QUALITY OF LIFE OF PATIENTS IN THE PERIOERATIVE AND POSTOPERATIVE PERIOD AFTER SURGICAL INTERVENTIONS

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Abstract: Surgical interventions represent significant physical and psychological stress for patients and can significantly affect the quality of life in the perioperative and postoperative period. Quality of life includes the physical, psychological, social and functional state of the patient, and his recovery depends on numerous factors including the type of surgical procedure, the presence of complications, the quality of health care and psychological support. A modern approach to treatment involves holistic care focused on the needs of the patient with the aim of improving treatment outcomes and faster recovery.
Aim of the article are to present the importance of assessing and improving the quality of life of patients in the perioperative and postoperative period after surgical interventions, with special emphasis on the role of the nurse - technician in the process of health care and rehabilitation.
The paper is designed as a review paper based on the analysis of available professional and scientific literature in the field of surgery, nursing and perioperative health care. Relevant databases and professional articles published in the last ten years related to the quality of life of surgical patients were used.
Literature analysis shows that surgical interventions significantly affect the physical functioning, emotional state and social activities of patients. The most common problems in the postoperative period include pain, reduced mobility, anxiety, fear of complications and difficulty performing daily activities. Early education, adequate pain control, continuous health care and psychological support contribute to improving the quality of life and faster recovery of the patient. The nurse technician has a key role in assessing the patient's needs, implementing health care, education and providing emotional support.
The quality of life of a patient after surgical interventions is an important indicator of the success of treatment and the quality of health care. A multidisciplinary approach, continuous assessment of the patient's needs and the active involvement of the nurse technician in perioperative and postoperative care significantly contribute to improving the patient's physical and psychological recovery. An individualized approach and quality patient education play a significant role in improving the overall quality of life after surgical treatment.
Keywords: quality of life, perioperative care, postoperative care, surgical interventions, nurse, health care.

1. INTRODUCTION

Before any diagnostic or therapeutic procedure that requires anesthesia, the patient should be referred for an anesthesia examination. An anesthesia examination is performed with several goals: evaluation of the patient's history, physical status, therapy and findings, assessment of the stability of chronic diseases, assessment of the patient's risk for surgery, assessment of the need for preoperative and perioperative optimization, and patient education on anesthesia procedures and obtaining valid informed consent. (Kivark, 2021, Pavčić, 2020) Many models of perioperative risk assessment have been developed. The most widely used is the stratification model of risk assessment developed by the American Society of Anesthesiologists, the so-called ASA classification. (Kivark, 2021) Patients are divided into 4 classes: I - healthy patient, II - patient with minor chronic disease, III - patient with significant or uncontrolled chronic disease, IV - patient with a disease that carries a constant risk of death. V and VI - represent an emergency patient whose life is immediately threatened by a surgical disease and a brain-dead organ donor. Each of the ASA classes is associated with an approximate proportion of complications and mortality. Patients with ASA I status have a 2% risk of complications and a 0.02% risk of perioperative mortality. ASA II category - also the category with the most patients - is associated with a 5% risk of complications and a 0.14% risk of mortality. ASA III and ASA IV categories carry significantly higher risks of complications and perioperative mortality: ASA III 14% complications and 1.41% mortality, ASA IV 37% complications and 11.14% mortality. (Horvath, 2021).

Optimization of respiratory status - pulmonary comorbidities in pulmonary patients, in the preoperative phase, a more detailed physical status of the lungs is recommended with an adequate history of daily fitness. (Chandler, 2020)

Smoking is a risk factor for the development of squamous cell carcinomas, and is also associated with an increased risk of intraoperative and postoperative complications such as bronchospasm, difficult ventilation, wound infection and delayed wound healing. (Smaily, 2021)

The American Society for Perioperative Assessment and Quality Improvement (SPAQI) in its 2020 Consensus Statement states that the total number of smokers who undergo surgery annually is approximately 60 million. (Wong, 2020)

Optimizing Nutritional Status, the 2021 European Society for Parenteral and Enteral Nutrition (ESPEN) guidelines for perioperative clinical nutrition cite the results of meta-analyses that show a reduced rate of postoperative complications in patients in whom nutritional status is corrected. (Weimann, 2021)

Patients diagnosed with diabetes spend an average of 45% longer in the hospital for the same procedure compared to non-diabetics. (Vogt, 2021) ESAIC guidelines, and other authors in recent works suggest glycated hemoglobin, HbA1c as a guide to long-term diabetes control. (Vogt, 2021)

Perioperative complications include reduced functional reserve, prolongation of surgical procedures due to difficult access to the surgical field, intraoperative and postoperative glycaemic fluctuations. (Plassmeier, 2021)

