Peer Review Report

Review Report on Food insecurity, health care utilization, and health care expenditures: A longitudinal cohort study

Original Article, Int J Public Health

Reviewer: Heather Brown
Submitted on: 04 Apr 2023
Article DOI: 10.3389/ijph.2023.1605360

EVALUATION

Q 1 **Please summarize the main findings of the study.**

This study finds that when controlling for a range of covariates using longitudinal data from Korea that serve food insecurity is associated with increased health service utilisation. However, when controlling for all covariates this relationship does not hold for moderate food insecurity.

Q 2 **Please highlight the limitations and strengths.**

Strength is repeated measures, however as per comments below it is not clear if the authors took advantage of the panel nature of the data.

There is no mention of attrition and how this impacts on the results

Because there is a lack of description of the Korean health care system it is difficult to put the results in context and how the findings compare to those from the US

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.**

More background information is needed on food insecurity in Korea. What is the prevalence? It would also be helpful to have more background information on the health system in Korea. How is health care provided (e.g. via a social insurance based system). What are typical out of pocket payments for people?

In the description of the variables it is not clear if you are looking at being in food insecurity for multiple years or just one data point. This needs to be made clearer when describing the variables

More clarity is needed if you control for individual heterogeneity in the models to take advantage of the panel nature of the data or do you just treat the data as cross-sectional.

Please include information on attrition (i.e. percentage of people who leave the panel by food insecurity status) and how that may impact on the findings.

It would be helpful to consider why including additional covariates may have changed the significance and magnitude of the IRR, what does this mean for the interpretation of results.

PLEASE COMMENT

Q 4 **Is the title appropriate, concise, attractive?**

In title it would be helpful to mention which country the study came from

Q 5 **Are the keywords appropriate?**

In keywords I would also mention country where data came from

Q 6 **Is the English language of sufficient quality?**

The study would benefit by proofreading from a native English 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?)**

Reference list looks appropriate

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.