# **Peer Review Report**

# Review Report on Gender-specific health-adjusted life expectancy of type 2 diabetes mellitus among the rural elderly population Author

Original Article, Int J Public Health

Reviewer: Zhenxing Mao Submitted on: 21 Nov 2023

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#### **EVALUATION**

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

A prospective cohort study was assessed the prevalence of type 2 diabetes mellitus (T2DM) and health-adjusted life expectancy (HALE) of T2DM among the population aged over 65 in rural areas. In this study, a total of 10318 participants aged 65 to 79 were enrolled d from the Henan Rural Cohort, and the results showed that the elderly women have higher prevalence of T2DM than men in rural areas. In addition, the elderly women appeared to have higher LE and HALE than men. Although the finding is interesting, there are some suggestions that may help further strengthen the work.

# Q 2 Please highlight the limitations and strengths.

#### Limitations:

The study only focused on the rural elderly population aged over 65, so the findings may not be applicable to urban areas or younger age groups.

The study relied on self-reported data, which may be subject to recall bias or misclassification.

The study did not consider other factors that may influence health-adjusted life expectancy, such as comorbidities or socioeconomic status.

The study did not provide information on the specific interventions or strategies that could be implemented to reduce the impact of T2DM on health-adjusted life expectancy.

#### Strengths:

The study used a large sample size of 10,318 participants, which increases the generalizability of the findings. The study used both baseline and follow-up data to calculate health-adjusted life expectancy, providing a comprehensive assessment of the impact of T2DM on the rural elderly population.

The study used two different methods (Sullivan method and multistate life table) to calculate health-adjusted life expectancy, which strengthens the validity of the results.

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.

- [1] In results section, more detailed data towards the life expectancy among different group of people should be listed in tables or displayed in figures.
- [2] Healthy life expectancy calculated by the Sullivan method appears to be lower than the multistate life table method, which should be explored in discussion section.
- [3] Rural residents are the study subjects. Authors should emphasize the unique feature of this group compared with the urban ones and other groups so that the manuscript may show its importance to the literature.
- [4] It could be easy to confuse about the similarities and differences in healthy status expectancy indicators and health-adjusted life expectancy indicators. Please explain the similarities and differences in manuscript? [5] In limitations, authors need to analyze potential bias impact on the current results and conclusions.

[6] English expression needs to be more refined.

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?
Yes.	
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 make a recommendation based on your comments:
Major revisions.	