

National Institute for Health Research

Is social support associated with greater weight loss after bariatric surgery? A systematic review

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CRD summary

The authors concluded that attending support groups after bariatric surgery was associated with a greater degree of weight loss, but the causal relationship was not clear. There was very limited and poor quality evidence to support this conclusion and its reliability is uncertain.

Authors' objectives

To evaluate the association between postoperative support group attendance and weight loss in patients following bariatric surgery.

Searching

MEDLINE was searched from January 1988 to April 2009 for published studies in English. Search terms were reported. Reference lists of retrieved articles were scanned to identify further studies.

Study selection

Studies that evaluated the association between postoperative support group attendance and weight loss in patients over the age of 18 following bariatric surgery were eligible for inclusion. Studies with fewer than 10 participants were excluded.

Included studies were retrospective cohorts that contained (where reported) participants with a mean age range of 42 to 45 years and a baseline body mass index (BMI) in the range 42.6 to 52.8kg/m². Studies were mostly of women. Support group topics included nutrition, exercise, psychiatric counselling, weight loss and other issues. Most studies distinguished between participants who attended support groups and those who did not. One study reported that attendance was mandatory in order that patients were considered for bariatric surgery. Outcome measures included excess weight loss (%), actual weight loss (kg) and change in BMI.

Two reviewers selected the studies for inclusion.

Assessment of study quality

The authors did not report any validity assessment of the included studies.

Data extraction

Data were extracted on percentage excess weight loss, percentage BMI decrease, decrease in BMI points and (where possible) 95% confidence intervals (CI).

Two reviewers carried out data extraction.

Methods of synthesis

A narrative synthesis was presented. Differences in study characteristics were reported in tables and text.

Results of the review

Four retrospective cohort studies (n=264) were included in the review. Follow-up ranged from 12 to 27 months. Studies used different criteria to classify patients as being in support and non-support groups (criteria for support group included any attendance, at least 50% attendance and five or more attendances).

All four studies showed positive associations between support group attendance and weight loss. One study reported a % decrease in BMI of 42% for support versus 32% for no support groups. One study reported the percentage excess weight loss was 55.5 in support versus 47.1 in non-support groups. One study reported a BMI points decrease of 9.7 in support versus 8.1 in non-support groups. One study demonstrated a correlation between number of group meetings attended and the variance in weight loss.

Authors' conclusions

Attending support groups was associated with a greater degree of weight loss following bariatric surgery. The causal relationship was not clear.

CRD commentary

The review question was clear. Inclusion criteria were broad and attracted wide variation among the included studies. The search strategy was limited to one electronic database. There were no attempts to minimise publication and language biases. The review processes for study selection and data extraction appeared to include some attempts to minimise error and bias. There was no reported validity assessment and the included study designs suggested a low methodological standard. Study details were provided. There appeared to be some discrepancy in the results reported between tables and text.

There was very limited evidence to support the authors' conclusion. This and the search constraints and the poor quality of included studies make the reliability of the conclusion uncertain.

Implications of the review for practice and research

Practice: The authors did not state any implications for practice.

<u>Research</u>: The authors stated that prospective randomised or matched cohort intervention studies were needed to determine the key components of successful support groups and the number of sessions required to confer benefit.

Funding

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Bibliographic details

Livhits M, Mercado C, Yermilov I, Parikh JA, Dutson E, Mehran A, Ko CY, Shekelle PG, Gibbons MM. Is social support associated with greater weight loss after bariatric surgery? A systematic review Obesity Reviews 2011; 12(2): 142-148

PubMedID

20158617

Original Paper URL

 $\underline{\text{http://onlinelibrary.wiley.com/doi/10.1111/j.1467-789X.2010.00720.x/abstract}}$

Indexing Status

Subject indexing assigned by NLM

MACH

Adult; Bariatric Surgery; Female; Humans; Male; Middle Aged; Obesity, Morbid /psychology /surgery; Postoperative Period; Social Support; Treatment Outcome; Weight Loss /physiology

AccessionNumber

12011001459

Database entry date

28/09/2011

Record Status

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