Peer Review Report

Review Report on Gender gap in Unhealthy Life Expectancy: The Role of Education Among Adults Aged 45+

Original Article, Int J Public Health

EVALUATION

Q 1   Please summarize the main findings of the study.

– Women significantly lived longer but in poorer health than men;
– There are gender differences in unhealthy life expectancy estimates across most age-groups and in both education groups, being the worst results shown in low schooled.
– There is a health gradient due to aging (health getting worse with age) and across the health measures (starting with chronic conditions and progressing with bad self-reported health and disability problems and culminating in cognitive impairments).

Q 2   Please highlight the limitations and strengths.

LIMITATIONS:
– Use of cross-sectional data from different data source.
– Use of self-reported health measures / absence of clinical conditions
– Absence of longitudinal comparisons

STRENGTHS:
– Use of validated and well-known method.
– The study estimated unhealthy life expectancy using four important health measures within the scope of the ageing

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 manuscript addresses an important topic from a perspective that is still lacking in publications in the country, using data from a broad and recognized population-based survey with a well know method.
The authors evaluate the gender gaps in unhealthy life expectancy accross education levels and age in Spain. However, there are still some gaps that need to be addressed in order for the text to be suitable for publication.
ABSTRACT
– Authors should cite the four health indicators, in addition to mortality, which were included in the unhealthy life expectancy estimates. The same is true for the introduction, where the authors should succinctly describe why those health indicators were chosen and what they can represent.

RESEARCH DESIGN AND METHODS
– Variables: Why did the authors employ life tables with ten-year age groups? It is more common to use five-year age groups in healthy life expectancy studies. Please, justify that choice in the text.

RESULTS

Table 1: I suggest showing p-values for a bivariate comparison of the characteristics according to sex. In addition, % values should be presented in a X.XX or X.X way, and not 0.XX. Ex.: 0.57 > 57.0.

Table 2: It is not possible to read the last columns of this Table in the attached file. In addition, please, standardize 95%CI font size across the Table.

PLEASE COMMENT

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

Yes, adequate.

Q 5 — **Are the keywords appropriate?**

Yes, adequate.

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

The English is good.

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, the reference list is adequate.

QUALITY ASSESSMENT

Q 9 — **Originality** — ▮▮▮▮▯ (4/5)

Q 10 — **Rigor** — ▮▮▮▮▯ (4/5)

Q 11 — **Significance to the field** — ▮▮▮▮▯ (4/5)

Q 12 — **Interest to a general audience** — ▮▮▮▮▯ (4/5)

Q 13 — **Quality of the writing** — ▮▮▮▮▮ (5/5)

Q 14 — **Overall scientific quality of the study** — ▮▮▮▮▯ (4/5)

REVISION LEVEL

Q 15 — **Please make a recommendation based on your comments:**

Major revisions.