references/sources for the claim that trustworthiness of informational sources were difficult to determine for the population?
- Line 45: "determined" is probably not the appropriate word here.
- Line 59/60: Consider the language, the authors should probably not repeat "compared to whites" twice.
- Lines 65-68: I don't understand how the COVID-19 incidence is related to the prevalence of diabetes, obesity or smoking. That would mean that these are possible risk factors for becoming infected, but I doubt that this is the case. Please comment on or revise this sentence.
- Lines 68-69: I can't follow the argumentation, how are access barriers or SES related to the authors' main research question, trust in information? Please elaborate the arguments.

Methods

- Lines 93-100: the variable "level of trust in the directives" is a score built from 8 different sources, so is it based on 8 variables? If so, I doubt the median for each of the 8 variables would be 3. Else, since the score would range from 8 to 40, the median can't be 3. Please provide more details on the range of the final score and the dichotomization of the final variable.
- Lines 102-103: How did the authors build socioeconomic status? From the concepts I know, educational level is part of the socioeconomic status, however, in this paper these are two separate variables.
- Lines 102-103: Why did you include smoking? What's the rational that you adjust your model for that variable when the dependent variable is "compliance with physical distancing"? Furthermore, please elaborate on how the other variables were measured.
- Lines 104-110: The STPI is a score from many items. Please provide information on the range of the sum score and if the median can be 4.

- Lines 128-129: "that were associated with compliance at the level of 5% in the univariate analysis." what do the authors exactly mean here? The level of significance? Please provide more details here.
- Lines 132-138: What is the rationale behind different numbers independent variables in the models between the first and the second survey? This makes inferences and comparisons hardly possible. Furthermore, model 3 in the second survey is missing in the description of the models.
- Lines 124-138: The authors need to provide information about the statistical tests for comparisons in figure 1 that indicate significant differences. The same for significance tests in table 2.

Results

- Table 1: I'm missing information about the dependent variable. Please add the descriptive statistic for that measure as well.
- Tables 4A and 4B: what is the rationale for having three models for the first survey and only two for the second survey? Furthermore, I'd like to emphasize one of my previous points again: the different sets of predictors in the models for the first and second survey have an impact on the effect of the main independent variable, thus making the comparison of the association between dependent and main independent variables hardly possible. I suggest using the same models 1-3 for both surveys.
- Tables in general: Please provide more information, so that tables can be understood without reading the methods sections. I'm missing information on the conducted significance tests where shown p-value stem from. Furthermore, please add information on the abbreviation, e.g. table 3, -2LL seems to be -2 times the log-likelihood. Should be added as footnote.

Discussion

- Lines 221-222: Authors state that an association between trust and compliance only exist for the first survey. However, there is also a strong association for the second survey as well, with confidence intervals suggesting that the data is compatible with a high probability for a positive sign of this association. The result is not significant, but stating that there is "no association" is not correct. Please rephrase that sentence, taking into account that "the absence of evidence does not mean evidence of absence" (cf. https://www.bmj.com/content/328/7438/476).
- Also concerning these lines: Again, comparing associations between the main independent predictor and the dependent variable in the models from survey 1 and 2 are not valid because of the different sets of predictors, which is likely to affect the resulting odds ratio of the main independent variable. The authors should consider having the same models for both surveys.
- Line 227: The authors should check the correct in-text citation: should the year be reported here according to the journal guide lines?

Limitations

- I'd say there are some more limitations, e.g. the information loss due to dichotomizing sum scores. I suggest the authors should also critically discuss their measures in this section.

Conclusion

- I suggest to add a small conclusion sections, indicating what we have learned from the study.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

Maybe "Inequalities in trust levels" is not the most appropriate word, the authors could probably use "Differences" instead.

Q 5 Are the keywords appropriate?

yes.

Q7 Is the quality of the figures and tables satisfactory?

Yes.

Q8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

Yes.

Q9 Originality

Q10 Rigor

Q11 Significance to the field

Q12 Interest to a general audience

Q13 Quality of the writing

Q14 Overall scientific quality of the study

REVISION LEVEL

Q15 Please make a recommendation based on your comments:

Parts of the paper could be revised in regard of sentence structure, e.g. lines 143-149 in the results are

Major revisions.