Reviewer’s report

Title: Association between anemia and frailty in 13,175 community-dwelling adults aged 50 years and older in China

Version: 0 Date: 11 Aug 2019

Reviewer: Ron Cialic

Reviewer's report:

The authors provide us with an interesting view on the relationship between Frailty and Anemia. Both are highly prevalent in the older population. While anemia is widely known and acknowledged by physicians from broad disciplines, frailty is still mainly a "geriatric issue". Linking frailty with physiological and pathological states may broaden our understanding of the biological mechanisms underlining it.

Specific remarks:
Major
* Age - the authors include non-geriatric population in the study (Younger than 65). This population comprised large part of the general population of the study (44%). There is no clear reason for that decision. The prevalence of frailty in this population is low and including it in the study adds irrelevant dependencies (e.g it might be that this younger cohort is more educated than the oldest cohort - this may cause educated population in the study to be less frail due to the age factor and not due to other relevant inherent factor of education). I suggest to exclude these non geriatric population from the study or to address the decision to include it in the discussion.
* Page 6, line 47 -" Higher wealth was also associated with higher anemia rates" - if this is true (although it doesn't make sense) - the authors need to address it in the discussion (since this is not the expected finding).
* With regard to place of residency - there are conflicting results (page 6, line 45 and Page 7, line 1 - Rural residents had lower levels of anemia and higher levels of frailty (which points to inverse correlation).

Minor
* Page 6, line 10 -" Covariates of interest included age, gender, education, smoking, nutrition, physical activity". Table 4 refers to additional covariates which should be mentioned (residence, income quintile. Alcohol consumption).
* In the last paragraph of the results section (page 7, lines 6-23) there are missing covariates (which can be found in the table but are not mentioned in the results without any good reason (Physical activity and nutrition).
* There are several grammar issues (page 8, line 8 - "increasing" should be "increased". Page 8 line 48 - "suggesting that….Hematocrit levels", page 8 line 51 -"found mildly" - should be "found that mildly"
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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