Reviewer's report

Title: Bone Mineral Density, Body Mass Index and Cigarette Smoking among Iranian Women: Implications for Prevention

Version: 1 Date: 28 February 2005

Reviewer: Paul Gerdhem

Reviewer's report:

General
This is a well done and well-written study on the effect of BMI and smoking on bone density in a sample of Iranian women living in Australia.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. I’m not sure of the interpretation of non-Western Caucasians (Abstract, last line). I would suggest the authors to use the term Caucasians of non-European origin instead, which I think is what they mean.

2. I think the authors somewhat more should emphasize that these women have immigrated to Australia and therefore the results from this study could be affected by this fact. They have, as already stated by the authors, another life-style (smoking pattern) than Iranian women living in Iran. Other life-style factors such as physical activity, sun exposure and diet could also affect the results as compared to Iranian women in Iran.

3. The BMI criteria that are used in the manuscript are not stated in the methods section (or elsewhere in the manuscript).

4. Page 7, line 7; Since the duration of menopause is apparently not normally distributed, describe the range instead.

5. To get a better picture of the representativity of this population describe the number of women that were excluded from the study.

6. Page 7, line 6 from the end of the page; The figure 0.09 g/cm2 for the adjusted difference in BMD between smokers and non-smokers does not agree with Table 2, maybe due to rounding, I suggest the same number of decimals be used at both places, it otherwise will confuse the reader.

7. Page 8, line 2-3; “The effect of cigarette smoking was more pronounced in current smokers whose BMD was significantly lower than in non-smokers”; Rewrite this sentence since it can be misunderstood: There is no effect of smoking in non-smokers at all.

8. Page 10; paragraph 2. I'm not sure why the finding of a higher prevalence of osteoporosis at the lumbar spine than at the femoral neck requires further examination of BMD at the femoral neck in women from similar populations and suggest the authors to explain this further.

9. Table 2; BMI (-5 kg/m2) probably means the change in BMD by a 5 kg decrease in BMI, but have to be explained to the reader.
10. Figure 2; The number of women in each bar is important information in the interpretation of the data and should be included in the figure (for example below each bar).

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

1. The asterisk sign (*) is used in Table 1, but without explanation.
2. IQR (interquartile range) should be written out in the explanation of Table 1.

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