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## The Role of Nurses in Pre-Operative Care for Cosmetic Surgery Patients

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### Abstract:

Nurses play a crucial role in the pre-operative care of cosmetic surgery patients, functioning as both caregivers and educators. In this preparatory phase, nurses assess patients' medical histories, conduct thorough physical examinations, and identify any potential risks associated with the procedure. They are instrumental in educating patients on what to expect during surgery and the recovery process, helping to alleviate anxiety and ensuring that patients are well-informed about their options. By providing tailored guidance and answering questions, nurses enhance the patient's understanding of the surgical procedures, promoting informed consent and fostering a sense of security before the operation. Moreover, nurses are vital in preparing the surgical environment and coordinating with the surgical team to ensure everything is in place for a successful procedure. They also monitor patients for any underlying psychological concerns that could impact the outcome, emphasizing the importance of mental well-being in cosmetic surgery. Additionally, pre-operative nurses may provide resources for support should the patient require psychological counseling or conflict resolution regarding their expectations. By fostering a collaborative and supportive atmosphere, nurses help to create a safer, more positive surgical experience for cosmetic surgery patients, ultimately contributing to better surgical outcomes and patient satisfaction.

### Keywords:

Nurses, cosmetic surgery, pre-operative care, patient education, surgical preparation, risk assessment, informed consent, psychological support, collaboration, patient satisfaction.

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### Introduction:

In the contemporary landscape of healthcare, the role of nurses has expanded significantly beyond their traditional functions, particularly in specialized areas such as cosmetic surgery. With the rapid growth of the cosmetic surgery industry, driven by

societal trends, increasing awareness of aesthetic possibilities, and advancements in surgical techniques, the demand for competent and skilled nursing professionals in pre-operative care has never been more critical. Pre-operative care is a multifaceted process that requires thorough assessment, patient education, emotional support,

and effective communication, all of which are foundational elements of nursing practice. Nurses play a crucial role in ensuring that patients are well-prepared for their surgical experience, which can ultimately influence surgical outcomes and patient satisfaction [1].

As the initial points of contact for patients seeking cosmetic procedures, nurses are uniquely positioned to gather critical information that shapes the patient's surgical journey. The pre-operative phase often begins with a comprehensive health assessment, where nurses evaluate the patient's medical history, identify any potential risk factors, and conduct necessary physical examinations. This information is not only vital for the surgical team but is also essential in guiding patients toward realistic expectations regarding their desired procedures. Any underlying health issues or contraindications that may impact the surgical outcome must be meticulously identified and communicated to the surgeon. By performing thorough assessments, nurses can help mitigate risks and ultimately enhance patient safety [2].

Moreover, patient education is another pivotal aspect of pre-operative care that nurses are well-equipped to handle. Many patients pursuing cosmetic surgery may possess varying degrees of understanding about the procedures, anesthesia involved, recovery timelines, and potential complications. The responsibility of nurses extends to educating patients about these elements, ensuring they are informed participants in their care. Effective education encompasses discussions about pre-operative preparations, such as dietary restrictions, smoking cessation, and medication management, which all play critical roles in optimizing surgical outcomes. This educational component not only empowers patients but also alleviates anxiety and fosters a sense of control over their surgical experience [3].

The emotional and psychological dimensions involved in cosmetic surgery cannot be overlooked, as they significantly impact patient satisfaction and post-operative outcomes. Nurses serve as advocates and empathetic listeners, providing emotional support during this transformative period. Many cosmetic surgery patients harbor insecurities and complex feelings concerning their body image, and the journey to surgical intervention can be fraught with apprehension. Addressing these concerns

requires a delicate balance of sensitivity and professionalism. Nurses are trained to recognize signs of emotional distress and can engage patients in discussions that help clarify their motivations for seeking surgery. By actively listening and offering reassurance, nurses foster a therapeutic environment that empowers patients to voice their concerns, thereby promoting a positive pre-operative experience [4].

Additionally, nurses play a fundamental role in coordinating care across multidisciplinary teams. Pre-operative care for cosmetic surgery patients often involves collaboration among various healthcare professionals, including surgeons, anesthesiologists, and psychologists. Nurses act as the linchpins, facilitating communication among team members to ensure a seamless flow of information. This role is particularly crucial when addressing patient concerns that may require input from different specialists, such as psychological assessments for patients seeking certain aesthetic interventions. By bridging the gap between patients and the surgical team, nurses help create a cohesive plan tailored to each individual's needs, enhancing both patient safety and satisfaction [5].

The regulation and ethical considerations inherent in cosmetic surgery also emphasize the nurse's role in safeguarding patient welfare. With varying regulations across jurisdictions, nurses must stay informed about current guidelines and best practices in cosmetic surgery. They are responsible for ensuring that informed consent is obtained prior to any procedure, which includes providing comprehensive information about risks, benefits, and alternatives. This process is particularly significant in cosmetic surgery due to the elective nature of these procedures, where unrealistic expectations can lead to dissatisfaction. Nurses advocate for patient autonomy and informed decision-making, upholding ethical standards in practice [6].

### **The Importance of Nurse-Led Assessment in Cosmetic:**

Cosmetic procedures have seen a significant increase in popularity over the past few decades. From minimally invasive treatments like dermal fillers and Botox to more invasive surgeries such as facelifts and liposuction, there is a growing demand for aesthetic enhancement. As a result, the

healthcare landscape has adapted, incorporating various healthcare professionals, including nurses, into the cosmetic industry. One significant trend emerging in this sector is that of nurse-led assessments [7].

Nurse-led assessment can be defined as a systematic approach whereby trained nursing professionals conduct thorough evaluations of patients prior to cosmetic procedures. This process involves assessing not only the physical but also the psychological and emotional readiness of the patient. Nursing professionals use their expertise in human anatomy, physiology, and client relationships to understand the patient's needs better. This collaborative model is becoming increasingly vital as the cosmetic field evolves, necessitating comprehensive care that enhances patient outcomes [8].

One of the principal advantages of nurse-led assessments is the enhancement of patient safety. Before undergoing any cosmetic procedure, it is crucial to rule out potential contraindications, medical conditions, and complications. Nurses, equipped with medical knowledge and experience, identify red flags in a patient's history that may pose risks during aesthetic interventions [9].

