

Peer Review Report

Review Report on Decomposing disability inequality in unmet healthcare needs and preventable hospitalizations: An analysis of the Korea Health Panel

Original Article, Int J Public Health

Reviewer: Zachary Morris

Submitted on: 20 Oct 2022

Article DOI: 10.3389/ijph.2023.1605312

EVALUATION

Q 1 Please summarize the main findings of the study.

I believe this manuscript has the potential to provide an important contribution to discussion of unmet needs for healthcare services for people with disabilities. Below I provide comments to the authors which I hope contribute to the development of the manuscript.

Q 2 Please highlight the limitations and strengths.

See below

Q 3 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 comments:

- Need to provide the definition of disability that is used. This is critical.
- Need to clarify why there was such little amounts of missing data. Were those who did not fully complete the survey dropped? Not clear.
- Would like to see dependent variables substantiated with reference to prior work.
- Needs editing of language to avoid passive voice and other minor grammatical matters.

Minor comments:

Abstract: - The results section (percentage point differences. Are they statistically significant differences? - "respectively" should follow the results sentence presenting the findings for both dependent variables so it's clear which stat refers to which variable.

Introduction: -Page 3: . "It has been reported

50 that people with disabilities are more likely to have chronic diseases and are less likely to receive preventive 51 screening services." Not a clear citation provided and example provided in statistic presented in next sentence does not follow as it does not say anything about unmet need. - I find the "on the one hand" and "on the other hand" language difficult to follow on pages 3 and 4. I encourage the authors to more clearly state the complexity for the reader. - "There is a conceptual framework for understanding healthcare disparities experienced by individuals with 65 disabilities, including cultural and contextual factors" -What conceptual framework? Why should we give it credence? There are probably lots of these conceptual frameworks. I think a little more could add to the credibility.

Data:-I'm surprised by the low amount of missingness (only 5 missing values). This seems unusual. Were any of the covariates missing data?

Measures:

- Have any prior studies used the unmet healthcare needs variable? If so, you should cite to demonstrate validity of the measure.-"grand mal status" Looks like a typo.
- In the last sentence on page 6 line 113 make make clear for the reader that this is the measure of preventable hospitalization that you use and please cite if other studies have used this same measure using the Korean ACSC. It's not clear if Jeong used the measure as a means of identifying preventable hospitalization but maybe the case.
- The lack of a definition of the disability measure is a glaring omission! (Needs to be clearly documented)!!!-I wonder if other health conditions can be controlled for given that it is likely to be a highly explanatory variable. What about controls fro depression for example?

Statistical analysis:

- I don't see a problem with the linear probability model for decomposition analysis but I find the language here a bit unclear and obtuse. For example, what does back transformation mean and why is that a problem? Authors may also just cite the use of linear probability models in prior research using this method and not get into the weeds of stats lit.

Results:

- Was the percentage differences in table 1 significant upon a t-test/chi-squared test for group differences? - LPM does not need mentioning.
- There is a lack of period on page 7 line 162

Discussion:

- I would like to see acknowledgment that other factors besides environmental factors may also explain the disparity (i.e. other individual level variables could not be controlled such as mental health for example). What other limitation
- "There were several limitations of this study. First, the proportion of persons with disability (6.95%) was higher than that of national statistics (4.9% of the adults aged 20 years or older and 5.1% of the whole population) (9), because we focused on the respondents, who answered the survey questions." Was there missing data that was not made clear to the reader. Reader should know who did not respond to the survey if that data is available. Also, no comma before "who."

Conclusion:

- This is rather weak language. I would remove "it seems" and based the conjecture on prior research. 'It seems that individual and environmental characteristics such as physical accessibility, having a caregiver to accompany to a hospital, lack of appropriate primary care services, and invisible discrimination can be the possible components of the gap.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

Yes

Q 5 Are the keywords appropriate?

yes

Q 6 Is the English language of sufficient quality?

Fairly but needs editing.

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?)

I provide suggestions above regarding the dependent variables.

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 make a recommendation based on your comments:

Major revisions.