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Impact of Nurse-Initiated Preoperative Health Education in Selected Hospitals in Southern Palawan

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Abstract

Effective nurse-initiated preoperative teaching improves surgical overall outcomes by reducing anxiety, clarifying understanding of the procedure, and enhancing recovery. Numerous foreign studies have already established the effects of preoperative teaching given by nurses yet evidence from Philippine Level 1 hospitals is limited. This cross-sectional descriptive comparative research studied 90 purposely selected elective postoperative adults (18 to 60 years) in three public facilities in Southern Palawan. Using a validated pilot-tested questionnaire (Cronbach α=.88), this study aimed to capture the respondents' demographics, evaluate their perceptions on four preoperative teaching domains, determine differences in teaching perceptions, and evaluate perception towards teaching barriers. Descriptive statistics profiled the cohort, and Welch t-tests, one-way ANOVA, and Fisher exact tests explored differences in perception. Respondents were mainly 26- 35 years old (38.9%), married (50%), college-educated (35.6%), and mostly undergone major and general surgeries. Focus means on perceptions towards preoperative clustered tightly between 4.47 and 4.49 on a five-point scale (grand mean = 4.48, "strongly agree"), confirming uniformly that nurse-led preoperative education was helpful, clear, and comprehensive. Perceptions did not have significant variations by sex, age, education, or surgical complexity, showing the current teaching protocol's equity-levelling effect. Operation type was the only key influencer of teaching perception (F =2.84, p=.029) where orthopedic patients rated teaching lower (mean=4.11). Reversed barrier scores exposed two major threats, an unfavorable nurse-patient ratio (4.76) and limited teaching resources (4.60). The study concludes that while current education is highly effective, overcoming communication barriers, the staffing and material deficits jeopardize its sustainability. The findings suggest implementing the developed three-phase augmentation plan featuring protected teaching windows, resource-efficient high-reach media, and targeted staffing advocacy to fortify the current program's strengths and address its vulnerabilities.

Keywords: preoperative teaching, health education, teaching barriers

Chapter 1
INTRODUCTION

This chapter presents the study's background, problem statement, significance, scope and delimitation, and explanation of fundamental research concepts.

Background of the Study

Nursing is among the healthcare industry's backbones, encompassing all care rendered to patients and their families. According to the American Nurses Association (2023), nursing involves protecting, promoting, and optimizing the health and abilities of those under their care while preventing illness and injury. From a patient's admission until discharge, reaching as far as a patient's home for follow-ups, nurses are present to perform interventions that aid in the process of healing, utilize proper interaction to human response, thereby alleviating suffering, and be advocates of care for individuals, families, communities, and even entire populations. Nursing is non-stop, can be found anywhere, and is practiced whenever there is a need for nursing knowledge, compassion, and expertise. The profession exists to achieve the most positive patient outcomes, balancing the requirement of adhering to job descriptions, practicing human decency, and exercising compassion for society.

A nurse's work in the hospital is mainly divided between administrative and clinical functions. Nurses on the administrative side are responsible for coordinating staff, developing policies and procedures, facilitating professional development activities, and conducting other relevant leadership roles to collaborate with hospital board members and committees to set and reach performance goals (Deering, 2024). On the other hand, clinical nurses are involved in direct patient care, where they assess patients, administer medications, and provide physician-assisted treatment. Clinical nurses are also responsible for educating patients on managing their health conditions and necessary lifestyle changes to promote health. Being a giver and coordinator of care, educator, and advocate are just a few of the many roles that a clinical nurse performs (Potter P. et al., 2021).

According to Berman A. et al. (2020), nurses work in different clinical areas within the hospital, each with different specific duties and responsibilities. These areas include the medical-surgical unit, emergency department, intensive care unit, pediatrics, labor and delivery unit, oncology unit, psychiatric unit, outpatient clinics, rehabilitation centers, and the operating room (OR) department. The operating room department requires nurses to assist in surgeries, performing the scrub or circulating nurse role to ensure surgery efficiency and provide preoperative and postoperative care. Nurses caring for patients in the OR perform a slightly different role from nurses from other areas due to applying a different set of knowledge and skills demanded by the responsibility. Being a special area, nurses in the OR follow stricter sterile techniques and utilize highly technical knowledge for surgical instruments and procedures. Alternatively, nurses also prepare the patients for surgery and render postoperative care to ensure that the patients are stable after surgery before transfer to recovery units. OR nurses usually interact with patients for a shorter time than nurses from other areas because the role of OR nurses is focused on the procedure itself, limiting the interaction with the patient.

Despite being one of the workers with the least time spent with patients, OR nurses play a critical role in patient education, mainly focusing on the preoperative and postoperative stages. Preoperative patient education entails helping the patient understand the surgical procedure, talk with their expectations, and provide measures to relieve their anxiety Anaba, P. et al., (2020).

According to Brunner et al., (2022), surgeries are considered a significant event for patients with substantial physical and mental impacts regardless of its complexity. Surgeries are, in fact, as disruptive to a person's life as it is as promised to be helpful, thereby eliciting fear and anxiety due to uncertainty. Following surgery, an OR nurse is also responsible for conducting postoperative patient education to communicate what happened with the procedure and provide recovery instructions to the patient, helping

them understand their pain management, wound care, and mobility restrictions, if there are any (Association of Perioperative Registered Nurses, 2021).