For instance, a patient with a history of keloids may not be suitable candidates for specific procedures, such as laser treatments or surgical incisions. Furthermore, a nurse's assessment can unveil allergies or adverse reactions to anesthetics or injectables, which might otherwise go unnoticed. By performing thorough evaluations and screening, nurses can prevent complications and ensure that patients are provided the safest and most appropriate treatment options [10].

In addition to enhancing safety, nurse-led assessments allow for comprehensive evaluations that extend beyond the physical aspects of the patient. Aesthetic treatments often come with psychological implications, as they directly affect an individual's self-esteem and mental well-being. A nurse's training emphasizes holistic approaches, allowing them to inquire about factors such as body image perception, expectations from the procedure, and the patient's mental health history [11].

By assessing these underlying psychological dimensions, nurses can gauge whether a patient is seeking cosmetic enhancements for healthy reasons

or if they may be motivated by issues such as body dysmorphic disorder. Understanding these psychological factors is crucial in ensuring patients are prepared for what the procedure entails, thus setting realistic expectations, improving satisfaction rates, and minimizing the risk of post-procedural regret [11].

Care continuity is a critical factor in any healthcare setting, including cosmetic practice. In surgeries and procedures that may require follow-up assessments and interventions, nurses play a pivotal role in providing ongoing care. Nurse-led assessments allow for the establishment of a continuous monitoring system, identifying potential complications early on while effectively addressing patient concerns [12].

By maintaining communication with patients before, during, and after the procedure, nurses ensure patients feel supported throughout their journey. This support can lead to increased trust in the cosmetic practice, improving patient loyalty and adherence to follow-up appointments, further enhancing overall patient outcomes [12].

The cosmetic industry is often scrutinized for ethical concerns, particularly surrounding patient coercion and unrealistic standards of beauty. Nurse-led assessments serve as an ethical checkpoint in the cosmetic process. Nurses are trained to advocate for patients and prioritize their well-being, which can involve communicating with physicians and other team members about concerns or reservations regarding specific procedures.

A nurse's professional integrity and commitment to ethical practice can also help educate patients about the limits of cosmetic enhancements and discourage hasty decisions driven by external pressures. For instance, if a patient insists on a procedure deemed inappropriate for their needs, a nurse can step in to guide and support the patient toward healthier choices or alternative treatments [13].

### **Educating Patients: Ensuring Informed Decision-Making:**

Cosmetic surgery has grown in popularity over the past few decades, transforming the lives of countless individuals seeking to enhance their appearance and self-esteem. As the procedures become more accessible, it is crucial for potential patients to be adequately educated about their choices, risks, and

the realities of cosmetic surgery. Comprehensive patient education is paramount in ensuring informed decisions that prioritize safety and satisfaction over impulse and societal pressure [14].

Cosmetic surgery encompasses a variety of procedures aimed at improving aesthetic appeal. This includes surgical interventions like rhinoplasty (nose reshaping), breast augmentation, liposuction, and facelifts, as well as non-surgical treatments such as dermal fillers and Botox injections. Each procedure has its own set of risks, benefits, and recovery times, making it essential for patients to conduct thorough research before proceeding [15].

Patients often come into consultations with preconceived notions influenced by media portrayals of beauty and success. These perceptions can cloud judgment, leading individuals to pursue procedures without a complete understanding of their implications. Therefore, educating patients about the nature of cosmetic surgery, its realistic outcomes, and potential complications is critical [16].

One of the foundational principles of medical ethics is informed consent, which requires healthcare providers to ensure that patients understand the risks and benefits of a procedure before agreeing to undergo it. In cosmetic surgery, this means not only discussing potential complications—such as infection, scarring, or dissatisfaction with results—but also ensuring that patients have realistic expectations about what surgery can achieve [17].

The concept of informed consent also extends to understanding the recovery process, including time off work, lifestyle adjustments, and the emotional impact of undergoing significant physical changes. By preparing patients for the journey ahead, healthcare providers can reduce anxiety and help manage expectations, contributing to a more positive surgical experience [17].

Consultation plays a vital role in patient education for cosmetic surgery. A thorough consultation allows patients to express their desires and concerns while enabling surgeons to share their expertise and clarify any misconceptions. During this discussion, patients should be encouraged to ask questions about the procedure, the expected outcomes, qualifications of the surgeon, and any credentials associated with the surgical facility [18].

Surgeons should provide a candid assessment of a patient's candidacy for the desired procedure. It is important for patients to understand their individual anatomy, health status, and how these factors might affect the results of surgery. This information empowers patients to make informed choices based on their unique circumstances rather than solely on trends or anecdotal evidence.

The influence of marketing and social media cannot be underestimated in the realm of cosmetic surgery. Social media platforms often showcase idealized versions of beauty, which can create unrealistic standards that compel individuals to pursue surgery as a means of achieving a certain image. Moreover, cosmetic surgery clinics often engage in aggressive marketing tactics that highlight success stories while downplaying risks [19].

Patients must be educated about the effects of social media on body image and how these representations may not reflect reality. Many surgeons are incorporating discussions around media literacy into their patient education protocols, helping clients critically assess the information they consume and make choices grounded in authenticity rather than allure [19].

### Strategies for Effective Patient Education

To facilitate informed decision-making in cosmetic surgery, several strategies can be employed:

1. **Comprehensive Educational Materials:** Clinics can provide brochures, videos, and online resources that cover the full spectrum of information about various procedures. This education should include information on pre-operative and post-operative care, recovery expectations, and realistic outcomes [20].
2. **Visual Aids:** Before-and-after photos, while often used in marketing, should be shared with caution. Patients should be shown a range of results to illustrate variability in outcomes. Additionally, animations or simulations can help visualize what to expect before, during, and after surgery.
3. **Support Groups:** Connecting patients with support groups or previous patients can offer insights into the emotional and physical journey of cosmetic surgery.

Hearing firsthand experiences can help potential patients gain a broader perspective on their decision [21].

4. **Encouraging Questions:** Patients should be invited to freely ask questions during consultations. Surgeons should create an environment that encourages dialogue, ensuring patients feel comfortable expressing doubts and concerns.
5. **Follow-up Education:** Post-operative education is equally essential. Patients should be informed about what to expect during the recovery phase, signs of complications to watch for, and when to seek medical advice [22].

