Reviewer’s report

Title: Marital history, health and mortality among older men and women in England and Wales

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Reviewer: Edith Guilley

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Marital history, health and mortality among older men and women in England and Wales

The study by Grundy and Tomassini demonstrates that marital history influences risks of limiting long-term illness and mortality in older age. It also demonstrates that parity (for women) and socio-economic status (SES) across the adult life course modify the relationship between marital history and long-term illness or mortality.

The strengths of this study are:
- the data set based on a large record linkage of successive censuses, which includes institutionalized elderly.
- life course information over 20 or 30 years for marital status and SES.

Major compulsory revisions:
- p10, analysis: The authors should explain why they have chosen to use Poisson regression to analyze mortality and not Cox regression for instance (date of death was unknown?) and another analysis (logistic regression) for long-term illness. Why Poisson regression, for instance, has not been used for analyzing the number of disabled persons?
- Discussion. I would recommend to discuss more deeply the results using research from the social sciences. Educational qualification, professional trajectories (and thus SES), marital history and parity are closely correlated, especially for women. For instance, (long-term) divorced women with children may have faced economic pressure; there is a high probability that married women with children have ceased, temporarily or permanently, their professional activity; In contrast, women with a higher educational qualification may maintain their professional activity. Various combinations of education, SES and parity represent highly different life courses which may explain their different associations with long-term illness or mortality.

Minor essential revisions:
- In older age, cohabitation status may be more relevant than current marital status to predict long-term illness or mortality. The authors should give some information about the percentage of married people living alone and unmarried people living with someone else.
- p2 : there is a mistake in the methods (of the abstract): "men and women aged 40-59 (and not 60-79) in 1971".
- p4, 8th line: the authors should say …particularly important for women "in older cohorts".
- p4: the sentence "widowhood is a normative …" is hard to understand.
- p7: the authors should explain why elderly in nursing homes in 1971 were excluded,
- p8, last sentence: there are 2 words in French.
- p9: the authors should report the percentage of women without occupation to justify that this variable was not used for women.
- p11: 'reported prevalence of long-term illness was higher for all age groups in 2001 than in 1991'. The authors could discuss this result which invalidates the 'compression of morbidity' hypothesis.
- p 13; 1st line: 'each unit change in the social score was associated with a 4% (and not 6%) change in the mortality risk ratio'
- p 16: Concerning the effect of parity, it may be of interest to discuss results of the present study with those of Doblhammer, G. (2000). Reproductive history and mortality later in life: a comparative study of England and Wales and Austria. Popul Stud (Camb), 54, 169-176.
- p17, 15th line: Table 4 instead of Table 5 should be mentionned.
- p18, 5th line: a verb is lacking.
- Table 2: the authors should better explain the model with current marital status. Are SES variables included in the model?
- Table 2: for additional clarity, the authors could add 'marital status history' and 'current marital status' before the list of the variables used.
- Table 5, title: Please add 'Odd and rate ratios … from Poisson and logistic regression…'

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests