

Exploring the Lived Experiences of Operating Room (OR) Nurses on Different Surgical Realities

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ABSTRACT

This qualitative study utilized a Husserlian descriptive phenomenological design to explore the lived experiences of operating room (OR) nurses navigating unpredictable surgical realities. Conducted in government hospitals within Surigao City and the Caraga Region, the study involved eight (8) OR nurses to uncover the essence of their professional practice amid systemic and clinical uncertainty. Data were gathered through semi-structured interviews and analyzed using Colaizzi's method of phenomenological analysis. Findings revealed that nurses experienced the operating room as a high-stakes environment characterized by sudden case insertions, resource shortages, workflow disruptions, and emergent surgical demands. The study identified key themes reflecting the realities encountered, the emotional and mental burdens experienced, and the strategies employed by nurses in managing these challenges. The findings highlighted that OR nurses served as stabilizing forces within unpredictable clinical environments through adaptability, rapid decision-making, and professional resilience. The applicability of the study suggests that operating room nursing is inherently shaped by unpredictability, requiring both technical competence and emotional strength. It further emphasizes the need for responsive nursing management strategies, improved communication systems, and institutional support mechanisms to sustain nurse well-being and ensure patient safety.

Keywords: Lived Experiences, Operating Room Nurses, Surgical Realities, Descriptive Phenomenology, Resilience.

INTRODUCTION

The operating room (OR) is a complex, fast-paced, and high-risk environment where nurses work under unpredictable conditions characterized by emergency cases, cancellations, deferrals, and workflow disruptions that require rapid decision-making, adaptability, and coordination to ensure patient safety (Gillespie et al., 2012; Arora et al., 2010). While surgical services are organized through structured systems, actual practice is dynamic, with frequent changes caused by patient instability, resource limitations, and intraoperative complications. In this setting, OR nurses play a central role in maintaining a safe and sterile environment, coordinating multidisciplinary care, and managing both clinical and emotional demands, often serving as the stabilizing force during unexpected events. Despite this critical role, existing literature has largely focused on system-level outcomes such as efficiency, delays, and cancellations (Koekkoek et al., 2021; Wong et al., 2018), revealing a knowledge and population gap regarding the lived experiences of OR nurses, as well as a methodological gap due to the dominance of quantitative approaches that fail to capture the depth of nurses' perceptions and coping processes.

To address these gaps, this study adopts a phenomenological approach to explore how OR nurses experience and interpret unpredictable surgical realities, including emergent cases, sudden insertions, cancellations, and workflow disruptions, focusing on the emotional, cognitive, and professional dimensions of their practice. Within the local hospital context, unplanned OR events are frequent, requiring nurses to reorganize schedules, coordinate with teams, and communicate effectively with patients and families while maintaining composure and clinical accuracy. These experiences reflect both the challenges and strengths of OR nurses, including

stress, moral responsibility, adaptability, and problem-solving, highlighting the importance of understanding their lived realities. The study aligns with Sustainable Development Goal 3 (Good Health and Well-Being) by contributing to improved healthcare delivery, workforce well-being, and system responsiveness through recognition of nurses' experiences.

The study proceeds with an atheoretical stance consistent with phenomenological inquiry, allowing meanings and insights to emerge inductively from participants' narratives rather than imposing predefined theoretical frameworks. Through in-depth interviews, themes are derived to capture the essence of OR nurses' experiences, while the researcher practices bracketing to set aside personal assumptions and ensure that findings are grounded in participants' perspectives. Potential biases are addressed through reflexivity, confidentiality, and systematic analysis procedures. The findings are expected to inform nursing management and hospital administration by providing insights for improving staffing, communication systems, training, and supportive policies, ultimately contributing to a more responsive, resilient, and patient-centered surgical care environment.

Atheoretical Stance

This study was qualitative in nature and adopted an atheoretical stance, proceeding without the use of a predefined theoretical framework or hypothesis. The absence of an a priori theory was intentional and consistent with phenomenological inquiry, which aimed to understand a phenomenon as it was lived and experienced by participants rather than as it was explained by existing theoretical models. In this study, the phenomenon under investigation was the lived experience of operating room (OR) nurses as they navigated diverse and unpredictable surgical realities, including emergent surgeries, sudden case insertions, cancellations, deferrals, unforeseen intraoperative events, and workflow disruptions.

Rather than imposing a theoretical lens at the outset, the research relied on inductive reasoning, allowing meanings, patterns, and insights to emerge directly from the participants' narratives. Through in-depth interviews, significant statements were identified, clustered, and synthesized into themes that reflected the essence of OR nurses' experiences in managing rapidly changing clinical situations. This inductive process ensured that the findings remained grounded in the actual realities of OR nursing practice and accurately represented the participants' perspectives.

Consistent with phenomenological methodology, the study began without predetermined assumptions regarding how OR nurses perceived, responded to, or coped with unpredictable surgical environments. No initial testing of theories or models related to stress, decision-making, or workflow management was conducted. Instead, theoretical understanding emerged only after data analysis, based on the meanings derived from the participants lived experiences.

To preserve the authenticity of the phenomenon, the researcher consciously practiced epoché or bracketing by temporarily setting aside personal experiences, professional knowledge, and preconceived beliefs about operating room practice. Although the researcher had clinical experience in the OR setting, these experiences were intentionally suspended during data collection and analysis to prevent them from influencing interpretation. This methodological discipline ensured that the voices of the participants, rather than the assumptions of the researcher, shaped the findings of the study.

