

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Epidemiology and risk factors for diabetes in the suburbs of Beijing: a retrospective cohort study
AUTHORS	Xie, Lingding; Zhao, Xu; Zhang, Bo; Zhu, Haiqing

VERSION 1 – REVIEW

REVIEWER	Pouya Saeedi IDF, Belgium
REVIEW RETURNED	07-Jul-2020

GENERAL COMMENTS	<p>Thank you for sharing your research. Some aspects of the research mainly in the methods and result section require more detailed information.</p> <p>Abstract: abbreviations need to be spelled out when introducing for the 1st time. Few grammar points need attention.</p> <p>Introduction: where reporting prevalence of T2D, more recent global data are available: https://www.sciencedirect.com/science/article/pii/S0168822719312306 Same applies to health expenditure data: https://www.sciencedirect.com/science/article/pii/S0168822720301388</p> <p>Methods: Please mention the sample in the objective: The objective of this study is to determine the incidence of and risk factors for T2DM in the suburbs of Beijing. Line 112-114, please revise to make it clear how none diabetic people have been tested and assigned to the 2 groups. Line 143-144, Not sure what does the half-hour mean in this context, please revise: the day before the examination and to sit quietly in a chair for at least 5 min in the half-hour before the measurement with their arms bare and placed at the chest level. Line 148, please specify who has done through the OGGT test.</p> <p>Results: line 165-166, where it is mentioned "After eliminating 118 subjects who were diagnosed with diabetes at baseline", were they excluded based on self-reported or blood test? Please clarify and also adjust the method accordingly to clearly explain who and how was excluded in the initial assessment. It is suggested to use the term "sex" instead of "gender". Line 175-176, were the results clinically significant? Please add the information.</p>
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	In the result section there is a need to mention whether the reported numbers are also meaningful from clinical point of view or not.
REVIEWER	Dongsheng Hu China
REVIEW RETURNED	09-Sep-2020
GENERAL COMMENTS	There are some concerns about this manuscript: 1. The author mentioned that the study population was selected by random sampling method, but the details were not described, the representativeness of the sample is questionable. 2. The anthropometrics should be measured by trained people or the data may not trustful, especially the blood pressure tested by a mercury sphygmomanometer. 3. The distribution of data should be taken into consideration with the application of t test.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

Comment 1: Please state any competing interests or state 'None declared':
None declared

Response: Thank you for your comment. According to your comment, we have added the sentence in line 276(clean version).

Comment 2: Abstract: abbreviations need to be spelled out when introducing for the 1st time.

Response: Thank you for your careful work. We have made the corrections in the revised abstract.

Comment 3: Few grammar points need attention.

Response: Thank you for your careful work. We have tried our best to correct the grammatical errors.

Comment 4: Introduction: where reporting prevalence of T2D, more recent global data are available: <https://www.sciencedirect.com/science/article/pii/S0168822719312306>

Same applies to health expenditure data: <https://www.sciencedirect.com/science/article/pii/S0168822720301388>

Response: Thank you for your instructive suggestion. According to the literature you recommended, we have updated the data concerning the prevalence of T2DM and health expenditure.

Comment 5: Please mention the sample in the objective: The objective of this study is to determine the incidence of and risk factors for T2DM in the suburbs of Beijing.

Response: Thank you for your comment. We have added the sample in the objective in line 98.

Comment 6: Line 112-114, please revise to make it clear how none diabetic people have been tested and assigned to the 2 groups.

Response: Thank you for your valuable advice. First, people with a history of diabetes were excluded from the study. Second, all the subjects were asked to undergo an oral glucose tolerance test (OGTT); subjects with diabetes at baseline were excluded.

Comment 7: Line 143-144, Not sure what does the half-hour mean in this context, please revise: the day before the examination and to sit quietly in a chair for at least 5 min in the half-hour before the measurement with their arms bare and placed at the chest level. Line 148, please specify who has done through the OGGT test.

Response: We apologize for our inappropriate description and have deleted the phrase "in the half-hour".

Comment 8: Results: line 165-166, where it is mentioned "After eliminating 118 subjects who were diagnosed with diabetes at baseline", were they excluded based on self-reported or blood test? Please clarify and also adjust the method accordingly to clearly explain who and how was excluded in the initial assessment.

Response: Thank you for your careful work. According to your comments, we have revised the methods section to explain the exclusion criteria clearly.

Comment 9: It is suggested to use the term "sex" instead of "gender".

Response: Thank you for your careful reading. We have made the correction in the revised manuscript.

Comment 10: Line 175-176, were the results clinically significant? Please add the information. In the result section there is a need to mention whether the reported numbers are also meaningful from clinical point of view or not.

Response: Thank you for your instructive suggestion. The results were clinically significant. We have rewritten the sentence.

Reviewer 2

Comment 1: The author mentioned that the study population was selected by random sampling method, but the details were not described, the representativeness of the sample is questionable.

Response: Thank you for your comment. The three suburbs were randomly selected from the Beijing countryside. The study population was selected using a random sampling method. However, the follow-up could not be random due to the limitations of the conditions.

Comment 2: The anthropometrics should be measured by trained people or the data may not trustful, especially the blood pressure tested by a mercury sphygmomanometer.

Response: In our study, all clinical staff members were trained to measure blood pressure and obtain anthropometric measurements. According to your helpful advice, we have added this information in lines 143–145.

Comment 3: The distribution of data should be taken into consideration with the application of t test.

Response: Thank you for your helpful advice. We used the P-P plot to test the normality of the numerical variables. A t-test was performed for the data that conform to the normal distribution.

Comment 4: Authors must include a statement in the methods section of the manuscript under the sub-heading 'Patient and Public Involvement'.

Response: Thank you for your careful work. We have added the sub-heading 'Patient and Public Involvement' in lines 165–167.