Reviewer's report

Title: Knowledge and Perception of Diabetes in a Semi-urban Omani population

Version: 1 Date: 12 January 2008

Reviewer: Rainford Jonathan Wilks

Reviewer's report:

The study addresses an important aspect of a subject which has international relevance. The data derive their international significance from the fact that several countries at a similar stage of development could be informed by these findings.

Major Compulsory Revisions

1. Methods: (a) The report is unclear as to how the sample was selected. Page 4, paragraph 4 refers to villages that were "independently" selected. I am not sure what this means. Could this be a translation error?
(b) The report refers to "getting the authorities approval" but it is not clear whether these are civil, government or ethical authorities. At the same no reference is made to ethical review and approval and no reference to participants' informed consent.
(c) It is unclear whether more than one participant could have been or was recruited from the same household. If this was done it may implications for analysis and interpretation of the results.
(d) The Methods section of the report does not make it clear whether the questionnaire (paragraph 3, page 5) was self- or interviewer-administered. If the latter, there is no reference to tests of its reliability among observers or of its validity. Some confusion is created in my mind, as in the Limitations (page 11, paragraph 4) the report says "Finally, data derived from interviewing that may be susceptible to information bias as a questionnaire was not administered" and yet the Limitations section goes on to say "For uniformity, it was decided to read the items to all of the subjects....." (page 12, paragraph 1). This issue is crucial to the validity of the study and needs to be clarified.
(e) The data analysis section (page 5, paragraph 4) refers to the pooling of categories of variables which are "homogenous" and where numbers were small. This is not clear and no further reference is made to this in the results so that an assessment of the justification for this manouvre can be made.
(f) The Titles of the Tables could be improved for example, Table 3 could read "Prevalence of Knowledge of Risk Factors by Demographic Factors and Family History of Diabetes among Non-diabetic Respondents"
(g) The labelling of Figure 1 is inadequate and cannot be interpreted without reference to the text and even with help from the latter it is unclear.
Minor Essential Revisions

1. Results
(a) Table 2 could be removed.
(b) I suggest that a Table with the data for the section "Awareness of Diabetes complications" be included to make this easier to understand.
(c) There is repeated use of words like "predict", "contribute", "determine" which are inappropriate in this cross sectional study. The word "associated" would be more appropriate.
(d) It is undesirable to commence sentences and paragraphs with figures. There are several examples of this throughout the Results section.
(e) The report has several errors in grammar, spelling and construction which may well be due to translation issues but which must be corrected.
(f) The report makes repeated reference to "desired levels" of awareness and knowledge but there are no indications of the levels.

Discretionary Revisions

1. (a) The authors fail to emphasize the strong associations between KAP and educational levels and fail to put this in the context of a country which is classified as "higher middle income" (page 9, paragraph 4) but which has 20% illiteracy and 50% of participants with less than high school education.
(b) An analysis of gender differences may be interesting especially in respect of associations with income and education.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

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.