Do intensive preoperative and postoperative behavioural interventions impact on health-related bariatric surgery outcomes? A systematic review

Marshall, Skye; Mackay, Hannah; Rich, Graeme; Isenring, Elisabeth

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Do intensive preoperative and postoperative behavioural interventions impact health-related bariatric surgery outcomes?

A systematic review and meta-analysis

Although pre- and postoperative support by a multidisciplinary team (MDT) is recommended as best practice, it is unknown if intensive behavioural interventions improve outcomes beyond standard MDT support.

**Methods**

Six databases were searched and 6,871 records screened for eligibility. Risk was assessed by Cochrane Risk of Bias tool, meta-analysis performed using RevMan, and confidence in the body of evidence for pooled outcomes appraised using GRADE.

**Findings**

There were a total of n=953 participants (mean age 33-46 years; 63-85% female). Risk of bias was unclear to high in all studies.

**Interventional MDT characteristics**

- **Lifestyle & nutrition interventions**
  - n=4 studies
  - 100% • 100%
- **Psychology interventions**
  - n=5 studies
  - 100% • 80%

**Intensive nutrition, lifestyle, and psychology focused interventions**

- **Continued past or commenced at 6-months post-op**
- **Greater weight loss (7.8% [95%CI: 2.9, 12.6]) compared to those that in usual care. Interventions which concluded prior to 6-months post-op had no effect on weight loss compared to usual care (GRADE: very low confidence in estimated effect).**

**Intensive psychology focused interventions decreased depressive symptoms compared to usual care (GRADE: very low confidence in estimated effect).**

**Implications for practice**

Pre- and postoperative MDT support of bariatric surgery is essential to ensure patient safety; however, intensive behavioural interventions of any type appear to be effective only if they continue past or commence at 6-months post-op. Confidence in the estimated effects are very low due to lack of blinding in studies and a poor of precision of the pooled estimates; further research will strengthen confidence in the body of evidence.