Potential sources of bias were acknowledged during the conduct of the research. Participant bias may have occurred when informants provided responses perceived as socially acceptable rather than expressing their genuine experiences. To minimize this, the researcher fostered a trusting and nonjudgmental interview environment and assured participants of confidentiality. Researcher bias was addressed through rigorous bracketing, reflexive journaling, and adherence to systematic phenomenological analysis procedures.

By maintaining an atheoretical stance, the study allowed the complex and dynamic realities of the operating room to be understood in their full depth and context. This approach ensured that meaningful insights were derived directly from the lived experiences of OR nurses who continuously adapted to uncertainty and high-stakes clinical demands.

Philosophical Stance of the Study

This qualitative research study was grounded in an interpretivist and constructivist philosophical stance, with complementary elements of realism, and was operationalized through a phenomenological approach. The study aimed to explore the lived experiences of operating room (OR) nurses as they navigated the complex and unpredictable realities of the operating room environment. Rather than viewing the operating room as a purely technical or procedural setting, the study recognized it as a socially and emotionally constructed clinical space where meaning was continuously shaped through interaction, experience, and context. OR realities were not experienced uniformly; instead, they were influenced by nurses' professional roles, level of experience, team dynamics, institutional policies, and situational demands. These characteristics made OR nursing practice particularly suitable for exploration through a qualitative, phenomenological lens.

From an **ontological assumption**, the study assumed that reality in the operating room was multiple and context-dependent rather than singular and objective. Different nurses experienced the same clinical events in varied ways depending on their background, exposure, and responsibilities. For example, a sudden case insertion may have been perceived as routine by an experienced nurse but stressful for a novice nurse. These multiple realities were essential in understanding the essence of OR nursing practice.

From an **epistemological assumption**, knowledge was co-constructed through interaction between the researcher and the participants. The meanings uncovered in the study emerged from in-depth dialogue, reflection, and interpretation of the participants lived experiences. The operating room was therefore understood not only as a physical environment but also as a lived space shaped by urgency, communication, teamwork, and emotional labor.

The **axiological assumption** acknowledged that values were inherent in the research process. The researcher recognized that her background as an OR nurse influenced her engagement with the study. To address this, reflexivity was practiced through continuous self-awareness and documentation, while bracketing was applied to minimize the influence of personal biases on data interpretation.

Methodologically, the study followed an inductive and emergent design consistent with phenomenological inquiry. Understanding developed from the participants' narratives rather than from predefined theories or hypotheses. Through systematic analysis, shared meanings and patterns were identified, leading to the development of themes that captured both what the nurses experienced and how they experienced it.

The **rhetorical assumption** emphasized a descriptive and human-centered writing style. The study presented the narratives of OR nurses using rich and detailed descriptions to accurately reflect their lived experiences. This approach allowed readers, particularly nurse leaders and administrators, to better understand the realities of operating room practice.

Finally, the concept of **intentionality** was central to the study. The experiences of OR nurses were understood as being directed toward specific situations, such as responding to emergencies, managing workflow disruptions, and ensuring patient safety. These experiences were continuously interpreted in relation to past experiences, professional expectations, and situational demands.

Domains of Inquiry

This study explored the lived experiences of nurses handling different operating room (OR) realities in Level II hospitals in Surigao City during the year 2025.

Specifically, the study was guided by the following research questions:

1. How were operating room realities experienced by the nurses?
2. What was the essence or meaning of their experiences?
3. Based on the findings, what implications for education, policymaking, practice, and research were identified?

RESEARCH METHODOLOGY

Design. This study utilized a Husserlian descriptive phenomenological design anchored in the philosophy of Edmund Husserl, which focused on describing phenomena as consciously experienced by individuals without interpretation or theoretical imposition, emphasizing that knowledge was derived from participants' direct lived experiences; the approach was employed to capture the lived experiences of operating room (OR) nurses as they encountered and managed diverse realities such as sudden case insertions, emergent procedures, cancellations, deferrals, unforeseen complications, and workflow disruptions within their natural work environment. Guided by Husserl's concept of intentionality, the study viewed nurses' consciousness as directed toward unfolding clinical events, patient safety, team coordination, and rapid decision-making under pressure, while epoché or bracketing was applied by the researcher to suspend personal beliefs and minimize bias, ensuring authenticity and credibility of findings; as a qualitative and descriptive study, it generated rich narrative accounts aimed at describing the essence and structure of OR realities rather than explaining causality, providing a clear and grounded understanding of operating room practice in a complex and unpredictable tertiary hospital setting.

Locale. This study was conducted in Level II government hospitals and selected surgical facilities within Surigao City and the broader Caraga Region, Philippines, which served as major referral centers for surgical and perioperative care.

Informants. This study initially involved six (6) operating room (OR) nurses, with additional participants recruited from government hospitals in Surigao City and the Caraga Region who had direct experience in managing diverse OR realities such as emergent cases, cancellations, and other unplanned events; data saturation was achieved at the eighth (8th) participant when no new themes emerged, ensuring sufficient depth of information, while nurses with longer clinical experience and greater exposure to complex OR situations were considered key informants for providing richer and more reflective accounts of the phenomenon.

