Reviewer's report

Title: Impact of disease screening on awareness and management of hypertension and diabetes between 2011 and 2015: results from the China Health and Retirement Longitudinal Study

Version: 1 Date: 24 Dec 2018

Reviewer: Nasheeta Peer

Reviewer's report:

Abstract:

Methods: "It followed participants every two years. In 2011, over 11,000 participants completed interviews and physical examinations and provided fasting glucose samples to screen for hypertension and diabetes."

Please replace the above 2 sentences with the following for greater applicability and meaning: "Participants were assessed every two years with completed interviews, physical examinations and fasting glucose samples. Of the 11,000+ participants screened in 2011, 4594 and 1703 participants were identified with hypertension and diabetes, respectively." The latter sentence may be moved to the results section.

Main text:

Page 8, line 52: The sentence is incomplete.

Page 9, lines 18-21: "The disease awareness for hypertension and diabetes was somewhat higher overall…" higher than what, please? What are you comparing?

Page 9, lines 42-43: Please include '…having blood pressure monitored at least once in the previous year'

Page 9, lines 44-46: '…having received medication…' please include the definition/time period. Is this having received medication at least once in the previous year, or currently taking medication, etc.?

Please do the same for diabetes: Page 9, lines 56 onwards.

Table 1:

Please include definitions/cut-points in the text or footnotes for education level and write the acronym PCE in full.
The 'Total' numbers for this table are incorrect. If you have only included participants with hypertension and diabetes in this table, then your number for hypertension is n=4594 and for diabetes it is n=1703.

If you wish to include the data for the entire study sample in this table, then you need to relabel it appropriately.

In response to my following comment from the previous draft: "For completeness, what were the proportions of treatment and control among participants with hypertension/diabetes or among those who were aware of their diagnoses? Please include this data and discuss.", the authors respond that "Interested readers can calculate the proportions from the data presented." Which data that has been included can be used to calculate this, please? You need data pertaining to the proportion of participants with BP ≥140/90 mmHg despite currently being on treatment to determine the percentage of uncontrolled hypertension. None of the 3 tables nor figure 1 has the necessary data for this calculation.

Figure 1 has the data for percentage receiving treatment but not control and this cannot be calculated without additional data i.e. the blood pressure data.

Furthermore, for clarity, I suggest that you describe your denominators in Figure 1 as follows, please:

Awareness: among all participants with hypertension/diabetes, the proportion that were aware of their condition.

Treatment: among all participants with hypertension/diabetes, the proportion that were on treatment.

Please do the same for Monitoring and Medical advice. Please also include the time frame. For Monitoring, I believe this should be '…at least once in the previous year…'. For medical advice, I presume that there is no set time frame/limit? If yes, then please include 'received medical… at any time'.

Discussion

Page 12, lines 23-40: This paragraph is unclear. There are few points to note here. 1) The proportion of hypertensive/diabetes participants who were on treatment and who were controlled will not be the same, so please don't describe them together. 2) Furthermore, what is the importance of discussing whether participants on treatment are aware or not of their hypertension/diabetes status? 3) The discussion related to the data presented in the 1st sentence is not coherent.

Page 12, last paragraph. After the 2nd sentence (line 51), please include the following sentence: "This study highlights that conducting a good follow-up study does not necessarily translate into
imparting adequate or appropriate information on hypertension and diabetes status to study participants."

Page 13, line35: The term 'high-risk' has specific connotations. What are the 'high-risk groups identified by the CHARLS survey'? How was high-risk defined and calculated? Or are the authors simply referring to the variables associated with hypertension/diabetes unawareness in this study? If yes, then please say so and remove the term 'high-risk'.

Conclusions

Page 15, line 28: Please remove/define 'high-risk'.

Please read carefully and correct for minor grammatical errors in the text.

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

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