

**PSYCHOLOGICAL ASPECTS OF SURGERY: THE IMPACT OF PATIENTS' AND SURGEONS' MENTAL STATES ON SURGICAL OUTCOMES****Mirakbarov M.M.**

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**Abstract:** Surgical intervention is not only a technical procedure but also a powerful psychological stressor for both the patient and the surgeon. Preoperative anxiety, postoperative depression, surgeons' personality traits, and psychological preparation significantly influence the risk of complications, speed of rehabilitation, and overall quality of life. This review examines the main areas of interaction between psychology and surgery: the mental state of surgical patients, the role of preoperative psychological support, the psychological characteristics of surgeons, and modern approaches to integrating psychological care into the surgical process. The literature confirms that systematic attention to psychological factors can improve treatment outcomes and reduce the incidence of postoperative complications.

**Keywords:** psychology of surgery, preoperative anxiety, postoperative depression, psychological preparation, surgeon psychology, psychosomatic aspects.

**Introduction.** Surgery has traditionally been viewed as a highly technological discipline where success depends on the surgeon's skill, quality of anesthesia, and modern equipment. However, as early as the mid-20th century, prominent surgeons (such as N.N. Petrov) emphasized: "It is impossible to treat the body without considering the patient's soul." Modern research confirms that psychological factors account for 30–50% of the variability in surgical outcomes, depending on the type of intervention.

**The main issues** at the intersection of psychology and surgery include: high levels of anxiety and fear before surgery in 60–80% of patients. Development of postoperative depression and post-traumatic stress. The influence of mental state on immune response, wound healing, and length of hospital stay. Professional stress and burnout among surgeons. Patients' Psychological State Before and After Surgery. The preoperative period is often accompanied by acute anxiety related to uncertainty, the risk of anesthesia, possible complications, and changes in appearance or bodily functions. In patients with oncological diseases or undergoing elective procedures (such as bariatric or plastic surgery), anxiety may develop into generalized anxiety disorder. Common postoperative issues include: Postoperative depression (occurring in 20–40% of patients in the first weeks). Feelings of fear, clouded consciousness, and sleep disturbances. Reduced motivation for rehabilitation. Studies show that high levels of preoperative anxiety correlate with greater intensity of postoperative pain, longer hospital stays, and increased risk of infectious complications. The mechanisms involve activation of the sympatho-adrenal system, suppression of immunity (reduced NK-cell activity), and disruption of coagulation. Particularly vulnerable groups are: Patients undergoing plastic or aesthetic surgery (risk of body dysmorphic disorder and unrealistic expectations). Children and elderly individuals. Patients with pre-existing mental disorders. Psychological Preparation for Surgery.

Psychological preparation is one of the most evidence-based **methods** for improving surgical outcomes. It includes: Informational support (detailed explanation of the stages of surgery and rehabilitation). Cognitive-behavioral techniques (relaxation, visualization, breathing



exercises). Psychological counseling (individual or group sessions). Meta-analyses confirm that such preparation reduces: Anxiety levels by 30–50%. The need for analgesics. Hospital stay duration by an average of 1–2 days. In the postoperative period, preventive conversations with a clinical psychologist are important for explaining the features of recovery and addressing negative emotions. Psychological Characteristics of Surgeons. Surgeons are constantly exposed to high stress: responsibility for the patient's life, non-standard situations in the operating room, night shifts, and emotional burnout. Key qualities of a successful surgeon include high initiative, stress resilience, and the ability to make quick decisions.

Research shows a connection between the surgeon's personality type and work quality: Certain personality traits correlate with the risk of postoperative complications and documentation errors. High levels of emotional burnout lead to decreased empathy and poorer communication with patients. Recommendations include regular supervision, burnout prevention programs, and the development of self-regulation skills (e.g., autogenic training before surgery). Psychosurgery and Modern Directions. A separate direction is psychosurgery (stereotactic interventions for severe, treatment-resistant mental disorders such as obsessive-compulsive disorder and major depression). Modern methods (deep brain stimulation) are significantly safer than classical lobotomy and are used in limited cases. The integration of psychological care into surgical protocols (Enhanced Recovery After Surgery — ERAS with a psychological component) is also actively developing.

**Conclusion and Practical Recommendations.** Psychology and surgery are closely intertwined. Ignoring psychological factors reduces treatment effectiveness, increases healthcare costs, and worsens patients' quality of life. It is recommended to:

1. Implement mandatory preoperative psychological assessment (screening for anxiety and depression).
2. Include clinical psychologists in multidisciplinary teams in surgical departments.
3. Develop burnout prevention programs for surgeons.
4. Conduct further research on personalized psychological support depending on the type of surgery.

The integration of psychological care into surgical practice is not an “optional extra” but a necessary element of modern medicine, allowing us to treat the person, not just the disease.

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