### **Risk Management and Mitigation Strategies by Nursing Professionals:**

Plastic surgery has gained significant popularity over the years, driven largely by advances in medical science, changing societal norms, and enhanced aesthetic awareness among individuals. As a result, plastic surgery procedures, ranging from reconstructive surgeries to aesthetic enhancements, have become more prevalent. However, this growth has also led to a heightened focus on safety and risk management within the domain of plastic surgery nursing [22].

#### **Understanding Risks in Plastic Surgery**

Plastic surgery, while often perceived as elective, encompasses a wide range of procedures, each carrying its unique set of risks. These risks can be broadly categorized into surgical risks, postoperative complications, and psychosocial concerns.

1. **Surgical Risks:** These encompass risks associated with anesthesia, wound healing, and potential surgical errors. Anesthesia-related risks can range from allergic reactions to complications such as respiratory distress or cardiovascular events. Additionally, surgeons may face challenges related to excessive bleeding, infections, or incomplete healing [23].
2. **Postoperative Complications:** After surgery, patients may encounter complications such as hematomas, seromas, necrosis of tissues, and infections.

These complications can lead to extended hospital stays, additional surgeries, and increased medical costs. Familiarity with these potential issues is crucial for nursing professionals, as they are often the first line of defense in recognizing and addressing postoperative problems.

3. **Psychosocial Concerns:** The psychological well-being of patients undergoing plastic surgery is paramount. Issues such as unrealistic expectations, body dysmorphic disorder, and the emotional effects of surgical outcomes can influence recovery and overall satisfaction. Nursing professionals must be equipped to identify and manage these concerns effectively [23].

### **The Role of Plastic Surgery Nursing Professionals**

Plastic surgery nursing professionals play a vital role in risk management and the mitigation of the aforementioned risks. Their responsibilities extend beyond routine nursing care, integrating advanced knowledge of surgical procedures, patient pathways, and psychological support. Here are some critical functions that nursing professionals undertake to ensure effective risk management:

1. **Preoperative Assessment and Patient Education:** One of the core components of risk management is thorough preoperative assessment. Plastic surgery nurses collect comprehensive medical histories, perform physical examinations, and assess psychological readiness for surgery. This phase often includes discussions addressing the risks of surgery, what to expect during recovery, and the importance of adhering to preoperative protocols [24].

Patient education is fundamental to this process. By providing clear, evidence-based information, nursing professionals can help patients make informed decisions about their procedures. For instance, discussing lifestyle modifications, such as smoking cessation and weight management, can significantly impact surgical outcomes and recovery.

2. **Surgical Team Collaboration:** Effective communication among the surgical team

members is integral to risk management. Plastic surgery nursing professionals are involved in surgical planning and can facilitate discussions regarding patient concerns and unique considerations. Their insights regarding patient history and preferences can lead to tailored surgical approaches that mitigate risks [25].

3. **Monitoring During and After Surgery:** During surgery, nursing professionals are responsible for monitoring vital signs, managing anesthesia, and ensuring sterile techniques are maintained. Their vigilance can help in identifying complications as they arise. Postoperatively, nurses assess patients for symptoms of complications, educate them about signs of infection, and ensure that recovery protocols are followed. Early detection of issues can be crucial in preventing further complications [25].
4. **Emotional Support and Counseling:** Given the psychosocial aspects of plastic surgery, nursing professionals must also be prepared to provide emotional support. This includes being attuned to the mental health needs of patients, addressing concerns, and connecting them with appropriate psychological resources when necessary. By fostering a supportive environment, nurses can help improve patient satisfaction and compliance with recovery plans [26].

### Implementing Mitigation Strategies

Mitigation strategies employed by plastic surgery nursing professionals are multifaceted and involve a combination of clinical knowledge, patient engagement, and ongoing education:

1. **Evidence-Based Practice:** Staying abreast of the latest research findings and clinical guidelines is crucial for minimizing risks associated with plastic surgery. Participation in continuing education and professional development activities helps nursing professionals to implement evidence-based practices that improve patient safety [27].

2. **Regular Risk Assessments:** Establishing protocols for regular risk assessments allows for the identification of potential issues before they become serious problems. Such protocols may include checklists for preoperative preparation, routine audits of surgical outcomes, and evaluations of patient feedback to identify areas of improvement [27].
3. **Interdisciplinary Collaboration:** Collaboration with a multidisciplinary team—comprising surgeons, anesthesiologists, psychologists, and occupational therapists—can enhance the overall quality of care. This integration fosters a holistic approach to patient management, mitigating risks that could arise from organizational silos [28].
4. **Developing Standard Operating Procedures (SOPs):** Establishing clear SOPs for various aspects of care, from preoperative preparation to postoperative management, can improve consistency in care delivery. SOPs ensure that all team members are aligned and that protocols for addressing risks are clearly defined.
5. **Patient Follow-Up and Support:** A structured follow-up system ensures continuity of care. Regular follow-up appointments can facilitate early identification of complications and allow for timely medical intervention. Furthermore, providing patients with access to support groups or counseling services can help address emotional and psychological aspects of recovery [28].

### Emotional and Psychological Support: A Nurse's Role in Patient Wellness:

The practice of plastic surgery is often seen solely through the lens of physical transformation. This perception tends to overshadow a critical aspect of the surgical journey—the emotional and psychological well-being of the patient. As patients embark on procedures that promise to reshape not only their appearance but also their self-esteem and body image, they often grapple with a complex tapestry of emotions. It is in this context that the role of the nurse transcends the boundaries of traditional

medical care, evolving into one that encompasses emotional and psychological support [29].

Plastic surgery can stem from various motivations, including corrective measures after trauma, congenital anomalies, cosmetic enhancements, or reconstructive surgery post-mastectomy. Each scenario carries its psychological underpinnings. Patients may approach surgery with high hopes for improved self-image and heightened social acceptance, while others may express anxiety or apprehension concerning the outcomes. The decision to undergo surgery often arises from a deep-seated desire to address perceived flaws or societal pressures, making it crucial to acknowledge the psychological stakes involved [29].

