






**Benefits, adverse effects, and the role of nursing professionals in bariatric surgery****Beneficios, efectos negativos y rol del profesional de enfermería en la cirugía bariátrica****Benefícios, efeitos negativos e papel do profissional de enfermagem na cirurgia bariátrica**

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ABSTRACT

Objective: To describe evidence of the benefits, adverse effects, and the role of nursing professionals in bariatric surgery. **Introduction:** Obesity has reached concerning levels in Chile, posing a public health challenge. In this context, bariatric surgery emerges as a crucial intervention for patients with obesity who do not achieve results with conventional approaches. While notable benefits are evident in individuals opting for this surgical procedure, there are also risks and adverse effects on the physical, psychological, and social aspects. The initially positive relationship between bariatric surgery and quality of life can become unfavorable due to lack of adherence to postoperative recommendations. Nursing professionals play an important role in preparing and monitoring patients undergoing bariatric surgery, providing education and emotional support. Exhaustive pre- and postoperative assessment is crucial, with a significant contribution of these professionals in the comprehensive care of these patients. **Conclusions:** Bariatric surgery should not be considered as an isolated solution but as part of a multidisciplinary approach that includes lifestyle changes. It is essential to promote collaboration among healthcare professionals, highlighting the significant role of nursing professionals in improving the outcomes and quality of life of patients with obesity undergoing this intervention.

Keywords: Obesity; Bariatric Surgery; Nursing Staff; Quality of Life.

RESUMEN

Objetivo: Describir evidencias de los beneficios, efectos negativos y rol del profesional de enfermería en la cirugía bariátrica. **Desarrollo:** La obesidad ha alcanzado niveles preocupantes en Chile, siendo un desafío de salud pública. La cirugía bariátrica emerge como una intervención crucial para pacientes con obesidad que no obtienen resultados con enfoques convencionales. Aunque se evidencian beneficios notables en personas que optan por este procedimiento quirúrgico, también existen riesgos y efectos negativos en aspectos físicos, psicológicos y sociales. La relación inicialmente positiva entre la cirugía bariátrica y la calidad de vida puede volverse desfavorable debido a la falta de adherencia a recomendaciones postoperatorias. Los profesionales de enfermería juegan un importante rol en la preparación y seguimiento de los pacientes sometidos a cirugía bariátrica, proporcionando educación y apoyo emocional. La evaluación exhaustiva pre y postoperatoria es crucial, reconociendo la contribución de estos profesionales en el cuidado integral de estos pacientes. **Conclusiones:** La cirugía bariátrica no debe considerarse como una solución aislada, sino como parte de un enfoque multidisciplinario que incluya cambios en el estilo de vida. Es fundamental promover la colaboración entre profesionales de la salud, destacando el rol significativo de los profesionales de enfermería en mejorar los resultados y la calidad de vida de pacientes con obesidad sometidos a esta intervención.

Palabras claves: Obesidad; Cirugía Bariátrica; Profesional de Enfermería; Calidad de Vida.

RESUMO

Objetivo: Descrever evidências dos benefícios, efeitos negativos e atuação do profissional de enfermagem na cirurgia bariátrica. **Desenvolvimento:** A obesidade atingiu níveis preocupantes no Chile, sendo um desafio de saúde pública. A cirurgia bariátrica está emergindo como uma intervenção crucial para pacientes com obesidade que não alcançam resultados com abordagens convencionais. Embora benefícios notáveis sejam evidentes nas pessoas que optam por esse procedimento cirúrgico, também existem riscos e efeitos negativos nos aspectos físicos, psicológicos e sociais. A relação inicialmente positiva entre cirurgia bariátrica e qualidade de vida pode tornar-se desfavorável pela falta de adesão às recomendações pós-operatórias. Os profissionais de enfermagem desempenham papel importante no preparo e acompanhamento dos pacientes submetidos à cirurgia bariátrica, proporcionando educação e apoio emocional. A avaliação exaustiva pré e pós-operatória é fundamental, reconhecendo a contribuição desses profissionais no cuidado integral desses pacientes. **Conclusões:** A cirurgia bariátrica não deve ser considerada como uma solução isolada, mas sim como parte de uma abordagem multidisciplinar que inclui mudanças no estilo de vida. É fundamental promover a colaboração entre os profissionais de saúde, destacando o papel significativo dos profissionais de enfermagem na melhoria dos resultados e da qualidade de vida dos pacientes com obesidade submetidos a esta intervenção.

Palavras-chave: Obesidade; Cirurgia Bariátrica; Equipe de Enfermagem; Qualidade de Vida.

INTRODUCTION

Since the 1990s, obesity has become a priority concern in the field of public health, with statistics in Chile showing significant impact of this condition. According to the latest National Health Survey (2016-2017), 31.4% of the population presented non-morbid obesity, and 3.4% morbid obesity, with no significant differences by sex for these categories.¹ For these individuals, conventional weight loss approaches have proven ineffective and thus have resulted in repeated failures.^{2,3}

In this context, bariatric surgery has emerged as a crucial intervention in the fight against obesity and associated chronic diseases.⁴ This procedure has become a valuable alternative for patients who have not achieved success through lifestyle or dietary changes.⁵ However, the decision to undergo this surgical intervention requires an understanding of the risks and benefits, as well as working with a specialized medical team. Each patient must be assessed individually in order to determine the optimal approach for them.

