Peer Review Report

Review Report on Trend Analysis of the Mortality Rates of the Top Three Causes of Death Among Chinese Residents From 2003 to 2019

Original Article, Int J Public Health

EVALUATION

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

To analyze rends of cancers, ischemic heart disease, and stroke as the major NCDs in China from 2003 to 2019.

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

No answer given.

| 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. |

The study comprises interesting data. The following comments may further clarify the findings.
• The English, particularly the Discussion, may need a professional editing and rewriting to discuss the findings in the content of prior knowledge. Some parts are just repetition of the results.
• Line 43, how much rise were observed in the world, Asia, and China?
• Line 66, How much rise was observed from 1990 to 2009?
• Results, section 1, may better add a table to show the results in detail. Data are rather difficult to follow in the text. Please revise this section accordingly. Likewise, for the second and forth sections of the results.
• Line 157, if possible, please add the 95% confidence interval for the AAPC.
• Figures 2 and 3 may better be added to the supplements. Rather difficult to grasp any data from them.
• Please change the format from x/100000 to x per 100,000 throughout the paper.
• Lines 217 to 235, presented data are very difficult to follow. The authors would better rewrite the whole section.
• In discussion, first paragraph: Instead of "Research on mortality can provide valuable information that could aid in the assessment of the efficacy of health systems and policies, as well as identify areas and resources for immediate and future action. This is the value of this study", the authors may revise this to directly mention the values of the present study.
• Line 245, what does "different change speeds" mean?
• Line 246, please revise and be more explicit with "initially decreased, steeply increased, and then declined steadily."
• Line 248, what proportion of the mortality was due to GI cancers? ", which has been mentioned in a previous study" is redundant.
• Line 257, is the rate of reduction in the burden of diseases due to the universal health coverage known?
• Lines 220 and 265, what does "75, +∞" mean? Could this be replaced with "≥75"?
• Page 12, paragraph 2, too many "this" are used. The paragraph would better be revised.
• Line 341, what does "major categories of diseases" indicate? In what measure, those diseases dominate?
• Line 296, "which is consistent with previous studies" is supported by only one reference.
• Line 296, What are "earlier findings"? This may need to be explained and supported by references.

• Lines 307-9, sounds like a repetition of results. This could be revised to a more discussion of the findings in the context? Please make the findings more meaningful to clinicians and policymakers as general readers. Likewise, for lines 310-11. Better be revised to a layman language.
• Line 329, "index of universal health coverage" is not defined earlier. How does an index of 83 in Japan compare to 79 in China?

PLEASE COMMENT

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

Yes

Q 5   **Are the keywords appropriate?**

Malignancy, Cancers, ischemic heart disease, stroke

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

Not for the discussion

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?)**

To some extend

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.