Reviewer's report

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

Version: 1 Date: 3 April 2012

Reviewer: Stefanos Tyrovolas

Reviewer's report:

Minor comments
Comment1:
Please define in the begging of the article the abbreviation of Diabetes Mellitus (DM). Write with the same form in all text because elsewhere appeared as DM, Diabetes, diabetes etc.

Major comments
Comment1:
Introduction: In the first paragraph the authors have to mention also the prevalence of diabetes among other Mediterranean older populations.
Comment2
Furthermore, in the phrase ‘However, the vast social and economic developments in Tunisia…’ please provide references for the unhealthier eating habits, decreased physical activity and manifestation of a wide range of noncommunicable diseases.
Comment3
Moreover after first paragraph it should be more helpful for the audience a small comment of the association between diabetes and other bio-clinical and lifestyle factors. Such as cardiovascular diseases, dietary habits i.e Mediterranean diet, smoking habits, physical activity etc…

Comment4:
Methods:
In the Subject’s evaluation please provide a reference for the definition of diabetes and for the two groups of CG. As we can see you have provide references for the definition of hypertension etc.

Comment5
Please provide more information on how you measure smoking habits, physical activity, and activity of daily living.

Comment6:
Statistical analysis
Please define the independent variables in the logistic regression model

Comment 7

Results section

Comment 8
In both tables 1 and 2 please provide the actual number of p values and not with NS. Furthermore in tables 1 and 2 the prevalence of diabetes needed (%).

Comment 9
For the variables included in analysis (table2) like Dependence and Hospital admission in preceding year, please provide, if possible, their measurements in methods section

Comment 10
Table3 needed definitions. The variable WC is not in the methods section, Please clarify this in methods section. In methods there is only a definition for abdominal obesity.
Please provide also the definitions in the table3 for the three variables WC, coexisting diseases, hypertension. For example hypertension (yes vs no), WC (…), etc

Comment 11

Discussion
In the first paragraph the lines ‘First, our subjects are selected in older … that diabetes prevalence increases with age.’ ‘Second, another possible reason … particularly, obesity and sedentary life with lack of physical activity.’ needed references.

Comment 12
The lines ‘It is possible that the earlier onset … prevalence of diabetes after 70 years of age in Tunisian subjects.’ needed a reference.

Comment 13
In the lines ‘The rapid transition and changes of lifestyles involving dietary intake (high fat caloric dense food, low in complex carbohydrates, refined sugar and salt) and decreasing physical activity have take a place in the past 20 years in Tunisia’ the dietary habits and physical activity needed references. Furthermore it would be more helpful for the audience if the authors add a comment on how healthy dietary patterns may protect elders.

Comment 14
After the last paragraph and the comment on hospital admissions and medication effect on diabetes, it would be more helpful for the audience if the authors add a comment from the perspective of public health. Higher public health organization and policy may prevent population from high prevalence of chronic diseases and
may enhance elders' quality of life

Comment15

Limitations

‘To our knowledge, this is the first study to report the prevalence of diabetes and risk factors among adults 65 years and older.’ This is not the first study that report prevalence of diabetes in the elders…maybe the authors mean is the first in Tunisian population. Please define.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.