

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Outcomes of a specialist weight management programme in the UK National Health Service: prospective study of 1838 patients.
AUTHORS	Logue, Jennifer; Allardice, Gwen; Gillies, Michelle; Forde, Lorna; Morrison, David

VERSION 1 - REVIEW

REVIEWER	Kate Jolly Professor of Public Health Public health Building School of Health & Population Sciences University of Birmingham No competing Interests
REVIEW RETURNED	19-Sep-2013

GENERAL COMMENTS	<p>This is a well written paper describing the outcomes of a large cohort of people referred to an NHS specialist weight management service in Glasgow. It does add to the literature in that the level of obesity is greater than that reported in previous observational studies of weight management services in the UK.</p> <p>In the introduction/discussion some additional studies could be referred to. Dixon et al report the outcomes of short weight management referral services in the UK and Ahern and Stubbs have audited data from the commercial providers and Nanchahal reports on a primary care programme. These references would add to the data from trials:</p> <p>Dixon KJL, Shcherba S, Kipping RR. weight loss from three commercial providers of NHS primary care slimming on referral in North Somerset: service evaluation. <i>Journal of Public Health</i>. 2012;34(4):555-561.</p> <p>Ahern, A. L., A. D. Olson, et al. (2011). "Weight Watchers on prescription: An observational study of weight change among adults referred to Weight Watchers by the NHS." <i>BMC</i> 11(434).</p> <p>Stubbs, J. R., C. Pallister, et al. (2011). "Weight Outcomes Audit for 34,271 adults referred to a primary care/commercial weight management partnership scheme." <i>Obesity Facts</i> 4: 113-120.</p> <p>Nanchahal K, Power T, Holdsworth E, et al. A pragmatic randomised controlled trial in primary care of the Camden weight loss (CAMWEL) programme. <i>BMJ Open</i> 2012;2:e000793.</p> <p>In the last line of the introduction I would remove the words 'taken care to'.</p> <p>The methods are well described. I do have some concerns about the definition of completers in phase 1. The authors state that to be a completer a participant should have attended at least half of the planned appointments, yet for phase 1 only 4 out of 9 sessions were defined for completion.</p>
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	<p>Results: Tables 2, 3 and 4 – it would be helpful to include the 95% CI for the mean change in weight Similarly on page 14 it would be helpful to include 95% CIs around the mean weight change in phase 2 for people who lost weight in phase 1. The mean weight loss (95% CI) for those who entered phase 2, having not lost 5kg in phase 1 should also be presented. Page 16: To make the findings in relation to demographics comparable with other programmes I think this should describe the findings for 5% weight loss, rather than the 5kgs set by the GCWMS programme. Yes males lose more absolute weight, but it doesn't really differ when looking at % weight loss. Similarly the differences between young men and women disappear. In the discussion some mention of uptake and adherence would be useful. I know this was addressed in the Public Health Nutr paper, but it feels like an omission here. The reference for the Public Health Nutr paper is incorrect, it should be Public Health Nutrition 2012;15(1): 28-38.</p>
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REVIEWER	<p>Kiran Nanchahal Senior Lecturer London School of Hygiene & Tropical Medicine UK</p> <p>I do not have any conflict of interest</p>
REVIEW RETURNED	04-Oct-2013

THE STUDY	<p>The Results section in the abstract reports that 78 patients were excluded but does not say why this was done. The Phases of the study are mentioned without saying what they are.</p> <p>It is unclear what 'intention to treat' analysis means in the context of a prospective cohort study. Given the level of missing data, it may be more appropriate to use multiple imputation methods to counter any biases.</p> <p>The references do not include some relevant studies e.g. DESMOND study results (Khunti et al BMJ 2012); Nanchahal et al BMJOpen 2012).</p>
RESULTS & CONCLUSIONS	The results should be presented with some measure of variability e.g 95% CIs, especially as a number of statements are made about differences between sub-groups in the interpretation of the results.
REPORTING & ETHICS	The paper reports results from the analysis of data on patients in NHS care. There is no statement on whether any consent or ethical approval was obtained (not sure if this is necessary in this case).
GENERAL COMMENTS	<p>Introduction The third paragraph reports mean baseline BMI values for patients in other studies but does not address why this is important.</p> <p>Results Men are reported to be significantly heavier than women - this is not remarkable so can be left out. There is a statement on p16 that a greater proportion of the heaviest patients lost 5kg or more but this should refer to the patients in the highest baseline BMI group according to the results in Table 3 (not the ≥ 150 kg weight group). Table 2: Give definitions of Phases and Completers in footnotes.</p> <p>Discussion 1st para Men are reported as achieving greater weight loss than</p>

	<p>women despite there being fewer men participating - the number of participants is not the important factor here. 3rd para, last sentence: Bariatric surgery has shown benefits for larger weight losses, not gains.</p>
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VERSION 1 – AUTHOR RESPONSE

This is a well written paper describing the outcomes of a large cohort of people referred to an NHS specialist weight management service in Glasgow. It does add to the literature in that the level of obesity is greater than that reported in previous observational studies of weight management services in the UK.

In the introduction/discussion some additional studies could be referred to. Dixon et al report the outcomes of short weight management referral services in the UK and Ahern and Stubbs have audited data from the commercial providers and Nanchahal reports on a primary care programme. These references would add to the data from trials:

Dixon KJL, Shcherba S, Kipping RR. weight loss from three commercial providers of NHS primary care slimming on referral in North Somerset: service evaluation. *Journal of Public Health*. 2012;34(4):555-561.