Patients frequently experience a spectrum of emotions before, during, and after a procedure. Anticipation and excitement can quickly give way to anxiety and fear, particularly about the surgery's results and potential complications. Postoperative emotions can include elation, about the new appearance, as well as disappointment or even regret if expectations are not met. Therefore, the nurse's role is vital in providing emotional and psychological support to patients throughout their surgical experience [30].

The nurse acts as a bridge between the medical team and the patient, facilitating communication, understanding, and assurance. One essential aspect of this role is active listening. By attentively engaging with patients, nurses can identify specific fears and concerns relating to the surgery. This empathetic approach allows nurses to validate the patients' feelings, fostering an environment where individuals feel heard and understood [31].

Nurses also play a crucial role in education. Many patients arrive with misconceptions or a lack of understanding of the surgical process. By delivering clear, comprehensive information about what to expect, the potential risks involved, and the recovery timeline, nurses can help reduce anxiety and instill confidence in the patient's decision-making process. An informed patient is one who may feel more secure about their choices, thereby alleviating feelings of fear or doubt surrounding the procedure [32].

Moreover, the emotional support provided by nurses can extend to helping patients envision their post-surgical realities. Visualization exercises can be

introduced, encouraging patients to mentally prepare for their recovery and the changes in their bodies. This psychological preparation can be instrumental in fostering resilience and a positive outlook, both pre- and post-surgery [33].

The nurse's role should include a proactive approach to psychological assessment. Nurses are often positioned to conduct initial evaluations of patients' mental health before surgery, screening for conditions such as depression, anxiety, or body dysmorphic disorder. Identifying these risk factors early enables the healthcare team to tailor interventions that address the patient's specific needs. For example, a patient exhibiting signs of depression might be referred to a psychologist for further evaluation and therapy, ensuring that they receive comprehensive support beyond surgical recovery [34].

In addition, ongoing assessments post-surgery are critical. As patients navigate the healing process, their emotional state may fluctuate. Regular follow-up appointments allow nurses to monitor patients' mental well-being, enabling timely interventions if distress arises. Recognizing signs of postoperative depression or anxiety will empower nurses to connect patients with appropriate mental health resources, enhancing overall patient care and support [35].

Postoperative care is another critical arena in which nurses can foster emotional well-being. The aesthetic consequences of surgery—swelling, bruising, and discomfort—can impact a patient's self-esteem. Nurses must prioritize creating a supportive and caring environment that promotes healing. This can involve simple gestures, such as words of encouragement, reassurance about recovery, and reminders of the patient's progress [36].

Additionally, nurses can facilitate peer support opportunities. Support groups or workshops for patients who have undergone similar procedures can provide essential platforms for sharing experiences and coping strategies. These interactions can reduce feelings of isolation and foster a sense of community among patients, enhancing their emotional resilience [36].

Holistic care recognizes the interdependence of physical and emotional health. Nurses trained in holistic approaches are particularly equipped to

address the comprehensive needs of plastic surgery patients. Techniques such as guided imagery, meditation, and mindfulness can be integrated into nursing practice, helping patients manage anxiety and stress associated with their surgery. By employing these methods, nurses not only address immediate emotional needs but also empower patients with lifelong coping strategies [37].

#### **Collaboration with the Surgical Team: Enhancing Perioperative Outcomes:**

The field of plastic surgery, encompassing both reconstructive and aesthetic procedures, has continually evolved over the years. One significant area that has seen remarkable advancements is the collaboration within the surgical team. Effective collaboration among various medical professionals can greatly enhance perioperative outcomes, ultimately leading to improved patient satisfaction, safety, and recovery efficiency. A comprehensive understanding of the mechanisms of this collaboration can illuminate strategies that enhance the quality of patient care in plastic surgery [38].

#### **Defining the Perioperative Period in Plastic Surgery**

The perioperative period refers to the time frame encompassing the preoperative, intraoperative, and postoperative phases of surgical care. Each phase plays a critical role in the overall success of the procedure, particularly in plastic surgery, where patient expectations often hinge not only on surgical results but also on the experience surrounding the surgery itself [38].

1. **Preoperative Phase:** This stage is crucial for patient assessment, education, and preparation. A thorough evaluation includes assessing medical history, conducting necessary laboratory tests, and discussing goals and expectations. This is where interdisciplinary interaction is essential. Collaboration among plastic surgeons, anesthesiologists, nursing staff, and even psychological professionals can address potential risks and manage mental and emotional considerations. Furthermore, involving a patient advocate or coordinator can ensure the patient is informed and comfortable with the planned procedures [39].

2. **Intraoperative Phase:** During the surgery itself, the collaboration becomes paramount. The surgical team typically consists of the primary surgeon, surgical assistants, anesthesiologists, and nursing staff. Effective communication is vital to ensure that everyone understands their roles and responsibilities. A structured approach to surgical protocols can enhance efficiency and minimize complications. The presence of a well-coordinated team not only secures a smoother operation but also fosters an environment of mutual support, which can be crucial during unexpected events.
3. **Postoperative Phase:** After the procedure, adequate communication among team members continues to be essential. Follow-up care often involves plastic surgeons, rehabilitation specialists, and nursing staff. This phase should encompass educating patients on aftercare, signs of complications, and psychological support, further enhancing recovery outcomes and patient satisfaction [39].

#### **The Importance of Interdisciplinary Collaboration**

Collaboration within the surgical team should extend beyond just the immediate participants in the operating room. An interdisciplinary approach can leverage diverse expertise, enhance patient safety, and promote holistic care [40].

1. **Incorporating Anesthesia Care:** Anesthesiologists play a pivotal role in surgical outcomes. Their involvement in preoperative evaluations can help identify potential anesthetic risks that may affect surgical decisions. Furthermore, anesthesiologists should engage in discussions regarding postoperative pain management tailored to the specific needs of the plastic surgery patient, which can result in better recovery experiences.
2. **Engaging Nursing Staff:** Nurses provide essential perioperative care and are often the most consistent point of contact for patients. By fostering a collaborative environment, surgical teams can ensure that nurses receive comprehensive training



and information regarding surgical procedures, which allows them to provide accurate instructions and emotional support to patients pre- and post-surgery.

3. **Involvement of Rehabilitation Specialists:** For many reconstructive procedures, especially after trauma or surgery, physical therapy or occupational therapy may be integral to recovery. Early collaboration with rehabilitation specialists can initiate a tailored rehabilitation plan that aligns with the surgical approach, leading to optimal functional and aesthetic outcomes [40].
4. **Emphasizing Psychological Care:** The emotional and psychological dimensions of surgical procedures are often overlooked. Incorporating psychologists or counselors into the surgical team can be particularly beneficial, especially in aesthetic surgery, where patient expectations may exceed realistic outcomes. By addressing the psychological aspects pre- and post-surgery, the surgical team can contribute to overall patient satisfaction and mitigate issues related to body image and self-esteem [41].

### **Technological Integration and Communication Tools**

Modern advancements in technology offer innovative solutions that enhance collaboration and communication within the surgical team. The integration of electronic medical records (EMRs) facilitates the sharing of vital patient information, ensuring that all team members remain informed about any changes or specific considerations regarding the patient's care [42].

Additionally, communication tools, such as team collaboration platforms, can streamline discussions, particularly in preoperative planning and postoperative tracking. These platforms provide a space for team members to document observations, share concerns, and track patient progress in real time, thereby reducing potential errors and improving overall care [43].

The effectiveness of collaborative strategies in the surgical setting can be assessed through various metrics including postoperative complication rates,

patient satisfaction surveys, and recovery times. Evidence-based studies have shown that established surgical teams with clear communication pathways lead to lower complication rates and higher patient satisfaction levels. Monitoring these outcomes will allow surgical practices to continuously refine their teamwork approaches, ultimately benefiting patients [44].

### **Best Practices in Pre-operative Procedures and Protocols:**

Plastic surgery, encompassing a variety of procedures aimed at enhancing, reconstructing, or altering physical appearance, requires a meticulous approach when it comes to pre-surgical protocols. These pre-surgical procedures are crucial for mitigating risks, ensuring patient safety, and optimizing surgical outcomes [45].

A thorough patient evaluation is the cornerstone of safe and effective plastic surgery. This evaluation begins with an in-depth medical history review, where the surgeon assesses the patient's overall health, pre-existing conditions, and any medications they are currently taking. Conditions such as diabetes, hypertension, or cardiovascular disease can significantly affect surgical outcomes and recovery [46].

Moreover, the surgical team should conduct a comprehensive physical examination to determine the patient's suitability for the desired procedure. This evaluation must include an assessment of the patient's anatomical features, skin quality, and any relevant cosmetic issues. For instance, in procedures such as rhinoplasty, understanding the specific anatomical nuances of the nasal structure is essential. In breast augmentation, the surgeon must evaluate existing breast tissue and skin elasticity [46].

One of the latest trends in patient evaluation is the implementation of 3D visualization technology, allowing both the patient and surgeon to visualize potential outcomes. This technology can aid in setting realistic expectations for surgical outcomes, enhancing patient satisfaction, and reducing the likelihood of complications linked to misaligned expectations [47].

Informed consent is another crucial component of pre-surgical protocols. It is imperative that surgeons provide detailed information about the proposed

procedure, including the expected outcomes, potential risks, and the steps involved. Patients should be encouraged to ask questions to ensure they fully understand what the procedure entails [48].

Best practices in this area include utilizing clear, jargon-free language and employing visual aids or diagrams when necessary to enhance comprehension. It is also helpful to provide written materials that the patient can take home. This allows them to review the information at their leisure, making the consent process more comprehensive.

Documentation of the consent process is critical. Surgeons should ensure that patients sign a consent form that clearly outlines their understanding of the procedure, any associated risks, and their agreement to proceed. This document serves not only to protect the surgeon legally but also reinforces the transparency of the surgical process [49].

Psychological assessment is essential, particularly in plastic surgery, where patient expectations and motivations must be understood thoroughly. Many practitioners opt to utilize standardized psychological evaluations or questionnaires that help identify potential emotional issues, such as Body Dysmorphic Disorder (BDD), which may impact the patient's satisfaction with their surgical results [50].

Screening for psychological readiness includes evaluating the patient's motivations for seeking surgery. A patient driven by external pressures or unrealistic expectations may not be suitable candidates and could face dissatisfaction post-operation. Practitioners are advised to create an environment in which patients can candidly express their concerns and reasons for surgery. Should any psychological concerns arise, referral to a mental health professional may be necessary before proceeding [51].

Effective communication among the surgical team, anesthesiologist, and nursing staff is paramount in ensuring a successful surgical experience. Preoperative meetings allow the team to discuss the specificities of each case, anticipate potential complications, and develop a cohesive surgical plan. This interdisciplinary approach fosters a collaborative environment, ensuring that all team members are on the same page regarding the patient's care protocol.

Anesthesia consultation is also a critical component of pre-surgical protocols. Anesthesiologists should evaluate the patient's health history and discuss anesthesia options, including potential risks and recovery expectations. Providing detailed information before surgery can improve the patient's comfort level and compliance with perioperative guidelines [52].

In addition to surgical evaluation, the preparation of the patient's physical state is paramount. Factors such as smoking cessation, dietary recommendations, and optimization of existing health conditions can have significant effects on surgical outcomes and recovery. For instance, patients are typically advised to avoid smoking for at least four weeks before and after surgery, as nicotine can impede blood flow and delay healing.

Additionally, patients should be provided with clear instructions regarding their pre-operative routines, such as fasting protocols and the administration of prescribed medications. Ensuring that patients understand these protocols reduces anxiety and helps them adhere to guidelines that could influence surgical success [52].

### **Evaluating Patient Satisfaction and Outcomes Post-Surgery:**

Plastic surgery has evolved remarkably over the last few decades, becoming both a prominent branch of medicine and a cultural phenomenon. With its various forms—cosmetic, reconstructive, and aesthetic—plastic surgery provides patients with opportunities to alter their physical appearance or restore function following trauma, illness, or congenital defects. However, following surgical procedures, one of the most critical aspects of assessment is patient satisfaction. Evaluating patient satisfaction and outcomes after plastic surgery is vital for numerous reasons, including improving surgical techniques, enhancing patient care, and understanding the psychological implications of these procedures [53].

### **Understanding Patient Satisfaction**

Patient satisfaction in plastic surgery encompasses a range of factors, from the pre-operative experience to the post-operative results, each playing a significant role in the patient's overall perception. Studies show that satisfaction is not only contingent upon physical results but is also significantly

influenced by aspects such as the quality of pre-operative information, the surgeon's communication, and the overall experience during the surgical process [54].

1. **Pre-operative Experience:** Education and transparency regarding what to expect are crucial in setting realistic goals. Patients who feel adequately informed are likely to have higher satisfaction levels post-operation. Detailed consultations can help clarify objectives, risks, and benefits associated with the procedures, which significantly impact patient expectations [54].
2. **Surgeon-Patient Relationship:** The interaction between the surgeon and the patient fosters trust and comfort. Surgeons who take the time to listen to their patients' concerns, provide insight into the procedure, and demonstrate empathy tend to cultivate a more positive perception. Building a rapport can have a potent influence on the patient's psychological readiness and satisfaction post-surgery.
3. **Post-operative Care:** The follow-up care significantly influences patient satisfaction. Complications or adverse effects can lead to dissatisfaction, not only due to the resultant physical issues but also due to feelings of vulnerability and anxiety associated with surgical outcomes. Ongoing support, clear communication about recovery expectations, and prompt responses to concerns can alleviate fears and contribute to a positive experience [54].

### Measuring Patient Satisfaction

To objectively evaluate patient satisfaction, numerous standardized assessment tools have been developed. Commonly used questionnaires include the Breast Surgery Measurement (BSM), the Rhinoplasty Outcomes Evaluation (ROE), and the FACE-Q for facial aesthetics. These tools assess various dimensions such as aesthetic outcomes, quality of life, psychological impacts, and overall satisfaction [55].

- **Outcome Metrics:** Many plastic surgeons utilize a combination of subjective

measures (patient-reported outcomes) and objective measures (clinical assessments) to gauge success. The combination of these metrics provides a comprehensive understanding of the surgical outcomes and satisfaction levels.

- **Long-term Follow-up Studies:** Frequent follow-ups after surgery are essential for understanding the durability of surgical results and the enduring impact on patient satisfaction. These studies often reveal shifting perceptions over time; while initial satisfaction may be high, it could wane if complications arise or if aesthetic results do not meet the evolving standards set by societal norms [55].

### Psychological Implications

An intrinsic aspect of plastic surgery is its psychological component. Many patients seek surgical intervention as a solution to deeper emotional or psychological issues stemming from body image dissatisfaction. Understanding the pre-operative and post-operative mental state of patients is crucial in evaluating overall satisfaction [56].

1. **Body Dysmorphic Disorder:** Some individuals may suffer from body dysmorphic disorder (BDD), where their perception of their physical appearance is skewed. Patients with BDD might have unrealistic expectations, making them less likely to be satisfied with surgical outcomes regardless of the technical success of the operation [57].
2. **Confidence and Well-being:** For many patients, the psychological benefits of plastic surgery, such as enhanced self-esteem and improved quality of life, are significant determinants of satisfaction. Research has indicated that successful aesthetic surgery can lead to increased happiness and improved mental health. However, it's essential to note that these benefits can vary and are influenced by pre-existing psychological conditions and societal factors [58].

### Challenges in Evaluation

Despite the established frameworks for measuring patient satisfaction, challenges persist. The

subjective nature of satisfaction is inherently complex, with varied individual experiences influencing perceptions. Furthermore, societal standards and ideals of beauty differ culturally and regionally, complicating the notion of what constitutes a "satisfactory" outcome [59].

1. **Subjective Expectations vs. Objective Outcomes:** Bridging the gap between a patient's subjective expectations and the objective outcomes can be challenging. If surgical results do not align with a patient's expectations due to a lack of understanding or unrealistic goals, dissatisfaction may ensue even with technically successful surgeries [59].
2. **Divergence Over Time:** Patient satisfaction may change over time, making it difficult to assess. Early follow-up may yield positive feedback due to the novelty of changes, while long-term evaluations can reveal issues such as dissatisfaction with final results or complications that may lead to revision surgeries [60].

#### Conclusion:

In conclusion, nurses play an indispensable role in the pre-operative care of cosmetic surgery patients, serving as advocates, educators, and support systems throughout the surgical journey. Their expertise in assessing patient health, educating individuals about procedures, and identifying potential risks significantly enhances the safety and effectiveness of cosmetic interventions. By fostering open communication and addressing both physical and psychological needs, nurses empower patients to make informed decisions, thereby mitigating anxiety and setting realistic expectations for outcomes.

Additionally, the collaborative efforts between nursing professionals and the surgical team are vital in ensuring a seamless transition from pre-operative preparation to surgical execution. As healthcare continues to evolve, the emphasis on comprehensive pre-operative care will likely increase, highlighting the importance of nurses in improving patient satisfaction and overall surgical success. Recognizing and further developing the multifaceted role of nurses in this field will ultimately contribute to enhanced patient

experiences and better surgical results in cosmetic surgery.

#### References:

1. Alijotas-Reig J., Fernandez-Figueras M.T., Puig L. Inflammatory, Immune-Mediated Adverse Reactions Related to Soft Tissue Dermal Fillers. *Semin. Arthritis Rheum.* 2013;43:241–258. doi: 10.1016/j.semarthrit.2013.02.001.
2. Pakize Özçiftci Yilmaz C.D. The Effect of Malnutrition on Prognosis in Surgical Inpatients in the Intensive Care Unit. *J. Clin. Med. Kazakhstan.* 2020;4:57–61. doi: 10.23950/1812-2892-JCMK-00789.
3. Harrison B., Khansa I., Janis J.E. Evidence-Based Strategies to Reduce Postoperative Complications in Plastic Surgery. *Plast. Reconstr. Surg.* 2016;138:51S–60S. doi: 10.1097/PRS.0000000000002774.
4. Levy L.L., Emer J.J. Complications of Minimally Invasive Cosmetic Procedures: Prevention and Management. *J. Cutan. Aesthet. Surg.* 2012;5:121–132. doi: 10.4103/0974-2077.99451.
5. Neaman K.C., Armstrong S.D., Baca M.E., Albert M., Vander Woude D.L., Renucci J.D. Outcomes of Traditional Cosmetic Abdominoplasty in a Community Setting: A Retrospective Analysis of 1008 Patients. *Plast. Reconstr. Surg.* 2013;131:403e–410e. doi: 10.1097/PRS.0b013e31827c6fc3.
6. Yu J., Hunter P.J., Perry J.A., Cross K.M. Plastic Surgery Patients are Malnourished: Utilizing the Canadian Malnutrition Screening Tool. *Plast. Reconstr. Surg. Glob. Open.* 2016;4:e1058. doi: 10.1097/GOX.0000000000001058.
7. Bozzetti F., Gianotti L., Braga M., Di Carlo V., Mariani L. Postoperative Complications in Gastrointestinal Cancer Patients: The Joint Role of the Nutritional Status and the Nutritional Support. *Clin. Nutr.* 2007;26:698–709. doi: 10.1016/j.clnu.2007.06.009.

8. Shermak M.A. Body Contouring. *Plast. Reconstr. Surg.* 2012;129:963e–978e. doi: 10.1097/PRS.0b013e31824ecd24.
9. Christensen L. Normal and Pathologic Tissue Reactions to Soft Tissue Gel Fillers. *Dermatol. Surg.* 2007;33((Suppl. 2)):168. doi: 10.1111/j.1524-4725.2007.33357.x.
10. Najera O., Gonzalez C., Toledo G., Lopez L., Ortiz R. Flow Cytometry Study of Lymphocyte Subsets in Malnourished and Well-Nourished Children with Bacterial Infections. *Clin. Diagn. Lab. Immunol.* 2004;11:577–580. doi: 10.1128/CDLI.11.3.577-580.2004.
11. Vidal P., Berner J.E., Will P.A. Managing Complications in Abdominoplasty: A Literature Review. *Arch. Plast. Surg.* 2017;44:457–468. doi: 10.5999/aps.2017.44.5.457.
12. Washer L.L., Gutowski K. Breast Implant Infections. *Infect. Dis. Clin. North Am.* 2012;26:111–125. doi: 10.1016/j.idc.2011.09.003.
13. Furnham A., Levitas J. Factors that Motivate People to Undergo Cosmetic Surgery. *Can. J. Plast. Surg.* 2012;20:47. doi: 10.1177/229255031202000406.
14. Hurvitz K.A., Olaya W.A., Nguyen A., Wells J.H. Evidence-Based Medicine: Abdominoplasty. *Plast. Reconstr. Surg.* 2014;133:1214–1221. doi: 10.1097/PRS.0000000000000088.
15. Correia M.I.T.D., Waitzberg D.L. The Impact of Malnutrition on Morbidity, Mortality, Length of Hospital Stay and Costs Evaluated through a Multivariate Model Analysis. *Clin. Nutr.* 2003;22:235–239. doi: 10.1016/S0261-5614(02)00215-7.
16. Sungurtekin H., Sungurtekin U., Balci C., Zencir M., Erdem E. The Influence of Nutritional Status on Complications After Major Intraabdominal Surgery. *J. Am. Coll. Nutr.* 2004;23:227–232. doi: 10.1080/07315724.2004.10719365.
17. Cardinale F., Chinellato I., Caimmi S., Peroni D.G., Franceschini F., Miraglia Del Giudice M., Bernardini R. Perioperative Period: Immunological Modifications. *Int. J. Immunopathol. Pharmacol.* 2011;24:3. doi: 10.1177/03946320110240S302.
18. Khunger N. Complications in Cosmetic Surgery: A Time to Reflect and Review and Not Sweep them Under the Carpet. *J. Cutan. Aesthet. Surg.* 2015;8:189–190. doi: 10.4103/0974-2077.172188.
19. Shermak M.A. Body Contouring. *Plast. Reconstr. Surg.* 2012;129:963e–978e. doi: 10.1097/PRS.0b013e31824ecd24.
20. Harrison B., Khansa I., Janis J.E. Evidence-Based Strategies to Reduce Postoperative Complications in Plastic Surgery. *Plast. Reconstr. Surg.* 2016;138:51S–60S. doi: 10.1097/PRS.0000000000002774.
21. Kral J. Morbidity of severe obesity. *Surg Clin North Am.* 2001;81:1039–61. doi: 10.1016/s0039-6109(05)70183-3.
22. Vandam LD. Positioning of patients for operation; Stiefel RH Electricity, electrical safety, and instrumentation in the operating room. In: Rogers MC, editor. *Principles and Practice of Anesthesiology*. Baltimore: Mosby Year Book; 1993. pp. 703–45.
23. Hsu P, Basu CB, Venturi M, Davison S. Venous thromboembolism prophylaxis. Optimization of patient safety in cosmetic surgery. *Semin Plast Surg.* 2006;20:225–32.
24. Doufas AG. Consequences of inadvertent perioperative hypothermia. *Best Pract Res Clin Anaesthesiol.* 2003;17:535–49. doi: 10.1016/s1521-6896(03)00052-1.
25. Cucchiara RF, Faust RJ. Patient positioning. In: Miller RD, editor. *Anesthesia*. New York: Churchill Livingstone; 1994. pp. 1057–73.
26. Sugerman HJ, Kellum JM, Engle KM, et al. Gastric bypass for treating severe obesity. *Am J Clin Nutr.* 1992;55(2 Suppl):560–6. doi: 10.1093/ajcn/55.2.560s.
27. Fritzlen T, Kremer M, Biddle C. The AANA Foundation Closed Malpractice