Sampling Design. This study employed purposive sampling to select operating room (OR) nurses with direct experience in managing diverse OR realities such as emergent cases, cancellations, and workflow disruptions, ensuring information-rich participants for in-depth descriptions, while snowball sampling was used when necessary to identify additional qualified participants across hospitals in Surigao City and the Caraga Region.

Inclusion Criteria and Exclusion Criteria. Included in this study were operating room (OR) nurses currently employed in public or private hospitals within Surigao City or the Caraga Region who had direct involvement in perioperative care and actual experience in managing operating room realities such as emergency cases, sudden insertions, cancellations, deferrals, or workflow disruptions, and who voluntarily agreed to participate with written informed consent; excluded were OR nurses in purely administrative or managerial roles without direct clinical involvement, those under the direct supervision of the researcher to minimize bias, and those unavailable during data collection due to leave, illness, or personal circumstances, while participation remained strictly voluntary with the option to withdraw at any stage without penalty or impact on professional standing.

Instrument. The researcher was the primary instrument of this qualitative phenomenological study, supported by a semi-structured interview guide that served as a flexible framework for eliciting rich and in-depth narratives, recognizing that understanding the phenomenon relied on careful listening, sensitivity to meaning, and the ability to probe lived experiences; the guide was designed to explore the lived experiences of operating room (OR) nurses in navigating diverse OR realities such as emergent cases, sudden insertions, cancellations, deferrals, and workflow disruptions through open-ended questions and probing to allow meanings to emerge naturally. To ensure rigor, the researcher conducted a mock interview with her adviser to enhance preparedness, neutrality, and probing skills, while the interview guide consisted of three parts: Part I: Introduction - to establish rapport; Part II: Main Interview - to explore experiences, emotions, decision-making, and coping strategies with strict bracketing, and Part III: Conclusion - to allow additional reflections and support completeness of data through member-checking. Through the use of this semi-structured interview guide and her role as the primary instrument, the study aimed to capture authentic, detailed, and meaningful

descriptions of OR nurses lived experiences within the dynamic and unpredictable operating room environment.

Data Gathering Procedures. The data gathering procedures consisted of pre-data gathering, actual data gathering, and post-data gathering phases, beginning with the approval of the research title, assignment of a research adviser, submission of transmittal letters, conduct of a design hearing, and securing ethical clearance from the university research committee, followed by adherence to ethical principles, informed consent, voluntary participation, and confidentiality; during actual data gathering, permission was obtained from selected hospitals, participants were identified through purposive sampling based on inclusion criteria, and data were collected through in-depth, semi-structured interviews conducted in private settings, lasting 30–60 minutes, audio-recorded with consent, supported by field notes, and guided by bracketing to minimize bias, with data collection continuing until saturation was achieved. In the post-data gathering phase, interviews were transcribed verbatim, reviewed for accuracy, and analyzed using phenomenological procedures involving familiarization, extraction of significant statements, coding, and theme development, while rigor was ensured through credibility, dependability, confirmability, and transferability, and all data were handled with strict confidentiality through anonymization, secure storage, and proper disposal in accordance with ethical guidelines.

Data Analysis. The study utilized Colaizzi's (1978) method of phenomenological data analysis, a systematic and rigorous approach suitable for descriptive phenomenological research that ensured credibility and reliability by uncovering the essential structure of participants' lived experiences (Wirihana et al., 2017); the process involved reading and rereading transcripts for familiarization, extracting significant statements related to the phenomenon, formulating meanings while practicing bracketing to minimize bias, organizing meanings into clusters of themes, and synthesizing these into an exhaustive description from which the fundamental structure or essence of the experience was derived. To ensure accuracy and validity, member checking was conducted with participants, and a dendrogram analysis was used to illustrate relationships among emergent themes, supported by tabular presentations in the appendices, while reflexivity through journaling, continuous bracketing, and peer debriefing enhanced analytic rigor; overall, the method produced a rich, holistic representation of the lived experiences of operating room nurses, with trustworthiness ensured through the application of credibility, dependability, confirmability, and transferability.

Criteria for Trustworthiness. Trustworthiness in qualitative research ensures that findings are credible, dependable, confirmable, and transferable. In this phenomenological study, these criteria were applied in alignment with the actual data gathering and analysis procedures to ensure that the lived experiences of operating room (OR) nurses were accurately represented.

Credibility. This refers to the extent to which the findings truthfully represent the participants lived experiences. In this study, credibility was ensured through in-depth semi-structured interviews, careful transcription of data, and member checking. After transcription, participants were given the opportunity to review and validate their responses to confirm accuracy and completeness. The researcher also practiced bracketing throughout the data collection and analysis process to minimize personal bias and allow the participants' perspectives to emerge authentically.

Dependability. This pertains to the consistency and reliability of the research process. This was established by maintaining clear and systematic documentation of the research procedures, including data gathering steps, interview processes, and transcription methods. The use of a semi-structured interview guide also ensured consistency across interviews while still allowing flexibility for participants to express their experiences in depth.

Confirmability. This ensures that the findings are grounded in the participants' narratives rather than the researcher's personal biases. In this study, confirmability was achieved through the use of verbatim transcripts, where participants' statements were directly reflected in the analysis. Additionally, the researcher maintained a reflexive journal to document insights, decisions, and potential biases throughout the research process, supporting transparency in data interpretation.

Transferability. This refers to the extent to which the findings may be applicable to other contexts. This was addressed through the use of thick description, providing detailed accounts of the research setting, participant characteristics, and operating room environments. These detailed descriptions allow readers to determine the relevance of the findings to similar clinical settings or populations.

Reflexivity. This acknowledges the influence of the researcher's background on the research process. As an operating room nurse, the researcher recognized the potential for personal experiences to influence data interpretation. To address this, reflexivity was practiced through continuous self-awareness and journaling, alongside strict adherence to bracketing during interviews and analysis to ensure that participants' voices remained central to the study.

Ethical Considerations. Ethical considerations are an essential component of any research study. The study was submitted to the ethics committee of both the university and the hospital. Ethical approval was sought prior to the start of data gathering to ensure that the welfare of the respondents was protected.

Presentation, Analysis, And Interpretation Of Data

Theme 1: Into the Unknown: Uncovering the Surgical Realities

Unpredictability was the most dominant reality described by the nurses. Despite carefully planned schedules and protocols, the operating room is constantly disrupted by emergencies, cancellations, and sudden insertions. These situations require nurses to reorganize priorities instantly, often under intense pressure. The theme underscores the dynamic nature of OR practice, where flexibility and vigilance are indispensable. Nurses must be prepared to abandon routine tasks and adapt to sudden changes, which often occur without warning. This theme highlights how unpredictability is not an occasional disruption but a defining characteristic of OR nursing practice, shaping the rhythm of daily work and influencing the way nurses perceive their professional responsibilities.

Subtheme 1.1: Scheduling Issues

Scheduling disruptions were a recurring reality for OR nurses, often caused by patient readiness, incomplete requirements, or surgeon availability. Rolan noted that "disruptions often come from changes in surgical schedules... though these happen rarely" (Lines 7-8), while Margarete emphasized that "sudden prioritizations and disruptions affect workflow" (Lines 4-5). These accounts highlight how even well-prepared surgical teams must frequently reorganize tasks and communicate changes to patients and families. Wong et al. (2018) found that cancellations due to patient readiness significantly affect OR efficiency and staff morale, reinforcing the nurses' accounts. The unpredictability of scheduling not only delays care but also increases stress, as nurses must balance patient expectations with institutional constraints.

Subtheme 1.2: Sudden Insertions

Emergency or "stat" cases often disrupted planned schedules, requiring rapid turnover and reassignment of staff. Rolan recalled, "a scheduled case was interrupted by an urgent cesarean section... we had to prioritize the emergency case" (Lines 10-11), while Leonid observed that "urgent insertions often disrupt workflow and cause delays" (Line 5). These narratives underscore the immediacy with which nurses must reprioritize, often shifting roles and responsibilities within seconds. Gillespie et al. (2012) emphasized that sudden insertions heighten stress levels and demand rapid adaptation from perioperative teams. Kulaksızoğlu (2025) adds that effective communication and teamwork are essential safeguards in such high-risk environments. For nurses, these moments are not only technically demanding but emotionally charged, as they balance the urgency of saving lives with the disruption of planned care.

Subtheme 1.3: Missing Instruments and Supplies

Resource shortages were a common challenge, forcing nurses to improvise or delay procedures. Rolan admitted that "resource issues such as unavailable supplies... are common" (Lines 26-27), while Taris added, "challenges include limited resources, unavailable instruments, and staffing shortages" (Lines 21-22). These

shortages compromise workflow efficiency and increase stress, as nurses must scramble to secure missing items while maintaining sterility and patient safety. Bjerregaard et al. (2021) similarly reported that equipment unavailability and environmental stressors exacerbate surgical delays and nurse fatigue. Literature positions these shortages not as isolated incidents but systemic issues that shape daily practice, demanding creativity, resilience, and advocacy from nurses to ensure patient safety despite resource gaps.

Subtheme 1.4: Workflow Disruptions and Delays

Unexpected changes in patient condition, equipment malfunction, or communication breakdowns frequently disrupted surgical flow. Rolan observed that “disruptions often come from communication issues among surgeons and anesthesiologists” (Lines 9-10), while Taris emphasized, “the most common disruption is communication, which is essential for teamwork” (Lines 2-3). These accounts highlight the fragility of OR coordination, where even minor lapses in communication can escalate into significant delays. Singh and Arulappan (2023) further stress that interprofessional communication is central to perioperative safety. Nurses often act as stabilizing forces, bridging communication gaps and ensuring continuity of care despite systemic inefficiencies.

Subtheme 1.5: Intraoperative Complications

Nurses frequently encountered unforeseen patient instability and intraoperative emergencies. Julienne recalled that “unexpected bleeding or patient instability demand rapid decision-making” (Line 7-8), while Joffer shared, “I recall a routine surgery that became complicated due to excessive bleeding” (Line 5-6). These narratives underscore the high-stakes nature of OR nursing, where vigilance and rapid response are critical. Feo et al. (2022) confirm that intraoperative emergencies amplify stress and require immediate coordination, while Lundgren & Andersson (2020) emphasize the moral responsibility of nurses to advocate for patient dignity even during crises. For nurses, these moments are defining experiences that test both technical skill and emotional resilience, reinforcing their role as patient advocates in critical situations.

Subtheme 1.6: Staffing Shortages

Limited personnel and overlapping duties added strain to already unpredictable conditions. Leonid noted, “staff absences... increase my workload and delay endorsements to the next shift” (Lines 11-12), while Kristian emphasized, “challenges include staffing shortages... that limit efficiency” (Lines 7-8). These accounts reveal how staffing gaps force nurses to stretch themselves across multiple responsibilities, often at the expense of rest and recovery. Zhang et al. (2025) and Bae et al. (2021) identify staffing shortages and rigid scheduling as key drivers of burnout, reducing nurse resilience and wellbeing. Literature consistently emphasizes that organizational support and adequate staffing are essential to sustain perioperative nurses’ long-term engagement and patient safety.

Subtheme 1.7: Administrative Constraints

Institutional policies and surgeon availability often dictated sudden changes in schedules. Rolan observed that “doctors not following policies are common challenges” (Line 15), while Leonid added, “policy non-compliance by some doctors... affects workflow” (Line 13). These accounts highlight how systemic inefficiencies and policy gaps exacerbate OR unpredictability Wong et al. (2018) and Al-Rafee et al. (2023) emphasized that administrative inefficiencies and policy non-compliance contribute significantly to surgical delays and staff frustration. Literature portrays OR nurses as communication bridges who must navigate institutional hierarchies while advocating for patient safety and workflow efficiency. This dual responsibility underscores the need for hospital leaders to recognize and address systemic barriers to effective OR practice.

Theme 2: Carrying the Invisible Weight of the Surgical Realities

The emotional and mental strain of operating room nursing was a recurring reality in the participants’ narratives. While the OR is often described as a technical and procedural environment, the nurses emphasized that it is also an emotionally charged space where stress, anxiety, and pressure are constant companions. Emergencies, sudden changes in patient conditions, and unexpected complications heighten the emotional

load, requiring nurses to regulate their feelings while maintaining clinical accuracy. The theme highlights how OR nurses must balance composure with empathy, often suppressing their own emotions to ensure patient safety and team stability. It also underscores the hidden emotional labor of OR nursing, which is often overlooked but is central to sustaining resilience and professional identity.

Subtheme 2.1: Stress and Anxiety During Emergencies

Stress was described as an inevitable part of OR practice, particularly during emergencies. Julienne admitted, “Emotionally, I feel stress and anxiety, along with a strong sense of responsibility, as small errors can have serious consequences” (Lines 16-17). Kristian echoed this, noting, “These situations bring stress and anxiety, especially if it’s almost time for endorsement to the next shift” (Lines 13-14). These accounts reveal that emergencies trigger heightened anxiety, yet nurses must remain outwardly composed to avoid disrupting the surgical team. The literature confirms this reality as Zhang et al. (2025) identified emotional exhaustion and depersonalization as prevalent among OR nurses, linking them to workload demands and high responsibility for patient safety. Bae et al. (2021) further emphasized that environmental stressors such as prolonged standing and rigid scheduling exacerbate fatigue and stress. Interpretation suggests that stress becomes a functional tool in the OR, sharpening focus and guiding judgment under pressure. However, the emotional toll is undeniable, as nurses carry the weight of responsibility for patient outcomes even when circumstances are beyond their control. This hidden burden illustrates the “invisible weight” of OR nursing, where composure masks the deep emotional strain of safeguarding lives.

Subtheme 2.2: Mental Strain

Beyond emotional stress, nurses described the mental strain of constant vigilance, rapid decision-making, and cognitive overload. Taris explained, “Unexpected events have a real emotional impact, not in terms of fear but in the sustained cognitive and emotional load, though I remain outwardly composed” (Lines 19-20). Julienne added, “These realities increase my workload physically and mentally, requiring flexibility and rapid decision-making” (Lines 15-16). These reflections highlight how mental strain is not only about acute emergencies but also about the sustained demands of anticipating needs, coordinating tasks, and maintaining situational awareness throughout long procedures. The literature situates this mental burden within the broader context of lived experience. Feo et al. (2022) and van Manen (2016) emphasize that nurses continuously interpret and make sense of unpredictable events, shaping their professional identity and coping strategies. Mayo Clinic College of Medicine & Science (2025) underscores that perioperative nurses must demonstrate high levels of situational awareness and adaptability, often under intense cognitive load. This analysis shows that mental strain is embedded in the structural realities of OR practice, where nurses must sustain concentration and composure despite fatigue and uncertainty. Over time, this strain influences professional confidence, resilience, and meaning-making, reinforcing the dual identity of OR nurses as both technical experts and emotional laborers.

Theme 3: Managing the Surgical Reality

Teamwork and communication were consistently highlighted by the nurses as the backbone of operating room practice. In unpredictable situations, the ability of the surgical team to coordinate effectively determines whether patient safety can be maintained. The OR is a highly interdependent environment where nurses, surgeons, anesthesiologists, and support staff must work in synchrony, often under intense time pressure. Participants emphasized that teamwork is not static but dynamic, requiring constant negotiation of roles and responsibilities depending on the urgency of the case. Communication, both verbal and non-verbal, was described as essential in preventing confusion and ensuring clarity during critical moments. This theme underscores that OR nurses are not only technical practitioners but also relational anchors, ensuring that collaboration and trust are sustained even when workflows are disrupted.

Subtheme 3.1: Role Shifting and Flexibility

Nurses described how their roles often shift depending on the urgency of the situation. Rolan recalled, “...roles as needed, sometimes even scrubbing in myself as team leader” (Lines 31-32), while Kristian emphasized,

“Teamwork is essential, and roles often shift flexibly depending on urgency” (Lines 20-21). Margarett reinforced this, stating, “Teamwork is vital, with roles shifting flexibly depending on urgency” (Line 15-16). These accounts highlight the fluidity of teamwork in the OR, where rigid role boundaries are often blurred to meet patient needs. Literature supports this, with Mayo Clinic College of Medicine & Science (2025) emphasizing that perioperative nurses must demonstrate adaptability and situational awareness. The analysis shows that flexibility is not optional but necessary, as emergencies demand that nurses step into unfamiliar roles to ensure continuity of care. Interpretation suggests that role shifting reflects the adaptability of OR nurses, who prioritize patient safety over strict adherence to assigned duties. This subtheme illustrates how teamwork in the OR is characterized by shared responsibility, where each member is prepared to adjust and support others when circumstances require.

Subtheme 3.2: Conflict Resolution and Dialogue

Misunderstandings were acknowledged as inevitable in the fast-paced OR environment. Rolan explained, “Misunderstandings are resolved through dialogue. Patient safety is ensured by informing patients and their families about the urgency” (Lines 44-45). Leonid noted, “Misunderstandings [are] resolved through communication. Patient care is affected by sudden changes, but safety is maintained” (Lines 22-23). Margarett reinforced, “Communication ensures misunderstandings are resolved. Patient care is affected by sudden changes, but safety is maintained” (Appendix F). These statements reveal that communication is not only about coordination but also about resolving tensions that arise during stressful situations. Kulaksızoğlu (2025) confirm that communication breakdowns are among the most common causes of workflow disruption. The analysis shows that conflicts, if left unresolved, can undermine trust and efficiency, but when addressed openly, they strengthen team cohesion. Interpretation suggests that dialogue is a critical tool for maintaining harmony, allowing nurses to clarify roles, correct mistakes, and rebuild trust after misunderstandings. This subtheme highlights the relational dimension of teamwork, where nurses act as mediators, ensuring that conflicts do not compromise patient safety or team morale.

Subtheme 3.3: Endurance and Coping Mechanisms

Endurance and coping mechanisms were repeatedly emphasized as survival strategies in the OR. Taris explained, “Coping is built over time through supports, experiences, habits, and relationships” (Lines 21–22). Mike added, “Past experiences guide me. When situations repeat, I learn to solve them quickly” (Lines 28–29). Julienne also reflected, “Coping strategies involve organization, rehearsing protocols, composure, support from colleagues, and past experiences” (Lines 46–47). The literature situates coping within the broader emotional and professional impact of OR nursing. Zhang et al. (2025) identified resilience as a protective factor against burnout, while Khademi et al. (2024) emphasized that peer support and teamwork sustain nurses during high-risk situations. Endurance is not only physical but also mental, requiring nurses to sustain concentration and composure during long and unpredictable procedures. Coping strategies evolve over time, transforming stress into resilience and reinforcing professional confidence. Nurses learn to normalize unpredictability, treating each disruption as an opportunity to strengthen adaptability.

Theme 4: Confronting the Hidden Barriers of Surgical Realities

Beyond the unpredictability of emergencies and intraoperative complications, nurses revealed that many of their struggles stem not from clinical demands but from systemic and organizational shortcomings. Resource gaps, staffing shortages, and policy inconsistencies repeatedly constrained their ability to respond effectively, amplifying the stress of OR practice. This theme underscores that unpredictability is not only clinical but also organizational, rooted in the structures and systems that govern hospital operations. Participants emphasized that these barriers often leave nurses feeling unsupported, as they must improvise solutions in the absence of adequate resources. The findings highlight that resilience alone cannot sustain OR nurses if systemic gaps remain unaddressed.

Subtheme 4.1: Challenges in Resources

Nurses frequently mentioned the lack of supplies and equipment as a major obstacle in their practice. Rolan lamented, “Give what is needed by the OR in terms of instruments or supplies, because it’s very difficult if our

instruments are lacking, especially since the OR is a special area” (Lines 18–20). Julienne added, “Sometimes instruments are missing, and we have to improvise quickly” (Lines 18–20).

These accounts reveal that resource shortages directly disrupt workflow, forcing nurses to delay procedures or find alternative solutions under pressure. Literature echoes this reality: Bjerregaard et al. (2021) reported that equipment unavailability and environmental stressors exacerbate surgical delays and nurse fatigue. The analysis shows that supply issues are not isolated incidents but recurring problems that undermine efficiency and patient safety. Interpretation suggests that nurses often bear the burden of these shortages, improvising solutions to maintain continuity of care while absorbing the stress of systemic inefficiencies. This subtheme highlights the critical role of institutional support in ensuring that OR nurses are adequately equipped to perform their duties without unnecessary obstacles.

Subtheme 4.2: Systemic Challenges

Staffing issues were also highlighted as a significant challenge. Rolan explained, “There are absences or unclear shifting schedules” (Lines 51–52). Kristian emphasized, “It is very difficult when staff are lacking, especially during emergencies” (Lines 21–22). Leonid added, “Policy non-compliance by some doctors... affects workflow” (Line 13). These reflections show that inadequate staffing and unclear policies exacerbate unpredictability, leaving nurses to manage increased workloads and blurred responsibilities. Literature supports this, with Zhang et al. (2025) and Bae et al. (2021) identifying staffing shortages and rigid scheduling as key drivers of burnout, while Al-Rafee et al. (2023) highlight that policy non-compliance undermines trust and coordination within surgical teams. The analysis reveals that staffing gaps not only strain individual nurses but also weaken team cohesion, making it harder to respond effectively to emergencies. Interpretation suggests that systemic challenges, whether in staffing or policy enforcement, create tension between nurses and physicians, eroding trust and weakening the collaborative fabric of the OR. This subtheme underscores the need for clear policies, consistent staffing, and stronger institutional accountability to support nurses in their critical role.

Theme 5: Final Countdown

Despite the unpredictability, emotional strain, and systemic challenges of operating room practice, the nurses consistently emphasized how these experiences shaped their professional identity and resilience. They described how repeated exposure to crises strengthened their confidence, sense of responsibility, and pride in their role. OR nursing was not seen merely as technical work but as a vocation that blends science, art, and ethical commitment. The theme highlights that resilience is not simply coping with stress but transforming adversity into mastery, where nurses redefine themselves through the challenges they face. This theme underscores that OR nurses derive meaning and pride from their ability to endure, adapt, and uphold patient safety, even when recognition is limited.

Subtheme 5.1: Confidence and Responsibility

Nurses expressed that repeated exposure to crises strengthened their confidence and sense of responsibility. One participant reflected, “Because situations keep repeating, I learn to solve them quickly” (Joffer, Lines 62–63). Another emphasized, “You must be responsible in your unit to improve” (Julienne, Lines 55–56). These accounts reveal that confidence is not innate but cultivated through experience, where each disruption becomes an opportunity to refine skills and judgment. The analysis shows that responsibility is internalized as part of professional identity, with nurses viewing themselves as guardians of patient safety and team stability. Interpretation suggests that resilience is not only about coping but also about embracing responsibility as a defining feature of OR nursing. Confidence grows as nurses repeatedly confront unpredictability, reinforcing their identity as capable and dependable practitioners. This subtheme illustrates how professional growth emerges from the challenges of OR practice, shaping nurses into leaders within their units.

Subtheme 5.2: OR Nursing as Science and Art

Nurses articulated the deeper meaning of their role, describing OR nursing as both science and art. One explained, “It is both science and art, requiring integrity even when there’s no recognition” (Taris, Lines 57–

57). Another shared, “Experiences in the OR don’t just teach skills, they also shape identity” (Margarette, Lines 25–26). These reflections highlight that OR nursing transcends technical competence, encompassing ethical responsibility and emotional discipline. The analysis shows that nurses view their role as a blend of precision and humanity, where technical expertise must be balanced with compassion and integrity. Interpretation suggests that resilience transforms adversity into mastery, affirming OR nursing as a vocation that demands both scientific rigor and humanistic care. This subtheme underscores that professional identity is not only about what nurses do but about who they become through their lived experiences in the OR.

SUMMARY OF FINDINGS AND IMPLICATIONS

Summary of Findings. This study explored the lived experiences of operating room nurses in navigating unpredictability in surgical flow using a descriptive phenomenological approach, revealing 5 major themes that reflect how nurses experience and construct meaning from these realities; *Into the Unknown: Uncovering the Surgical Realities* identified unpredictability as a defining characteristic of OR practice marked by scheduling issues, sudden insertions, missing instruments, workflow disruptions, intraoperative complications, staffing shortages, and administrative constraints, while *Carrying the Invisible Weight of the Surgical Realities* highlighted the emotional and mental strain through stress, anxiety, and sustained vigilance that shape resilience and professional identity.

Teamwork and Communication in Managing Surgical Realities emphasized collaboration, role flexibility, conflict resolution, and coping mechanisms as strategies to maintain patient safety, whereas *Confronting the Hidden Barriers of Surgical Realities* focused on systemic challenges such as resource shortages, staffing gaps, and policy inconsistencies that amplify stress and require nurses to compensate for institutional shortcomings; finally, *Professional Identity and Resilience* showed that repeated exposure to crises strengthens confidence, responsibility, and pride, with OR nursing described as both science and art, where resilience is not merely coping but transforming adversity into mastery, collectively revealing that the essence of OR nursing lies in being a stabilizing presence in an unstable environment defined by adaptability, composure, responsibility, and ethical care.

Implication of the Findings.

Nursing Practice. The findings of this study suggest that nursing practice in the operating room must explicitly recognize unpredictability as an inherent component of perioperative care. For nurse managers, this means ensuring that OR nurses are continuously supported in developing adaptive skills such as critical thinking, rapid prioritization, and emotional regulation. Nursing management should integrate reflective practice, peer debriefing, and experiential learning into routine clinical work to help nurses process unpredictable events and strengthen resilience. Reinforcing patient advocacy and situational awareness within perioperative practice also enhances nurses’ ability to maintain safety and quality care despite sudden changes in surgical flow.

Nursing Administration. From an administrative perspective, the findings underscore the need for supportive organizational structures that acknowledge the emotional and cognitive demands of operating room nursing. Nurse administrators and managers should design staffing models, scheduling practices, and workload distribution systems that allow flexibility during unpredictable situations. Nursing management must also foster a culture of open communication, teamwork, and psychological safety to mitigate stress and improve job satisfaction among OR nurses. Providing access to wellness programs, stress management resources, and leadership support can reduce burnout and promote retention in perioperative settings.

Nursing Policy. The study’s findings highlight the importance of institutional and organizational policies that support safe and flexible perioperative practice. Nursing management plays a critical role in advocating for policies related to surgical scheduling, emergency case management, and interprofessional communication that reflect the realities of unpredictability in the operating room. Establishing clear guidelines for managing sudden workflow changes and ensuring nurse participation in decision-making processes strengthens patient safety and empowers nurses. At a broader level, policies that recognize the complexity of operating room nursing contribute to improved working conditions, professional recognition, and organizational accountability.

Nursing Research. The findings point to the need for further qualitative and phenomenological research focusing on operating room nurses lived experiences across diverse healthcare settings. For nursing management, future studies may explore how organizational culture, years of experience, and institutional resources influence nurses' meaning-making processes in unpredictable environments. Comparative studies between different surgical settings or regions may also deepen understanding of contextual influences. Integrating qualitative insights with quantitative outcomes could help nursing managers design evidence-based interventions that support perioperative nurses and enhance surgical care delivery. Suggested Future Research Titles :

- a. Exploring the Impact of Communication Dynamics on Team Performance in the Operating Room
- b. Comparative Analysis of Resource Challenges in Government and Private Hospital Operating Rooms
- c. The Influence of Systemic Constraints on Patient Safety and Workflow Efficiency in Surgical Units

REFERENCES

1. Al-Rafee, H., Al-Omari, H., & Saifan, A. (2023). Nurses' perceptions regarding the impact of teamwork on patient safety culture in the operating room: A qualitative study. *Perioperative Care and Operating Room Management*, 31, 100345. <https://www.sciencedirect.com/science/article/pii/S2405603023000407>
2. Arora, S., Sevdalis, N., Nestel, D., Woloshynowych, M., Darzi, A., & Kneebone, R. (2010). Managing intraoperative stress: What do surgeons want from a crisis training program? *The American Journal of Surgery*, 199(4), 537–543. <https://doi.org/10.1016/j.amjsurg.2009.04.031> (doi.org in Bing)
3. Bae, S. H., Lee, I., Kim, S., & Kim, M. (2021). Associations between operating room noise, occupational stress, and burnout among perioperative nurses. *Journal of Nursing Management*, 29(5), 1231–1239. <https://pubmed.ncbi.nlm.nih.gov/33655562/>
4. Bjerregaard, M., Drageset, J., Skorpen, S., Storm, M., & Hall-Lord, M. L. (2021). Operating room nurses' experiences of limited access to daylight in the workplace – a qualitative interview study. *British Medical Council Nursing*, 20, Article 227. <https://doi.org/10.1186/s12912-021-00751-8>
5. Dahlberg, K., Dahlberg, H., & Nyström, M. (2008). *Reflective lifeworld research* (2nd ed.). Studentlitteratur.
6. Feo, R., Conroy, T., Jangland, E., et al. (2022). Operating room nurses' experiences about patient care for laparotomy surgeries: A phenomenological study. *Journal of Family Medicine and Primary Care*. <https://pubmed.ncbi.nlm.nih.gov/35516685/>
7. Gillespie, B. M., Chaboyer, W., Wallis, M., & Werder, H. (2012). Operating theatre nurses' perceptions of competence: A focus group study. *Journal of Advanced Nursing*, 68(5), 1019–1028. <https://doi.org/10.1111/j.1365-2648.2011.05796.x>
8. Kulaksızoğlu, H. (2025). Mapping the nursing literature on patient safety in the operating room: A bibliometric analysis. *Journal of Safety Research*. <https://www.sciencedirect.com/science/article/abs/pii/S2405603024000888>
9. Lundgren, P., & Andersson, A. (2020). Newly trained operating room nurses' experiences of nursing care in the operating room. *Journal of Clinical Nursing*. <https://pubmed.ncbi.nlm.nih.gov/31943310/>
10. Singh, B. C., & Arulappan, J. (2023). Operating room nurses' understanding of their roles and responsibilities for patient care and safety measures in intraoperative practice. *SAGE Open Nursing*. <https://journals.sagepub.com/doi/10.1177/23779608231186247>
11. van Manen, M. (2016). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315421056>
12. Wong, J., et al. (2018). Evaluation of operating room inefficiencies and their impact on operating room duration using a surgical app. *The American Journal of Surgery*, 235(3), 570–576. <https://doi.org/10.1016/j.amjsurg.2017.12.018> (doi.org in Bing)
13. Zahavi, D. (2019). *Phenomenology: The basics*. Routledge. <https://doi.org/10.4324/9781315775104>
14. Zhang, X., Liu, Y., Chen, Y., & Li, H. (2025). Understanding burnout among operating room nurses: A qualitative study. *Frontiers in Public Health*. <https://www.frontiersin.org/articles/10.3389/fpubh.2025.1604631/full>