Reviewer’s report

Title: Factors Associated with Cancer-related Fatigue in Breast Cancer Patients during Endocrine Treatment in an Urban Setting

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Reviewer: Kristine A Donovan

Reviewer’s report:

This manuscript reports the results of a cross-sectional study of fatigue in 315 women with a history of stage I – IIIA breast cancer currently who had received or were receiving endocrine therapy. The purported aim of the study was to investigate the prevalence and severity of fatigue in these patients and to identify the demographic, clinical, and diet and exercise factors associated with fatigue. The study employed a relatively brief self-report questionnaire with one item assessing fatigue and other items assessing physical activity, diet, and demographic and clinical characteristics. Multiple logistic regression analyses were used to identify those factors associated with fatigue. The statistical approach itself appears sound. The authors have edited the revised manuscript and the text reads somewhat better. The previously noted weakness regarding the retrospective nature of the study and the inherent recall bias, particularly among women asked to recall their fatigue many months previously is now acknowledged, although just barely and not at all clearly or completely. In general, the manuscript could be improved by focusing on the relatively straightforward results and not over-interpreting them in the Discussion section. In this revised version of the manuscript, the authors have been responsive to reviewer comments. This reviewer still has some concerns about the manuscript.

Major Compulsory Revisions

1. The authors identify their study as a retrospective study (see, for example, the first sentence under Methods/Participants). It is more accurately identified as a cross-sectional study. Some of the questions are retrospective in nature; that is, they ask respondents to recall their level of fatigue prior to beginning endocrine therapy.

2. In the Methods and elsewhere, the authors state that their participants consist of “54 women having completed endocrine therapy and 261 having been undergoing treatment.” This is confusing, grammatically incorrect, and needs to be clarified. Do the authors mean that at the time of their participation in the study, 54 had completed endocrine therapy and 261 were still receiving endocrine therapy?

3. The authors draw very broad conclusions from the questions they apparently asked of the breast cancer patients. There is information to be found in the data but the authors over interpret their findings. The results are relatively
straightforward and simple. Focusing on these results and clearly interpreting the data would be sufficient.

4. It appears that the researchers asked respondents to indicate whether their fatigue had changed since beginning endocrine therapy, though this is not particularly clear. For some women the start of endocrine therapy was five years previously. This needs to be clarified in the text (at least identify for the reader, not just the reviewer, the specific question used). The potential for recall bias is increased by including women who have already completed endocrine therapy with women currently on endocrine therapy. Did the outcome differ between these two groups of women?

5. Results. Second paragraph. The authors state that 189 patients had improved fatigue or fatigue in “complete remission.” A woman who indicates her fatigue is reduced not necessarily in “complete remission.” What questions from the questionnaire were used to assess this? This needs to be made explicit.

6. In general, the authors overstate what they found in this cross-sectional, correlational study. The questions that ask participants about changes to fatigue levels are subject to considerable recall bias making the data derived from these of questionable validity.

7. The manuscript would benefit from better organization and a reduction in the length of the Introduction and Discussion sections. There is a lack of clarity in the results and the interpretation of these results, and the writing and use of the English language is not good. Some of the corrections, including the now included information about exclusion criteria read as if the text were lifted verbatim from previously published articles; the use of written English in this section is much better than the rest of the text. An editor or colleague more familiar with written English should be recruited to improve the grammar and sentence structure of the manuscript.

Minor Essential Revisions
There are none.

Discretionary Revisions
There are none.

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

**Quality of written English:** Needs some language corrections before being published

**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.