Reviewer’s report

Title: Daytime napping associated with increased symptom severity in fibromyalgia syndrome

Version: 9 Date: 27 September 2014

Reviewer: Gianluca Ficca

Reviewer’s report:

This study explores the relationships between daytime napping and a number of FMS characteristics: I acknowledge this is an interesting topic, given that FMS has not yet been fully clarified with regard to mechanisms sustaining it and possible effective countermeasures in coping with its symptoms.

The study is well-conceived and rigorous enough, with regard to its design and procedures, and the article presentation is also adequate.

However, there are a number of issues that need to be addressed before the article can be accepted for publication.

Major compulsory revisions

1. At page 4, chapter “Participants”, the Authors write: “Participants who were undertaking shift-work or who had been diagnosed with other specific sleep disorders (e.g., sleep apnea or restless legs syndrome) were excluded (…)” Was there any similar control for specific psychiatric diagnoses? There is a lot of clinical and experimental work on co-morbidities of FMS with mental illness (such as depressive disorders and anxiety disorders), it might have been an option to exclude patients with such syndromes. If this was not the case, I suggest the authors discuss it and provide arguments in favour of their procedure.

2. Among their comparisons between sub-groups, the authors unfortunately skipped one that I believe to be of major importance, i.e. subjects who take naps without having intention to with those planning their naps. For instance, there is wide evidence that in elderly people planned naps prove to be highly beneficial, differently from unplanned naps, which are often associated with severe health problems. This should be the first step to understand, as the authors say in the conclusions “if daytime napping is detrimental to symptom severity or if it can be recommended as a strategy to manage symptoms in FMS. So I definitely suggest that these results are added, altogether with the respective table or Figure.

3. The sample of the study seems adequate also because of its very wide age range. An important finding of the study comes from the logistic regression, showing that age does not predict napping behaviour. However, I wonder whether the lack of differences between the young and the elderly depends on the fact that unplanned naps are already very frequent in normal aging, rather than on a decreased attitude to use them as a countermeasure to sleep problems. In
other terms, to fully understand the theoretical implications of this result, it would be interesting to carry out a comparison between the populations under and over 60 years on all the dependent variables, especially on the subjective reports about why taking naps.

Minor compulsory revisions

Background:

page 3, four-to-last line: “Despite the evidence of the beneficial effects of napping found in healthy adults (…)”: this is a rather vague statement. I suggest the author better specify on which functions (e.g. vigilance, memory, subjective well-being) and add proper references.

page 4, line 2: “Consequently it is important to explore the effects of daytime napping (…)”. Since they are going to show data from a merely correlative study, the use of the word “effect” can be misleading.

Method

page 5, chapter “Procedure”: “To enable the exploration of the effects (…)”. This sentence is erroneously repeated twice.

page 7, chapter “Statistical analyses”: the choice of correcting significant p value for multiple analyses is commendable, however this should have been more properly done by means of a specific correction method, such as Bonferroni’s, rather than assigning an arbitrary < 0.01 value.

“Mann Whitney U tests were used to compare the median values on outcome measures to detect any differences between the two groups (…)” Which are the two groups? Please, specify.

Results

page 8, section “Sample characteristics”: “Participants who did not meet the inclusion criteria as they did complete >20% on the included measures (4% of the total sample) (…)” I do not manage to understand: is it possibly <20%? Otherwise, please rephrase and clarify.

Tables

Please, remove all non-significant values from the column on the right and just add “ns”.

Table 1 is extremely chaotic due to the different outcome measures that are used at the same time, i.e. absolute number, mean, median, percentages and so on. Please, give a different structure (One way to handle this would be to remove all absolute values and just leave frequencies where possible, and to put means and medians in two separate columns, removing from the top the sentence “FMS participants”, which is redundant).

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

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