Quality of life post-bariatric surgery is reflected in notable changes across various domains, including physical, emotional, social, and mental functions. The benefits are substantial, and patients often experience significant improvements in health and well-being. However, it is crucial to also address the potential negative effects that may arise following the intervention.⁶ Information and decision-making should be integral to the process,³ as each patient is unique, and outcomes may vary based on physical, emotional, and social factors. A deep understanding of these aspects will enable individuals to make informed decisions about the most appropriate treatment for their particular situation.⁷

In this context, Nursing stands out as a fundamental pillar in the comprehensive approach to obesity and bariatric surgery.⁸ Following Orem's theory,⁹ which advocates a holistic approach to the individual's mental and physical health, nursing professionals educate patients on the importance of self-care and work on their preparation and follow-up before and after surgical intervention, respectively. Their commitment to educating patients on lifestyle changes, postoperative diet, and managing potential complications is noteworthy and contributes to the success of bariatric surgery.^{10,11} Ultimately, the close collaboration between nursing professionals and other members of the medical team ensures comprehensive care that addresses not only the physical but also the emotional and social aspects of the patient's experience.

The objective of this essay is to describe evidence of the benefits and adverse effects of bariatric surgery, as well as the role of nursing professionals in the procedure.

BODY

Benefits of Bariatric Surgery in Obesity and Concomitant Conditions

Bariatric surgery, established as the most effective intervention for sustainable weight loss, goes beyond mere visible benefits and serves as a transformative catalyst for the overall health of patients. Extensive research offers evidence of not only the efficacy but also the comprehensiveness of this intervention, surpassing the efficiency of non-surgical alternatives, such as voluntary lifestyle changes.¹²

The close connection between diabetes and obesity further emphasizes the relevance of bariatric surgery. Unlike conventional approaches, which rarely eradicate diabetes mellitus, this surgical intervention shows significant weight reduction and short-term remission rates ranging from 60% to 90% of patients. In addition to these benefits, bariatric surgery offers long-term effects by maintaining these improvements and reducing associated cardiovascular complications.⁵

It is noteworthy that diabetes rapidly disappears in approximately 80% of patients who have undergone gastric bypass surgery. This effect, which often allows for the discontinuation of antidiabetic medications, highlights the unique ability of bariatric surgery to effectively address and reverse chronic metabolic diseases.³

Beyond weight loss, bariatric surgery has proven to be a beacon of hope for those facing psychosocial issues associated with obesity. Some studies show that the intervention leads to short-term improvements in mental health, reducing anxiety and body image distortions, and enhancing the social adjustment of patients.^{5,7}

In summary, bariatric surgery offers visible results within a few months and is a comprehensive solution for improving long-term physical and mental health. Its ability to address the complexities related to obesity and its comorbidities positions it as a valuable and effective tool in the array of available treatments.¹³

Possible Undesired Effects of Bariatric Surgery on Health

Despite the benefits reported by patients undergoing bariatric surgery, there is a debate regarding how much said benefits persist. Some authors argue that, over time, the quality of life of bariatric patients tends to decrease, reaching pre-surgery values.^{7,14} Furthermore, a study has revealed that scores related to quality of life may progressively decline after surgery. This is attributed to decreased adherence to post-surgery recommendations after the first year, such as changes in diet and lifestyle.⁷ The postoperative period and the support of a multidisciplinary team (medical professionals, nursing professionals, and psychologists, among others) are crucial. The team should work collaboratively to address the diverse needs of the patient and encourage sustained adherence to treatment, to ensure lasting effects over time.

In the first few months post-surgery, there is a significant reduction in calorie and macronutrient intake in patients undergoing gastric bypass and sleeve gastrectomy. This dietary change is associated with hair loss, deficient wound healing, and the risk of protein-calorie malnutrition.¹⁵ Although these effects may not seem significant in the short term, it is essential to consider the potentially serious long-term consequences that could affect the patient's quality of life.

Postoperative complications are classified as acute and long-term. Acute complications, affecting approximately 10% of patients, may include hemorrhages, obstructions, and arrhythmias, depending on the type of procedure, risk level, age, and patient condition. Long-term complications encompass neuropathies due to nutritional deficiencies and/or anastomotic stenoses, which can be unsettling for those less familiar with bariatric surgery.³

This procedure can also have a significant impact on the psychological domain. The presence of emotional eating, anxiety, and depression can affect weight loss.¹⁶ A study suggests that some patients may develop mental health disorders, including an increased propensity for suicidal ideation, with rates ranging from 8.8% to 37.5%.⁷ Additionally, patients may experience eating disorders, emotional stress, changes in body image, and adjustments in their relationship with food.⁷ The importance of psychological follow-up both before and after surgery is emphasized to reduce risks, as patients face drastic changes in their lifestyles.

Nutritional deficiencies are also a common post-surgery complication, possibly due to the anatomical alterations made to the digestive system. This can result in reduced food intake and subsequently deficiencies in the absorption of essential nutrients and vitamins.¹⁷ A phenomenon associated with these deficiencies is Dumping Syndrome, where patients experience a range of symptoms due to rapid weight loss and hormonal imbalances. Psychological issues, such as changes in body perception and self-esteem, can also contribute to the syndrome, affecting eating behaviors and the ability to manage stress.^{16,18}

The Importance of Nursing Staff in the Comprehensive Success of Bariatric Surgery

Nursing plays an essential and distinctive role in the success of bariatric surgery, acting as a key actor in the preparation, execution, and follow-up of the intervention. From the beginning, nursing professionals fulfill a crucial role as educators, providing patients with detailed and approachable information about the procedures, the required lifestyle changes, and postoperative expectations.¹¹

An example of the aforementioned is that, during the preoperative process, nursing professionals are responsible for explaining the characteristics of the intervention to the patient, to determine if the patient meets the requirements for surgery. They also measure weight and height, explain the results of tests carried out up to that point, and indicate to the patient which tests need to be conducted if all required information is not available before the surgery. They also highlight the importance of addressing any preexisting health issues before bariatric surgery, especially in obese patients, explaining the potential disorders this condition could result in in the future.

Additionally, nurses educate patients on the potential impact of bariatric surgery on their lives, emphasizing that it can be an effective solution as long as there is commitment from the person undergoing the intervention. Emphasis is placed on adopting healthy lifestyles, including a balanced diet, regular physical exercise, and ongoing psychological support. This educational approach provided by nursing professionals significantly contributes to the physical and mental preparation of patients, laying the foundation for a successful recovery.¹⁹

During bariatric surgery, nursing professionals play an essential role in coordination and direct assistance, ensuring a safe environment and supporting the surgical team.²⁰

An example of this is their involvement in patient preparation, guiding them to the operating room. They explain the procedure in detail, offer emotional support, and take the patient through the phases of the process, ensuring that all preoperative requirements, such as fasting, tests, and legal documentation, are met, and accompanying them until they are delivered to the operating room. Different nursing professionals receive the patient at this stage and actively participate in the procedure, providing support to the surgeon and caring for the patient's integrity. For instance, they monitor vital signs throughout surgery and assist the surgical team as needed, always making sure that the person's integrity remains intact.²⁰

In the postoperative phase, the influence of nursing professionals is amplified by providing personalized care, education, and constant monitoring of the patient, contributing to the success of the surgical intervention.²⁰

An example of the work of nurses in the postoperative stage is assisting the patient to gradually return to oral feeding, starting from zero intake and performing all procedures related to the installation and care of peripheral venous catheters. Additionally, nursing professionals are in charge of administering medications. They provide education on dietary changes, promoting the adoption of healthy lifestyles such as a balanced diet. It is crucial to highlight wound care and the follow-up of the patient after hospital discharge, focusing on their gradual return to physical activity and a normal diet, and allowing effective wound healing.²⁰

After this period, nurses assume the responsibility of conducting long-term follow-ups, regularly monitoring weight, providing support and motivation to participate in psychological therapies, and encouraging the practice of regular physical exercise as much as possible.¹⁰

Professional nurses play a critical role in all stages of the bariatric surgery process, from preoperative preparation to postoperative care and long-term follow-up. Their contribution is essential to ensure a safe environment and guarantee the overall success of the intervention. In addition to providing personalized care and education, these professionals offer critical emotional support that facilitates positive adaptation to lifestyle changes and significantly contributes to improving the patient's long-term quality of life.

One limitation that hinders a thorough understanding of the role of nursing professionals in the context of bariatric surgery is the lack of scientific literature addressing these experiences from the perspective of this profession. It is crucial to highlight the relevance of sharing these experiences to

broaden knowledge about the positive and negative impacts of this surgery on patients' health, focusing on comprehensive care that promotes the overall well-being of the individual beyond specific objectives such as weight loss.

CONCLUSIONS

The relationship between bariatric surgery and health-related quality of life shows an unfavorable tendency. This is supported by evidence that shows adverse effects of the procedure such as vitamin deficiencies, psychological issues like depression, suicide attempts, and body image disorders.

The probability of returning to the preoperative state is significant, which is attributed in most cases to the lack of patient commitment and the absence of a comprehensive multidisciplinary approach that ensures the long-term success of the surgical intervention.

In this context, nursing professionals play a fundamental role in supporting patients both before and after surgery, educating them on the importance of committing to healthy lifestyles and raising awareness of factors that can counteract the positive effects of the procedure. A thorough evaluation is required both before and after surgery to ensure its effectiveness, and nursing professionals should actively participate in this follow-up.

It is important to note that bariatric surgery should not be considered a replacement for comprehensive treatment that promotes long-term protective factors, and the likelihood of failure is high without including physical exercise and a balanced diet.

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