Reviewer’s report

Title: Prevalence of Diabetes mellitus among non institutionalized elderly in Monastir city

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Reviewer: Wichai Aekplakorn

Reviewer’s report:

Manuscript “Prevalence of diabetes mellitus among non-institutionalized elderly in Monastir city”.

Hammami, S and colleges reported on prevalence of diabetes in Tunisia and found a high diabetes prevalence in older persons.

There are several points that need clarification for improvement.

Major Compulsory Revisions

Introduction & methods
1. The objective of this study is not met, since the findings of treatment and control of DM were not clearly presented.

2. The sampling method is not clear whether the sampling unit is household or individual.

3. Was the sample size in urban and rural proportional to their population size?

4. This is a cross-sectional survey, what is the formula used to calculate sample size? why the authors have to used power 95% to calculate the sample size?

5. There are several points with grammatical errors. For example line 14 page 2 should the word “ than” be “ then”.

6. The first line of the second paragraph on page 2 is not a sentence.

7. The author said that the questionnaire was validated by the national institute of public health. It is not clear how the questionnaire was validated.

8. Page 3, Line 7 of second paragraph is not clear. What were the independent variables?

9. It is not clear whether the definition of diabetes in this study is based on history or capillary glucose. Why random blood capillary glucose was used?

10. Please explain how waist circumference was measured.

11. Statistical analysis, which variables were tested using t-test or Man-Whitney test?

12. What are the definitions of these variables: physical activity (yes/no), dependency, hospital admission in preceding year, coexisting diseases and medication?
Results
13. Page 6, line 18, “glycemic control was higher in diabetic participants……less than 11 mmol/l”, the sentence is confusing.
14. Page 6, line 22, what is the definition of “number of medication used”, what kind of medication were included?

Discussion
15. Page 7, Line 14-15, “the proportions of unawareness (5.5%)………… Please clarify how the unawareness diabetes comes, since this has not been prior defined in the method section.
16. The first limitation of this study that the authors mention is very importance, how the authors addressed this limitation and it is not clear if the prevalence from this study is likely to be over or underestimated.

Minor Essential Revisions
1. Table 1, what is the lower limit of age?
2. Table 1 and 2, what are the numbers in the parenthesis? Is all the prevalence presented in percentage?
3. Figure 1 is not informative, should be dropped.
4. Table 3, the title: “Correlates of diabetes” is not clear. The authors should present OR (95%CI) for other variables in the model. Since 95%CI of ORs were presented, beta –coefficient and p-value were not necessary.
5. Several points in this paper need to be checked for typo errors.

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’ below. If your reply is yes to any, please give details below.