Reviewer's report

Title: Number of Parity Is Associated with Low-Grade Albuminuria in Middle-Aged and Elderly Chinese Women

Version: 1 Date: 09 Apr 2019

Reviewer: Kirk P. Conrad

Reviewer's report:

Brief Summary

In a community-based retrospective study of 6495 women >40 years of age, the authors present evidence for a significant association of low grade microalbuminuria and parity of >2 children. This association persisted after correcting for multiple confounders (e.g., older age, SBP, TG, HDL-C, fasting glucose, eGFR). In further subgroup analysis after multiple adjustments, a significant relationship was observed between parity and low grade microalbuminuria for women > 55 years. On balance, this work is well-executed and compelling, the major conclusions being supported by the statistical analyses.

Major Comments

1. The authors excluded 451 subjects from the analysis with ACR>30 mg/g. Was there a trend for microalbuminuria to be associated with parity in these women?

2. Although pregnancy recall is not great especially after so many years, do the authors have any information about the health of the pregnancies? Were these all normal obstetrical outcomes, i.e., without preterm labor, pregnancy hypertension, fetal growth restriction, etc? Is there any reason to believe that abnormal obstetrical outcomes may have been over-represented in the multiparous women >2 pregnancies?

Minor Comments

1. By and large the English usage is good. But some editing for English usage by BMC Women's Health may be indicated.


3. Discussion, lines 209-211. What are the mechanisms whereby high parity promotes weight gain, insulin resistance and dyslipidemia?
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?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal