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Patients' Lived Experiences of Being in the Operating Room: A Qualitative Study

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Abstract

Background: A review of the available literature shows that preoperative care primarily focuses on the physical preparation of patients, with limited attention given to their psychological and spiritual concerns. The predominant focus has been on stress caused by the fear of surgery, while patients' perceptions of the surgical process and their presence in the operating room remain unexplored. Accordingly, this study aimed to investigate the lived experiences of patients in the operating room.

Methods: This qualitative study was conducted using a descriptive-interpretive phenomenological approach from 2019 to 2020 in Iran. Data were collected via in-depth interviews with 20 participants, who were selected through purposive sampling, supplemented by observational notes taken during and after the interviews. Data were analyzed using Van Manen's approach.

Results: Data analysis revealed that patients' lived experiences of being in the operating room could be categorized into two main themes and six subthemes. The main themes included emotional immersion and the duality of support. Emotional immersion was further divided into several subthemes including stress and fear, internal suffering, and psychological distress. The duality of support was subcategorized into perceived support, self-help, and unfulfilled support needs.

Conclusion: The experience of being in the operating room is predominantly psychological. Patients place significant value on communication with the operating room staff and have critical informational and emotional support needs that they expect the surgical team to address in accordance with their individual needs and expectations.

Keywords: Operating room nursing, Patients, Qualitative research

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Introduction

The operating room is a challenging environment for both patients and healthcare providers (1). It is crucial to allocate time for understanding patients' needs immediately before surgery, as they are often in a vulnerable state. Surgical nurses often operate under the assumption that most patients are afraid of anesthesia or surgery (2). As a result, they may perceive asking questions about patients' feelings and perceptions of the operating room as unnecessary. However, understanding an event is a dynamic process that can alter mindsets, leading to new insights, sound judgments, and the creation of shared knowledge and meanings. Therefore, nurses need to pay attention to patients' perceptions, experiences, and statements. Focusing on patients' experiences of surgery can help identify distressing situations and ultimately enhance understanding of their conditions.

Research indicates that nurses often provide care based on their assumptions and knowledge rather than patients' perceptions of intraoperative care (3, 4). For instance, a study by Ismayanti et al examined the effects of the Murottal Qur'an on preoperative anxiety (5). This highlights the necessity for nurses to carefully explore patients' perceptions and feelings regarding surgery and the operating room environment to develop appropriate care interventions from admission to discharge (6). Through this patient-centered approach, insights into lived health and recovery experiences can be gained by extracting individual perceptions of reality and the meaning of life, allowing nurses and patients to evaluate overall responses and prioritize care (7).

Phenomenology provides a framework for nurses to examine care in the current situation and understand the interactions between care receivers and care providers. It

enables a deeper understanding of individuals within the cultural framework of their society, regarding care as one of the dimensions of the world (8,9). This approach allows nurses to focus on patients' lived experiences, thereby addressing their problems and needs and informing care planning accordingly. Nurses should be able to identify the needs of patients using a phenomenological approach based on their lived experiences of surgery and presence in the operating room, which can then inform the development of care programs (10,11).

Although there are authoritative texts on pre- and post-operative care, a review of the available literature shows that such care mainly emphasizes patients' physical preparation before surgery (12). Therefore, the needs of surgical candidates may not be fully addressed. In this regard, Nasiri et al. found that many patients were dissatisfied with the information provided by the care team about surgery and anesthesia, indicating that the prevalent culture of care delivery does not prioritize patient information (13). Additional studies (14,15) confirm the presence of surgical anxiety and anesthesia-related concerns among Iranian patients undergoing elective surgery.

In addition to clinical effectiveness and safety indicators, evaluating patient experiences with the healthcare system can enhance the overall care process by developing and evaluating quality indicators in areas identified for improvement. While research on the needs and experiences of patients with chronic diseases has expanded in recent years, information regarding surgical patients' experiences of being in the operating room remains limited. A better understanding of patients' feelings, beliefs, and fears can aid healthcare providers in optimizing their management before and during care procedures. Furthermore, documenting the experiences of patients who have undergone surgery can help identify areas for improvement in the perioperative care process. Therefore, the present study seeks to elucidate the experience of being in the operating room from the perspective of surgical candidates.

Methods

This qualitative study was conducted using a hermeneutic phenomenological approach from February 2021 to November 2022 in Mashhad, Iran. The study adhered to the items outlined in the consolidated criteria for reporting qualitative research (COREQ) checklist. Data were analyzed using Van Manen's six-step method, which includes the following steps: (1) approaching the nature of the lived experience, (2) studying the experience as it is lived, (3) reflecting on the intrinsic themes that characterize the phenomenon, (4) writing and rewriting the text, (5) maintaining a strong and directional relationship with the phenomenon, and (6) aligning the research findings with the relationship between the parts and the whole (16). These steps were implemented in the present study as follows:

In the first step, after identifying the focus on the phenomenon of interest (i.e., patients' experiences of being in the operating room), the researchers formulated questions about the phenomenology and expectations surrounding this experience. In the second step, the research environment was selected, participants entered the study, and data were collected. For the third step, holistic, selective, and partial approaches were adopted to separate the thematic characteristics of the phenomenon, with detailed descriptions of these approaches provided in data analysis. The fourth step emphasized the art of writing and rewriting, which involved integrating the components of the research goal into written documents, including field notes, anecdotes, and examples from the interview transcripts that facilitated an understanding of the phenomenon. The fifth step involved maintaining a strong and directional relationship with the phenomenon, which was ensured by consistently referring to the central research question during data collection, data analysis, and theme extraction. This helped prevent deviations from the primary focus of the research. The sixth step promoted the hermeneutic cycle and the interaction between the whole and its components, with a focus on the iterative movement between the entirety of the text and its parts at all stages of the research.

This study was conducted in the surgical wards of teaching hospitals affiliated with Mashhad University of Medical Sciences. Following approval from the ethics committee of Mashhad University of Medical Sciences and the issuance of an introductory letter from the Faculty of Nursing and Midwifery, the researchers entered the research environment. After explaining the study objectives to relevant authorities and obtaining their permission, the researchers became fully acquainted with the selected environment. Notably, some researchers held master's degrees in medical-surgical nursing and had experience working in surgical departments.

Participants were selected using purposive sampling. The inclusion criteria were patients who had undergone surgery, were in favorable mental and physical condition for interviews, could understand and speak Persian, and were willing to participate in the study.

Interviews were conducted by two researchers in their final year of the doctoral program in nursing under the guidance of a professor of nursing proficient in qualitative research. Interviews were conducted in the patients' rooms after surgery, once their hemodynamic condition had stabilized. After explaining the objectives of the study to participants and obtaining written consent, demographic characteristics including age, education level, and marital status were collected. Data were collected through semi-structured face-to-face interviews designed and conducted according to the qualitative research questions,

focusing on the experiences of patients undergoing surgery. Interview questions consisted of general and probing questions. General questions included, "How did you feel when you entered the operating room?", "Can you describe your experience from the moment you prepared for the operation?", "What were your feelings and perceptions while in the operating room", "How do you compare this surgical experience?", and "What was important to you at that moment?" During the interviews, probing questions were asked for further details including, "What do you mean?", "Could you please explain more?", or "Could you give an example?". The minimum interview duration was 45 minutes, while the maximum was 120 minutes. In addition to the primary interviews, three supplementary interviews were conducted. All interviews were recorded on the same day and transcribed verbatim. Sampling continued until data saturation was reached, resulting in a total of 23 interviews with 20 participants. Moreover, MAXQDA software was used to facilitate data management.

Van Manen proposed three methods for extracting thematic elements: holistic, selective, and partial. In the holistic approach, the researcher considers the text as a whole and tries to understand its full meaning, asking, "What is the key phrase that expresses the main meaning of the text?" This approach is referred to as "calling for judgment in a text" (16). Using a detailed approach, the researchers in the present study read each text line by line and extracted keywords or phrases related to the phenomenon in the operating room. After extracting the subject phrases (descriptive codes), the researchers compared the main content of each interview with previous interviews to identify similarities and relationships. They were then classified into primary codes based on the identified relationships. By comparing and determining the relationships between the primary codes, subthemes emerged, which were then merged based on their relationship and similarities, eventually leading to the creation of main themes. Throughout this process, the main research question was consistently addressed, with researchers moving between the entire text of the interviews and the extracted themes or components at all stages of the study. Documents tailored to the objective of the study were created, including field notes and anecdotal records written during the interviews or while analyzing texts, along with quotes and descriptive analyses. These records were essential for ensuring a comprehensive understanding of the target phenomenon.

To ensure the accuracy and validity of the research, the criteria proposed by Guba and Lincoln were implemented, which include credibility, dependability, confirmability, and transferability (17,18). At the end of the interviews, researchers provided participants with a summary of the interview and an encrypted transcript to evaluate and validate the reflection of their experiences and to ask any follow-up questions.

Results

In this study, data saturation was achieved after interviewing 20 participants, whose ages ranged from 22 to 63 years (mean age: 34.85 ± 11.90). Table 1 presents the demographic characteristics of the participants.

After conducting the interviews, a thorough reflection on the texts yielded essential insights into the experiences of being in the operating room. A total of 398 descriptive codes were extracted. Through the researcher's immersion in the interviews and careful contemplation of the data, commonalities among the descriptive codes were identified and synthesized, resulting in 127 original codes. These codes were then classified into subthemes based on semantic and conceptual similarities, leading to the identification of six subthemes. By further comparing these subthemes, two main themes emerged (Table 2).

The identified themes and subthemes are as follows:

Emotional immersion

This theme reflects the participants' emotional reactions to being in the operating room. Patients' narratives showed that being in the operating room encompasses not only a therapeutic experience but also a range of emotions and feelings related to the surgical process and environment. This main theme was further categorized into three subthemes including stress and fear, internal suffering, and psychological distress.

Stress and fear

Participants' narratives indicated that stress and fear are the main components of their reactions to the operating room environment. Patients experience stress and fear in response to perceived threats and potential dangers. Anxiety and fear are typical reactions among individuals undergoing surgery, often stemming from concerns about death, doubts regarding the necessity of the procedure, unforeseen events during anesthesia and surgery, medical errors, and the distress of observing the surgical process of others. One of the participants expressed, *"As soon as I saw the operating table, it was terrifying, horrifying for me. It was the first time I saw the operating table"* (Participant 4).

Fear was examined from different angles, with many participants highlighting the fear of anesthesia. The phenomenon of anesthesia emerged as a significant source of stress and fear for most patients, often described as an experience "equal to death" and "challenging". One participant recounted, *"When I was anesthetized, I saw death with my own eyes. I was very ill. It was tough"* (Participant 12).

Internal suffering

Internal suffering refers to the unpleasant and negative emotions that patients mentally experience, which

Table 1. Demographic characteristics of the participants

Type of surgery	Marital status	Education	Age	Gender	Participant code
Removal of ureteral stones	Single	Diploma	28	Male	1
Trauma	Married	Diploma	33	Male	2
Appendectomy	Married	Middle School	37	Male	3
Inguinal hernia	Single	Master's degree	29	Male	4
Cesarean section	Married	Master's degree	29	Female	5
Cesarean section	Single	Master's degree	37	Female	6
Trauma	Single	Elementary school	24	Female	7
Appendectomy	Married	Elementary school	22	Female	8
Removal of ureteral stones	Married	Diploma	33	Male	9
Cataract	Married	Diploma	27	Male	10
Pilonidal cyst	Married	Bachelor's degree	22	Female	11
Trauma	Single	Middle School	32	Male	12
Myomectomy	Married	Diploma	35	Female	13
Cataract	Married	Elementary school	59	Male	14
Varicocele	Married	Middle School	33	Male	15
Cesarean section	Married	Bachelor's degree	24	Female	16
Appendectomy	Married	Middle School	47	Male	17
Prostate hyperplasia	Married	Illiterate	63	Male	18
Cholecystectomy	Single	Master's degree	29	Male	19
Cataract	Married	Bachelor's degree	54	Female	20

Table 2. Results of the analysis of interviews related to the participants in the research project lived experience of being in the operating room

The main classes	Subcategories	Basic codes
Emotional immersion	Stresses and fears	Anxiety and worry Anxiety The fear
	Internal suffering	Grief Being worthless Loneliness and abandonment Alas and regret Shame Discrimination Unreliability Feeling insecure
	Aggravators of psychological harassment	Environment, equipment, hygiene and operating room clothing Brainstorming your own negative experiences and those of others Delay and waiting Lack of information Congestion and the presence of interns Exposure without mental preparation Failure to meet physical needs
Supporting coverage	Perceived support	Patient recognition receiving information Standard physical environment Receive information from other patients Physician empathetic behavior
	Self-help	To trust Enjoying religious duties Entrusting everything to God Give yourself hope Strengthen a positive attitude towards action Rely on the confidence of the doctor
	Wishes and preferences	The desire to know Need to respect dignity Tendency to express emotions

are often understood and felt only by them. Feelings of sadness, worthlessness, insecurity, abandonment, loneliness, ambiguity, shame, discrimination, and regret were prevalent in the participants' narratives. For instance, one patient described her grief, *"The clothes were loose. Well, that made them (operating room staff) laugh. I was upset"* (Participant 16). Another participant stated, *"There was no talk between the nurse and us. Nobody cared about me ... We were four. I wanted to know how many of these people were to undergo surgery together?! Does the doctor want to do surgery on all four of us?! It was very strange to me!"* (Participant 9).

Feelings of loneliness were common, with participants noting that even when surrounded by others, they felt lonely and unable to share the horror of their experiences. One participant stated, *"When the four students are over your head, everything seems to be child's play! You and your life do not matter at all to them (operating room staff); they only would say 'he's dead', that's it"* (Participant 11).

Psychological distress

While the experience of surgery typically elicits emotional reactions, several factors affect the intensity and nature of these emotions. Physical design, equipment, and hygiene of the operating room, negative experiences of oneself and others, delays and waiting times, lack of information, exposure without mental preparation, and failure to meet physical needs all contribute significantly to patients' psychological distress. *"The cold air in the operating room multiplied my fear; I felt shaky, and this increased my stress"* (Participant 7). Another remarked, *"I thought it must be a lot more secluded. I don't think it was very exciting. It was a very stressful atmosphere.... I remember telling the doctor again, 'Doctor, do not forget what you wanted to do'"* (Participant 13).

The duality of support

The duality of being supported refers to the internal and external contradictory processes aimed at managing and alleviating patients' negative emotions and feelings. One aspect of this duality encompasses comforting behaviors exhibited by patients themselves or by others around them, while the opposing aspect reflects the suffering caused by unfulfilled support needs.

Perceived support

Supportive interactions from nurses, physicians, and even other patients can help alleviate patients' negative emotions. Such interactions foster a sense of connection, reassuring patients they are not alone in facing the challenges of surgery and that they are supported by those around them. The quality of the physical environment in the operating room also enhances feelings of support and mitigates unpleasant emotions. One participant shared, *"When the surgeon came, I asked him a question. He patiently explained it to me and finally asked me to decide whether I wanted to proceed. His explanation calmed me down"* (Participant 13).

In addition to the support from healthcare professionals and the quality of the physical environment of the operating room, patients sought support and assistance from fellow patients present in the operating room by sharing their previous surgical experiences. *"There were other patients we were talking to. We were talking about surgery and other things"* (Participant 10).

Self-help

This subtheme refers to the use of internal strategies that patients employ in response to emotionally stressful situations. These strategies can help patients achieve inner peace and a sense of control over their situation. A primary method for inducing calmness is seeking help from spiritual sources. Patients often draw strength and hope from their religious beliefs, using these resources to cope with their emotions. One participant stated, *«I was trying to calm myself down .... I was praying"* (Participant 2).

Unfulfilled support needs

Participants frequently expressed dissatisfaction with the lack of external support that aligned with their needs and preferences. This dissatisfaction was evident in statements reflecting their unmet desires for support. One participant noted, *"I did not get positive energy from nurses"* (Participant 4). Furthermore, the need for information was common among participants. They emphasized physicians and nurses should provide information to patients and address their questions and uncertainties. One participant pointed out, *«It's good that they ask you if you want general or local anesthesia, but they must tell you professionally. They must tell you the advantages, disadvantages, and risks"* (Participant 16).