Ahern, A. L., A. D. Olson, et al. (2011). "Weight Watchers on prescription: An observational study of weight change among adults referred to Weight Watchers by the NHS." *BMC* 11(434).

Stubbs, J. R., C. Pallister, et al. (2011). "Weight Outcomes Audit for 34,271 adults referred to a primary care/commercial weight management partnership scheme." *Obesity Facts* 4: 113-120.

Nanchahal K, Power T, Holdsworth E, et al. A pragmatic randomised controlled trial in primary care of the Camden weight loss (CAMWEL) programme. *BMJ Open* 2012;2:e000793.

- We have incorporated these references.

In the last line of the introduction I would remove the words 'taken care to'.

- We have removed these words accordingly.

The methods are well described. I do have some concerns about the definition of completers in phase 1. The authors state that to be a completer a participant should have attended at least half of the planned appointments, yet for phase 1 only 4 out of 9 sessions were defined for completion.

- We now refer to different definitions of completers used by other researchers and note in the Discussion that if we had used a higher threshold for completion it is likely that weight losses would have been greater in this group. We have changed the wording of completion to read "about half" of the sessions.

Results:

Tables 2, 3 and 4 – it would be helpful to include the 95% CI for the mean change in weight

- These have been added.

Similarly on page 14 it would be helpful to include 95% CIs around the mean weight change in phase 2 for people who lost weight in phase 1. The mean weight loss (95% CI) for those who entered phase 2, having not lost 5kg in phase 1 should also be presented.

- These have been added.

Page 16: To make the findings in relation to demographics comparable with other programmes I think this should describe the findings for 5% weight loss, rather than the 5kgs set by the GCWMS programme. Yes males lose more absolute weight, but it doesn't really differ when looking at % weight loss. Similarly the differences between young men and women disappear.

- We feel that keeping both measures is important as the 5kg weight loss is the target for the GCWMS

programme and needs therefore to be reported, while we also agree with the reviewer that the % loss is useful for comparison with other studies. One limitation of only using % is that, because our patients are heavier than those of many other studies, it represents a larger absolute weight loss and caution should be used in making direct comparisons.

In the discussion some mention of uptake and adherence would be useful. I know this was addressed in the Public Health Nutr paper, but it feels like an omission here. The reference for the Public Health Nutr paper is incorrect, it should be Public Health Nutrition 2012;15(1): 28-38.

- We have corrected this reference and mentioned uptake and adherence in the discussion as suggested.

Reviewer: Kiran Nanchahal
Senior Lecturer
London School of Hygiene & Tropical Medicine
UK

I do not have any conflict of interest

The Results section in the abstract reports that 78 patients were excluded but does not say why this was done. The Phases of the study are mentioned without saying what they are.

- We had explained that the 78 patients comprised 4 whose BMIs were lower than the threshold for the service of 30kg/m² and 74 wgi were directed to a specialised disordered eating group. We have added that this specialised group was qualitatively different from the main treatment group.

It is unclear what 'intention to treat' analysis means in the context of a prospective cohort study. Given the level of missing data, it may be more appropriate to use multiple imputation methods to counter any biases.

- We modified the sentence referring to "intention to treat" to read, "Primary analyses were on all patients who began treatment." Multiple imputation is usually used to fill in missing values where patients are present and have other information on which to impute their missing data. However, in this study, data are missing because patients did not attend and given the association between greater attendance and greater weight loss, it therefore would not be safe to assume that non-attenders' weights could be imputed from attenders' weights.

The references do not include some relevant studies e.g. DESMOND study results (Khunti et al BMJ 2012); Nanchahal et al BMJOpen 2012).

- We have added the reference to Nanchahal's paper but we feel that the DESMOND study, being specifically about diabetes mellitus and without baseline descriptive data on participants' BMIs, was not directly relevant to this manuscript.

The results should be presented with some measure of variability e.g 95% CIs, especially as a number of statements are made about differences between sub-groups in the interpretation of the results.

- We have added 95% CIs.

The paper reports results from the analysis of data on patients in NHS care. There is no statement on whether any consent or ethical approval was obtained (not sure if this is necessary in this case).

- We have added a statement on ethics permission.

Introduction

The third paragraph reports mean baseline BMI values for patients in other studies but does not address why this is important.

- We quote these figures so that when, in the Results, the mean baseline BMI of 43 is reported as "high", it is apparent that this is at least 26% higher than other UK studies.

Results

Men are reported to be significantly heavier than women - this is not remarkable so can be left out.

- We accept this point and have deleted the sentence.

There is a statement on p16 that a greater proportion of the heaviest patients lost 5kg or more but this should refer to the patients in the highest baseline BMI group according to the results in Table 3 (not the ≥ 150 kg weight group).

- We have corrected this error.

Table 2: Give definitions of Phases and Completers in footnotes.

- These have been added.

Discussion

1st para Men are reported as achieving greater weight loss than women despite there being fewer men participating - the number of participants is not the important factor here.

- We accept this point and have deleted the second part of the sentence.

3rd para, last sentence: Bariatric surgery has shown benefits for larger weight losses, not gains.

- We have corrected this error.