Peer Review Report

Review Report on Multidimensional deprivations and associated factors among older adults in urban geographies of Nigeria: implications for poor health outcomes in later life

Original Article, Int J Public Health

Reviewer: Reviewer 1 Submitted on: 02 Nov 2023

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EVALUATION

Q 1 Please summarize the main findings of the study.

This study conducted a secondary data analysis using the DHS data in Nigeria, which revealed a high prevalence of multidimensional deprivation among older adults in urban Nigeria, with a pronounced gender disparity where women are disproportionately affected.

Q 2 Please highlight the limitations and strengths.

While the study objective is important and novel by closing the current research gap on older population deprivation in Nigeria, the authors failed to describe their analysis method clearly and transparently.

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 issues:

- 1. The statistical methods lack detailed information, e.g., how was the SEM model defined, what are the model parameters, and how was the goodness of fit evaluated? How was model 1-4 defined? This sentence "The data analyses were based on 95% confidence interval using Stata (version 15.1) statistical package." is not a correct description of data analysis. 95%CI for what statistics? Based on what method? The authors need to consult with a statistician to improve the data analysis description.
- 2. In Table 2, the statistic K was mentioned but not defined in the methods. Similarly, R0, p%, and I% in Table 3 and 4 need to be defined in the method.
- 3. It would also be valuable and helpful if the authors could show the absolute numbers of distribution (before and after weighting). It is hard to interpret the result with just effect sizes and percentages.
- 4. Education and living standards are included in the MDI calculation, which could induce artificial associations between education and regions (correlates with living standards) with MD?

Minor issues:

1. Households headed by family is significantly protective for MD, it would be helpful if the authors could explain the possible reasons for this finding in the discussion.

PLEASE COMMENT

The use o	f "poor health outcomes" seems to be not fully represented by MDI, as it also involves other factors.
Q 5	Are the keywords appropriate?
Yes.	
Q6	Is the English language of sufficient quality?
Yes.	
Q 7	Is the quality of the figures and tables satisfactory?
No.	
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 make a recommendation based on your comments:
Major rev	isions.