Reviewer's report

Title: Knowledge of vitamin D and perceptions and attitudes towards sunlight among Chinese middle-aged and elderly women: a population survey in Hong Kong

Version: 1 Date: 14 June 2006

Reviewer: Tuan V Nguyen

Reviewer's report:

General

This study is interesting and useful because it addresses an important question of the role of knowledge belief and behaviour in osteoporosis prevention, an area of research that has not been well documented. The authors are congratulated for performing this type of research.

It is interesting to note that 62% of the respondents did not like going in the sun. As a general comment, this could be due to cultural factor. In general, Asians particularly women tend to prefer a while/pale skin and they don't like to be exposed to the sun. Could this be a factor that may explain the authors' results?

重大必改的修订（作者必须在决定接受发表前回复）

There are some issues in study design and analysis that I hope the authors will address in their next submission:

1. The response rate is modest (~50%) and the sample size in the older age groups is small. This potential weakness of the study should be discussed and acknowledged.

2. Phone interview is convenient, but can be less reliable than in-person interview. Did the authors test for reliability of the questionnaire they used in the phone interview?

3. It is not clear what data were collected in the study. What was the primary outcome of the study?

4. Almost 60% of the respondents' occupations (eg managers, clerical, home-makers) appeared to be less likely exposed to the sun. This may affect the study's external validity, and the authors should discuss this issue.

5. The low awareness of sunlight as a source of vitamin D among those in the older age groups could be due to (or related to) low levels of education or socio-economic status in this group. Have the authors examined this possibility?

6. The above comments lead suggest that the present data analysis seems too descriptive. This reviewer considers that the authors' data may be able to answer some interesting questions of the effects of age, education, occupations, etc on the level of awareness of vitamin D. Perhaps the authors should consider a more formal analysis (such as log-linear model or even logistic regression model) to examine the potential effects of these factors. This reviewer strongly thinks that such an analysis will further greatly improve the manuscript.

次要必改的修订

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

任选的修订

Discretionary Revisions (which the author can choose to ignore)
What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests