Reviewer's report

Title: Weight Watchers on prescription: An observational study of weight change among adults referred to Weight Watchers by the NHS

Version: 1 Date: 7 March 2011

Reviewer: Theo Vos

Reviewer's report:

This study on weight loss in people referred by NHS to the Weight Watchers program was funded by Weight Watchers. Just like some journals no longer accept papers on drugs funded by a pharmaceutical company, there may be arguments to reject this paper on similar grounds. However, I can see merit in reporting on the large number of NHS patients that were referred to a commercial weight loss programme as there is policy interest in such an option elsewhere. However, it does mean that the results and conclusions drawn by the authors need to be scrutinized for bias and potential conclusions that the authors have failed to make.

1. Major compulsory revisions

While the authors recommend further studies on longer term outcomes (pp 8&9) there is no mention of the literature that indicates that the initial weight loss that is brought about by weight loss programmes tends to be regained (on average) rather quickly (e.g. Dansinger et al. Meta-analysis: The Effect of Dietary Counseling for Weight Loss. Annals of Internal Medicine 2007; 147(1): 41-; Dale et al. Determining optimal approaches for weight maintenance: a randomized controlled trial. CMAJ 2009; 180: E39-; Freedman et al. Weight Maintenance. Obesity 2001; 9: 33S-). While health gain can be expected from a >5% loss in body weight (p3) this holds only if that weight loss is maintained.

The reported cost to NHS is reported as low as £45 for 12 sessions. That is much lower than was costed in Cobiac et al. (Cost-effectiveness of Lighten Up to a Healthy Lifestyle and Weight Watchers. Australian and New Zealand Journal of Public Health, 34: 240-). Is that because co-payments by patients are not reported? I note also that while mentioning they did not have enough data to estimate cost-effectiveness, the authors did not report on the unfavourable cost-effectiveness result reported by Cobiac from Australia.

While the greater weight loss in those with BMI 30-39 relative to those below BMI 30 is mentioned on page 7, the more disappointing weight loss in those at BMI 40+ (where it would matter most in terms of health outcomes) is not reported. A case of selective interpretation?

2. Minor Essential Revisions

Table 1: what are the units of the column headed median; the table caption
seems to indicate it is a percent weight change which strangely enough is labeled as being in units of kg. I suspect that each value is a change in weight, relative to the reference category in each section (i.e. in males median weight loss was 0.54 kg more than women). While the greater weight loss in those with BMI 30-39 relative to those below BMI 30 is mentioned on page 7, the more disappointing weight loss in those at BMI 40+ (where it would matter most in terms of health outcomes!) is not reported. A case of selective interpretation?

3. Discretionary revisions
P4 PCT, unexplained acronym

**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'