- Claims Study on nerve injuries during anesthesia care. *AANA J.* 2003;71:347–52.
28. Byrne TK. Complications of surgery for obesity. *Surg Clin North Am.* 2001;81:1181–93. doi: 10.1016/s0039-6109(05)70190-0.
29. Shermak M, Shoo B, Deune EG. Prone positioning precautions in plastic surgery. *Plast Reconstr Surg.* 2006;117:1584–9. doi: 10.1097/01.prs.0000207390.76490.67.
30. Sugermann H. Effects of increased intra-abdominal pressure in severe obesity. *Surg Clin North Am.* 2001;81:1063–75. doi: 10.1016/s0039-6109(05)70184-5.
31. Roth S, Thisted RA, Erickson JP, et al. Eye injuries after nonocular surgery. A study of 60,965 anesthetics from 1988 to 1992. *Anesthesiology.* 1996;85:1020–7. doi: 10.1097/00000542-199611000-00009.
32. Bund M, Heine J, Jaeger K. Complications due to patient positioning: Anaesthesiological considerations. *Anesthesiol Intensivmed Notfallmed Schmerzther.* 2005;40:329–39. doi: 10.1055/s-2005-861256.
33. National Task Force on the Prevention and Treatment of Obesity 2002 Medical care for obese patients: advice for health care professionals. *Am Fam Physician.* 2002;65:581–7.
34. MacGregor MI, Bock AJ, Ball WC. Topics in clinical medicine: Serious complications and sudden death in the Pickwickian syndrome. *Hopkins Med J.* 1970;189:279–95.
35. The Joint Commission Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery. JACHO 2003.
36. Strauch B, Herman C, Rohde C, Baum T. Mid-body contouring in the post-bariatric surgery patient. *Plast Reconstr Surg.* 2006;117:2200–11. doi: 10.1097/01.prs.0000218185.10795.aa.
37. Akinbingol G, Borman H, Maral T. Bilateral brachial plexus palsy after a prolonged surgical procedure of reduction mammoplasty, abdominoplasty, and liposuction. *Ann Plast Surg.* 2002;49:219–20. doi: 10.1097/00000637-200208000-00025.
38. Kohn LT, Corrigan JM, Donaldson MS. To Err is Human: Building a Safer Health System. National Institute of Medicine, Committee on Quality of Health Care in America. National Academy Press; Washington DC: 1999.
39. Dybeck RB. Intraoperative positioning and care of the obese patient. *Plast Surg Nurs.* 2004;24:118–22. doi: 10.1097/00006527-200407000-00009.
40. Buchwald H, Avidor Y, Braunwald E, et al. Bariatric surgery: A systematic review and meta-analysis. *JAMA.* 2004;291:1724–37. (Erratum in 2005;293:1728).
41. Naylor MD. Advancing high value transitional care: the central role of nursing and its leadership. *Nurs Adm Q.* 2012;36(2):115–126. doi: 10.1097/NAQ.0b013e31824a040b.
42. Haynes AB, Weiser TG, Berry WR, et al. The Safe Surgery Saves Lives Study Group. A surgical safety checklist to reduce morbidity and mortality in a global population. *N Engl J Med.* 2009;360(5):491–499. doi: 10.1056/NEJMs0810119.
43. Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. *JAMA.* 2007;297(8):831–841. doi: 10.1001/jama.297.8.831.
44. Clavien PA, Barkun J, de Oliveira ML, et al. The Clavien-Dindo classification of surgical complications: five-year experience. *Ann Surg.* 2009;250(2):187–196. doi: 10.1097/SLA.0b013e3181b13ca2.

45. Garcia-Miguel FJ, Serrano-Aguilar PG, Lopez-Bastida J. Preoperative assessment. *Lancet*. 2003;362(9397):1749–1757. doi: 10.1016/s0140-6736(03)14857-x.
46. Poldermans D, Hoeks SE, Feringa HH. Pre-operative risk assessment and risk reduction before surgery. *J Am Coll Cardiol*. 2008;51(20):1913–1924. doi: 10.1016/j.jacc.2008.03.005.
47. Coleman EA. Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs. *J Am Geriatr Soc*. 2003;51(4):549–555. doi: 10.1046/j.1532-5415.2003.51185.x.
48. Greenwald JL, Denham CR, Jack BW. The hospital discharge: a review of high risk care transition with highlights of a reengineered discharge process. *J Patient Saf*. 2007;3(2):97–106.
49. Fleisher LA, Beckman JA, Brown KA, et al. ACC/AHA 2007 guidelines on perioperative cardiovascular evaluation and care for noncardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2007;116(17):e418–e499.
50. Bradway C, Trotta R, Bixby MB, et al. A qualitative analysis of an advanced practice nurse-directed transitional care model intervention. *Gerontologist*. 2012;52(3):394–407. doi: 10.1093/geront/gnr078.
51. Nagpal K, Vats A, Ahmed K, Vincent C, Moorthy K. An evaluation of information transfer through the continuum of surgical care: a feasibility study. *Ann Surg*. 2010;252(2):402–407. doi: 10.1097/SLA.0b013e3181e986df.
52. Fudickar A, Horle K, Wiltfang J, Bein B. The effect of the WHO surgical safety checklist on complication rate and communication. *Medicine*. 2012;109(42):695–701. doi: 10.3238/arztebl.2012.0695.
53. Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Ann Intern Med*. 2003;138(3):161–167. doi: 10.7326/0003-4819-138-3-200302040-00007.
54. Christian CK, Gustafson ML, Roth EM, et al. A prospective study of patient safety in the operating room. *Surgery*. 2006;139(2):159–173. doi: 10.1016/j.surg.2005.07.037.
55. Ong MS, Coiera E. A systematic review of failures in handoff communication during intrahospital transfers. *Jt Comm J Qual Patient Saf*. 2011;37(6):274–284. doi: 10.1016/s1553-7250(11)37035-3.
56. Nagpal K, Vats A, Ahmed K, et al. A systematic quantitative assessment of risks associated with poor communication in surgical care. *Arch Surg*. 2010;145(6):582–588. doi: 10.1001/archsurg.2010.105.
57. Saleh SS, Freire C, Morris-Dickinson G, Shannon T. An effectiveness and cost-benefit analysis of a hospital-based discharge transition program for elderly Medicare recipients. *J Am Geriatr Soc*. 2012;60(6):1051–1056. doi: 10.1111/j.1532-5415.2012.03992.x.
58. The Joint Commission. Transitions of care: the need for a more effective approach to continuing patient care. *Hot Topics in Health Care*. Updated 2012.
59. Laine C, Williams SV, Wilson JF. In the clinic. Preoperative evaluation. *Ann Intern Med*. 2009;151(1):2–16. doi: 10.7326/0003-4819-151-1-200907070-01006.
60. Brock J, Mitchell J, Irby K, et al. The Care Transitions Project Team. Association between quality improvement for care transitions in communities and rehospitalizations among Medicare beneficiaries. *JAMA*. 2013;309(4):381–391. doi: 10.1001/jama.2012.216607.