Discussion

This study showed the experience of being in the operating room consists of two components, including emotional immersion and the duality of support. The results underscored that the operating room can be a site of psychological distress for patients, provoking different supportive approaches. While healthcare providers significantly contribute to these emotional challenges, their role in providing effective support during the surgical process appears limited. Before surgery, patients often experience anxiety, fear, panic, and uncertainty due to various factors such as fears related to anesthesia, the surgical process itself, potential outcomes, the risk of death, medical errors, and the unfamiliar care environment. The findings from this study indicated that many surgical patients are not emotionally prepared for surgery. This highlights the necessity of providing patients with comprehensive information before the operation,

enabling them to achieve emotional readiness.

Physiologically, nurses are tasked with accurately monitoring vital signs such as temperature, pulse, respiration, and blood pressure. They ensure that necessary laboratory and radiological tests such as hemoglobin levels, blood type, and screenings for HIV and hepatitis B and C are conducted for preoperative patients. However, the information gathered often neglects to address patients' emotional concerns, indicating that surgical care is not being delivered in a patient-centered manner. This phase is fraught with worry and uncertainty, emphasizing the need for a more responsive approach to patients' needs.

The preoperative experiences identified in this study, such as stress and fear, internal suffering, and the support required and received align with findings from previous studies (19-26). For instance, Iranian surgical candidates in a study by Farnia et al. reported unprofessional treatment from nurses, discriminatory behaviors, and a lack of respect for their dignity. They also highlighted the importance of receiving spiritual and comforting care from nurses while in the operating room (23). Ghanizadeh et al. confirmed that a significant number of patients undergoing elective surgery experience moderate to severe anxiety, indicating a neglect of their emotional needs (24). Similarly, Shafipour et al found that patients awaiting open-heart surgery faced numerous stressors during their care, leading to feelings of fear and threat due to unmet physical, psychological, and educational needs. They pointed out that patients often resort to self-help strategies and spirituality and seek support from family members when they do not receive adequate care from healthcare professionals (25). Gobbo et al also reported patients' fears related to surgery, the waiting time, and being in the operating room, along with their need for information (26).

As confirmed in previous studies (27-30), factors such as physical standards, equipment, and safety in the operating room, waiting times and delays, as well as patients' previous experiences can affect both the quantity and quality of psychological responses. Besides, in some cases, a lack of physical fitness can exacerbate distressing emotional reactions and increase patients' need for support. The failure of nurses to adequately supervise patients' preoperative preparations can hinder patients from achieving necessary readiness, underscoring the importance of vigilant monitoring to alleviate psychological stress.

However, findings related to previous surgical experience are inconsistent with the results of some studies, which suggest that patients who have never undergone surgery may experience greater fear than those with prior surgical experiences. In contrast, the present study found that even patients with previous surgical experiences reported significant fear and stress for subsequent surgeries (31). The quality of patients' previous experiences seems to have a significant effect on the severity of their psychological reactions. Therefore, healthcare professionals should not misconstrue a patient's previous surgical history, as this could impede a thorough preoperative evaluation. Patients who have undergone prior surgeries should receive appropriate support to understand the need for evaluation and education, especially if their recent surgery differs from their previous experiences (27).

Conclusion

The findings from the present study indicated that patients' concerns have not yet been fully addressed, highlighting the need to enhance this aspect of care. The results also suggested that patients value the relationship with their care staff and have significant informational and emotional support needs that they expect to be fulfilled by the surgical team, tailored to their individual requirements and expectations. When these needs are adequately addressed, patients report feeling more confident, less anxious, and more positive about the treatment process and its outcomes. The findings also emphasized the necessity for healthcare professionals to consider patients' knowledge levels and their desire for information and support.

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Competing Interests

The authors declared no conflict of interest in this study.

Ethical Approval

The research project was approved by the ethics committee of Mashhad University of Medical Sciences (IR.MUMS.NURSE.REC.1395.151).

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