Postoperative nausea and vomiting (PONV) is a common and unpleasant complication of surgery and anesthesia. A meta-analysis of 23 studies showed a prevalence of PONV between 16.8% and 31.4%, with the highest prevalence in Europe within the first 24 hours postoperatively. (Amirshahi, 2020)

Patients who consume alcohol daily should undergo preoperative alcohol withdrawal 4–8 weeks before the planned surgery. (Wainwright, 2020, Joliat, 2022, Stenberg, 2021)

Delirium is defined as a cognitive disorder of acute impairment of attention and consciousness of fluctuating intensity. Postoperative delirium most often occurs between the 2nd and 5th postoperative day, and prolongs hospitalization by an average of 2–3 days. (Volz, 2022)

Despite numerous advances in patient rehabilitation and recovery since the introduction of the Enhanced Recovery After Surgery (ERAS) protocol, the incidence of postoperative pulmonary complications (PPC) remains high. Prolonged postoperative immobile lying down contributes to the development of PPCs. (Balvardi, 2021).

2. AIM

To demonstrate the importance of assessing and improving the quality of life of patients in the perioperative and postoperative period after surgical interventions, with special emphasis on the role of the nurse technician in the process of healthcare and rehabilitation.

3. MATERIAL AND METHODS

The paper is designed as a review paper based on the analysis of available professional and scientific literature in the field of surgery, nursing and perioperative healthcare. Relevant databases and professional articles published in the last ten years related to the quality of life of surgical patients were used.

4. RESULTS

Quality of life is one of the most important indicators of the success of surgical treatment and postoperative recovery of a patient. Numerous studies indicate that various surgical procedures, as well as ongoing health care, significantly affect the physical, psychological and social functioning of patients after surgery.

Table 1: Research Studies

Heniford, B.T., et al. (2008)	Comparison of generic versus specific quality-of-life scales for mesh hernia repairs.
Kivela, A.J., et al. (2021)	Long-Term Health-Related QUALITY OF Life (HRQoL) After Redo-Fundoplication.
Aahlin, E.K., et al. (2017)	Health-Related Quality of Life, Cachexia and Overall Survival After Major Upper Abdominal Surgery.

Source: PubMed, Google Scholar, Science Direct

5. DISCUSSION

A significant number of studies have been conducted worldwide to assess the health-related quality of life of patients undergoing abdominal surgery.

Heniford et al. (2008) assessed the quality of life of patients who underwent mesh surgery and found that quality of life improved in all domains. (Heniford, 2008)
Kivel et al. (2021) in their study presented long-term subjective outcomes after surgery for failed fundoplication. They concluded that reoperation for failed antireflux surgery is a safe procedure in experienced hands, and that reduced quality of life is associated with recurrent comorbidities. (Kivel, 2021)
Patients with malignant tumors of the upper abdomen often suffer from cachexia, which manifests itself with postoperative weight loss and sarcopenia, which can also affect quality of life. Aahlin et al. (2017) conducted a study on how health-related quality of life is associated with long-term survival after major upper abdominal surgery. They found that health-related quality of life and survival were particularly strong for physical health-related quality of life after surgery. (Aahlin, 2017)

6. CONCLUSION

Poor functional reserve in patients is associated with poorer postoperative outcomes. Preoperative and perioperative optimization precondition patients for surgery and contribute to the reduction of perioperative complications, morbidity, and mortality. (Smith, 2020) Given that no adverse effects of prehabilitation have been reported, prehabilitation and optimization are recommended. (Carli, 2020, McIsaac, 2022) Currently, the most complete protocols for preoperative and perioperative optimization are contained in the Enhanced Recovery After Surgery (ERAS) guidelines individualized for individual branches of surgery. (Smith, 2020) Implementation of a preoperative and perioperative optimization system requires multidisciplinary collaboration and patient education. Implementation results in many centers worldwide show benefits for patients - shorter hospitalization, reduced number of complications, and reduced mortality. (Smith, 2020, Noba, 2020, Humeidan, 2021) Many centers report problems with multidisciplinary collaboration and patient education. (Smith, 2020) The focus of further work on preoperative and perioperative optimization should be on standardizing protocols and encouraging multidisciplinary collaboration. (Humeidan, 2021)
The quality of life of a patient after surgical interventions is an important indicator of the success of treatment and the quality of health care. A multidisciplinary approach, continuous assessment of patient needs, and active involvement of the nurse-technician in perioperative and postoperative care significantly contribute to improving the physical and psychological recovery of the patient. An individualized approach and quality patient education play a significant role in improving the overall quality of life after surgical treatment.

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