Peer Review Report

Review Report on The Magnitude of Black/Hispanic Disparity in COVID-19 Mortality across United States Counties during the First Waves of the COVID-19 Pandemic

Original Article, Int J Public Health

Reviewer: Jerome Endrass Submitted on: 27 May 2021

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EVALUATION

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.

Major Comment: Public-health responses varied substantially across the counties. This has not been addressed - neither as a covariate in the Poisson regression nor as a limitation

Minor (but relevant) Comment: The authors assess ethnic disparity with the proportion of African-American and Hispanic residents in a county. The US census lists five ethnic groups plus people of two or more ethnic backgrounds. The authors should address why they chose not to include these groups and/or address this in the limitation.

Minor Comment: The text is written from a North American perspective. Example: The authors assume that researchers who read this paper are familiar with the administrative subdivision of the United States. Since it is an international journal, more context would be helpful.

Minor Comment: The authors stated that the US COVID-19 death count could have been comparable to the one of Finland and Norway. They further implied, that the lower death count of those two countries was the result of a strong public-health response. Given the geographic localisation and the low population density of these countries it has yet to be established, that the public-health response was responsible for the low death rate. Minor Comment: Changes during the pandemic were not addressed. There were two waves during the time period that was covered. It should be mentioned in the limitations that the authors estimated a model that did not take changes in the pandemic into consideration. It would be helpful, if they furthermore explained why they chose to treat the pandemic as one event.

Q 2 Please summarize the main findings of the study.

According to the authors, ethnic disparity results in substantial (up to a 11-fold differences) of excess COVID-19 related deaths.

Q 3 Please highlight the limitations and strengths.

Strengths: The manuscript is focused, well written and easy to understand. The authors present a concise hypotheses, which is appropriately tested. The statistical approach is sound and the study well powered given the large sample size. The descriptive tables and the figure are very helpful to understand the underlying claim of the manuscript.

Limitations: The limitations are quite minor (see Q1).

PLEASE COMMENT
Q 4 Is the title appropriate, concise, attractive?
Mostly. Focussing solely on African-American and Hispanics is a rough estimate for
"ethnic disparity" - but is a form of ethnic disparity, so the title is precise enough.
Q 5 Are the keywords appropriate?
Yes
Q 6 Is the English language of sufficient quality?
Yes (with the caveat that I am not a native speaker).
Q 7 Is the quality of the figures and tables satisfactory?
Yes.
Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)
Yes
QUALITY ASSESSMENT
Q 9 Originality
Q 10 Rigor
Q 11 Significance to the field
Q 12 Interest to a general audience
Q 13 Quality of the writing
Q 14 Overall scientific quality of the
study
REVISION LEVEL
Q 15 Please take a decision based on your comments:
Minor revisions.