Reviewer’s report

Title: The effect of physical activity and body mass index on menopausal symptoms: a cross-sectional study in primary care

Version: 3 Date: 26 August 2013

Reviewer: PASCAL IZZICUPO

Reviewer’s report:

Major Compulsory Revisions

The study investigates the relationship between menopausal symptoms and both physical activity and BMI, in peri-menopausal and post-menopausal Turkish women. Physically active women show fewer bothersome symptoms than women with low levels of physical activity, whereas BMI seems to have not relationship with menopausal symptoms. Positive effects of lifestyle changes are promising because might reduce the use of pharmacological agents.

The study is well written with proper statistical analysis but I have some concern about the interest for publishing:

My major concern is about the contribution of this study to improve on knowledge. In background section, you cite studies that relate menopausal symptoms with physical activity leading to contrasting results. However the present study does not provide new results respect to some cited studies, with few little exceptions (e.g. smoking status). Furthermore, the relationship between the scores of MRS and IPAQ were previously reported by Canario AC et al. in a similar way to your study (Canário AC et al. The impact of physical activity on menopausal symptoms in middle-aged women. Int J Gynaecol Obstet. 2012 Jul;118(1):34-6 and da Silveira Gonçalves AK et al. [Impact of physical activity on quality of life in middle-aged women: a population based study]. Rev Bras Ginecol Obstet. 2011 Dec;33(12):408-13.). These studies were conducted on Brazilian population and ethnical and cultural differences could play an important role in menopausal symptoms, legitimizing the investigation on Turkish population. However, I suggest at least citing these studies and justifying the need of a similar study in Turkish population. Because IPAQ provides data about sitting time, can you provide results about this item? I suggest including this point in your analysis because, in my knowledge, it has not been related to menopausal symptoms, previously. Because HRT may influences body composition, I suggest to take it into account when you analyze the effect of BMI. Are there differences between inactive and active women respect to confounding factors such us, educational level, employment status, etc...? I recommend you to adjust your analysis for these variables.

Minor essential revisions

Methods, instrumental and data collection
- How were weight and height measured? Please, insert name and company of instruments or, indicate if they were simply asked to participants. If the latter is the case, this might explain the lack of relationships between BMI and menopausal symptoms and should be mentioned in discussion.

Results, second sentence
- ‘The MRS total score were also high in non-smoking…’. Change high with higher.

Discretionary revisions

Background, second sentence
- Provide reference for: ‘while 75-80% of women…’.
- the use of semicolon make the sentence a bit confusing: can you rephrase?

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

Quality of written English: Acceptable

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