Reviewer’s report

Title: Weight before and after a diagnosis of breast cancer or ductal carcinoma in situ: A national Australian survey

Version: 2 Date: 07 Jan 2020

Reviewer: Amy Downing

Reviewer's report:

The authors have put a lot of work into revising this paper and I am pleased to see the inclusion of the normative data for comparison. I have a few additional queries and suggestions -

Abstract

Background - weight gain post-diagnosis 'is' associated with.. rather than 'are'

Conclusion - it may be more impactful to state the weight gain relative to age-match controls over a longer period rather than half a kg per year.

Methods

Comparing to normative data - state which year of AusDiab was used for matching - presumably it was the follow up in 2004-05? Was it 1:1 matching? A little more detail required here.

Results:

Sample characteristics (pg 9) - I'm not clear how the BCNA and non-BCNA groups have been compared. There are two comparisons being made, for retired and self-employed, but only one p-value. It is probably sufficient to say there were no significant differences and quote the p-values rather than giving all the chi-squared test details.

Weight change (pg 12) - 'Mean weight gain was 4.5 kg' - can the authors clarify why this is different to the figures at the start of the paragraph? 76.08 - 71.24 = 4.84 kg

pg 13 - 'weight gain predominantly occurred within the first two years of diagnosis...' I don't understand how this matches with the following text and the data in Table 4 showing that there was no difference in weight gain with time since diagnosis. Please clarify the interpretation of this.

Rate of weight gain (pg 14) - 'On average, women gained 0.64 kg per year' - which women does this refer to? The normative data or the matched study group?
Table 5 - please add a row for the total 234 women.

Discussion

Page 16 - 'Median weight gain between 6 and 72 months was 0.7 kg...' - which group is this referring to? Should this sentence come earlier?

Page 16 - mean weight gain in this study compared to the Australian cohort study was 9.07kg v 5.3 kg. Do these figures relate to comparable time frames? The comparison needs to be made at 6 years post-diagnosis.

Conclusion - Survey respondents gained a significant amount of weight - please quantify this, what is significant?

General point - I think it would improve readability if figures were presented to 1 decimal place throughout the text and the tables.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

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