

INPLASY

Optimizing Post-Bariatric Surgery Recovery: The Role of Physiotherapy and Nutrition in an Integrated Care Approach – A Narrative Review

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Corresponding author:

Payal Jha

jhapayal111@gmail.com

Author Affiliation:

Galgotias university.

Jha, P; Verma, R.

ADMINISTRATIVE INFORMATION

Support - Self financed.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 28 December 2024 and was last updated on 28 December 2024.

INTRODUCTION

Review question / Objective Research Question: The review aims to evaluate the effectiveness of integrated approach {physiotherapy & nutrition} in bariatric surgery patients using the PICO framework:

Population (P): Post bariatric surgery patients

Intervention (I): aerobic exercise, resistance training mobility, nutrition interventions

Comparison (C): Not specific

• Outcome (O): physical function: measured using tools like 6-minute walk test and muscle strength assessment.

• quality of life: assessed using validated questionnaires such as the SF-36.

• psychological wellbeing - evaluated using scales like beck depression inventory.

• nutritional status; monitored through dietary assessment and blood tests for nutrient deficiencies

Objectives

1. To examine the role of physiotherapy in improving functional mobility, physical strength, and reducing post-operative complications following bariatric surgery.

2. To assess the impact of tailored nutritional interventions on enhancing recovery, preventing malnutrition, and supporting long-term weight management in post-bariatric surgery patients.

3. To evaluate the synergistic effects of combining physiotherapy and nutritional strategies on promoting faster recovery, better quality of life, and overall patient well-being.

Rationale Despite the established benefits of bariatric surgery, optimizing postoperative recovery remains a complex challenge. Existing research underscores the importance of a multidisciplinary approach, yet gaps persist in how physiotherapy can specifically enhance recovery outcomes.

Condition being studied Role of Physiotherapy and Nutrition in Post Operative Bariatric Surgery.

METHODS

Search strategy Keywords: Bariartic surgery , post operative recovery , physiotherapy, exercise intervention , nutrition .

Databases : • Google Scholar

- NCBI (National Centre for Biotechnology Information)
- PubMed
- SCI-Hub
- Cochrane Library.

Participant or population Obese Patient with Post Bariatric Surgery.

Intervention Review Study.

Comparator NA.

Study designs to be included Narrative review.

Eligibility criteria

Inclusion Criteria:

- Articles published in English
- Articles published between January 2013 and March 2023
- Free Full Text articles available for comprehensive review

Exclusion Criteria:

- Duplicated articles found in multiple databases
- Articles in languages other than English
- Articles not published between January 2013 and March 2023
- Articles without full text availability, ensuring access to complete data for evaluation.

Information sources

Databases : • Google Scholar

- NCBI (National Centre for Biotechnology Information)
- PubMed
- SCI-Hub
- Cochrane Library.

Main outcome(s)

Outcome:

physical function: measured using tools like 6-minute walk test and muscle strength assessment.
 psychological wellbeing - evaluated using scales like beck depression inventory.
 nutritional status; - monitored through dietary assessment and blood tests for nutrient deficiencies.

Additional outcome(s) Quality of life: assessed using validated questionnaires such as the SF-36.

Data management Data Extraction to extract important information from the selected articles
 Data Storage
 Data Categorization.

Quality assessment / Risk of bias analysis Pedro Scoring of articles.

Strategy of data synthesis The results will be synthesized narratively, and where possible, a meta-analysis would be performed to provide pooled estimates of the effects of Physiotherapy and Nutrition in Post Bariatric Surgery.

Subgroup analysis NA.

Sensitivity analysis The integration of nutritional guidance, psychological support, and physical activity is essential for optimizing the outcomes of bariatric surgery.

Language restriction Articles published in English.

Country(ies) involved India.

Other relevant information NA.

Keywords Bariartic surgery , post operative recovery , physiotherapy, exercise intervention , nutrition.

Dissemination plans Article Publication, Community Services.

Contributions of each author

Author 1 - Payal Jha - Data Scrutiny and Writing.

Email: jhapayal111@gmail.com

Author 2 - Rituraj Verma - Guidance.

Email: rituraj.verma@galogtiasuniversity.edu.in