Due to the nature of nursing being involved with many, if not all, patient-related matters during hospitalization, and with the reality of bearing the responsibility of patient education, nurses are even more encouraged to provide correct, sufficient, and relevant teaching to patients regarding their concerns and condition. This requires knowledge and understanding of the patient's condition and care for their worries, paying particular attention to educating them about their indicated surgical procedures and providing comfort to relieve their anxiety. As studied by Darville-Beneby, R. et al. (2023), we know that preoperative educational interventions provide positive patient outcomes, which are characterized by the benefit of pain reduction, a significant reduction in opioid consumption for postoperative pain, and reduced postoperative anxiety.

The researcher's experience in working among the Provincial Government of Palawan-managed hospitals in Southern Palawan, specifically Aborlan Medicare Hospital, has been instrumental in the conception of this study. The researcher has observed that patients who underwent elective surgeries were able to spend more time with nurses and receive preoperative education where their concerns were addressed and their knowledge, emotional, and spiritual burdens were discussed freely. Patients who were able to experience ample time to discuss their concerns preoperatively exhibited better psychological and physical dispositions postoperatively and were more participative in their plan of care.

The researcher also observed that Aborlan Medicare Hospital, Narra Municipal Hospital, and Southern Palawan Provincial Hospital are all at the forefront of rendering medical-surgical services to indigent people and residents of their respective municipalities of Aborlan, Narra, and Brooke's Point, even catering to patients on the southernmost of Palawan such as Balabac island. The sheer number of patients that these level 1 public health facilities care for, the availability of functioning operating rooms, and the presence of capable staff, together with materials ready to serve the masses, were enough to motivate the researcher in selecting these hospitals. By selecting these hospitals in Southern Palawan, the researcher aims to study how preoperative teaching impacts the surgical experience of Palaweños and how it can be generalized for Filipinos and humanity as a whole.

Statement of the Problem

This study titled "Impact of Nurse-Initiated Preoperative Health Education in Selected Hospitals in Southern Palawan" aimed to explore and analyze the impact of nurse-initiated preoperative health education.

Specifically, this study sought to find answers to the following queries:

1. What are the socio-demographic profiles of the respondents as to:

a. Age,
b. Sex,
c. Civil Status,
d. Highest educational attainment,
e. Type of surgery experienced, and
f. Number of surgeries experienced?

2. What is the perception of the respondents towards nurse-initiated preoperative teaching in terms of:

a. Surgical procedure overview,
b. Diet and nutrition,

c. Addressing fears and anxiety, and
d. Postoperative expectations?
3. Is there a significant difference in the perceptions of the respondents to nurse-initiated preoperative teaching?
4. What is the perception of the respondents towards the barriers affecting preoperative teaching in terms of:
a. Communication,
b. Nurse-patient ratio, and
c. Teaching resources?
5. What augmentation plan can be proposed to improve the preoperative teaching practices of nurses?

Significance of the Study

The significance of the study presents the importance of the research conducted and its contribution to advancing knowledge in a particular field. This study is deemed significant to the following:

Department of Health. The data that was gathered can be a reference for reviewing the hospital protocol and assessing the performance of staff involved in the point of care. The results of this study may contribute to the national awareness of the importance of preoperative patient education, especially the gravity of the role of nurses in fulfilling the responsibility above. Ultimately, this study may lead to an improved quality of healthcare, which will benefit patients, nurses, physicians, and the Philippine healthcare system.

Hospital management. The findings of this study would enable the hospital management of the selected hospitals in Southern Palawan to identify the weaknesses and strengths of their respective organization regarding the education of patients before a surgical procedure. It will also allow the hospitals to determine how their staff's performance affects patients' hospital stay experience with respect to the preoperative, intraoperative, and postoperative phases of surgery.

Nursing service department. The study would guide the entire nursing service, not just the nurses who work in the Operating Room department, by showing the importance of their role in educating patients preoperatively. It would also emphasize the value of nurses in the entire operative phase and the hospitalization experience of the patients themselves.

Readers. This study would enlighten readers about how closely nurses are tied to patients and how much they are involved in possibly helping patients achieve a better surgical experience by supplementing preoperative teachings. This study would also allow readers to see how nurses play the role of educator, advocate, clinician, and protector of the patient's well-being.

Future researchers. The data that was gathered in this study would also serve as a reference for future researchers interested in studying the impacts of nurse-initiated preoperative teaching to patients in other areas of the Philippines or their own regions. The relationship between the dependent and independent factors in this study may assist future researchers in finding evidence about the importance of nursing in the healthcare setting.

Scope and Delimitation of the Study

The scope of this study examined patients admitted to the selected hospitals in Southern Palawan. The following criteria were used in selecting the respondents for the study: they should be postoperative patients who experienced an elective procedure. They must be able to converse and convey their thoughts.

The limit for the participant's age should be not less than 18 years of age and more than 60 years of age on the day of the interview. This study was conducted from March 2025 until April 2025 using a cross-sectional approach through the interviews that the researcher conducted. A quantitative method of data collection was used to obtain the necessary data for statistical treatment and analysis.

This research is delimited to study participants who are admitted to level 1 hospitals in Southern Palawan that operate functioning Operating Room theaters fitted with trained staff and equipment capable of conducting Minor and Major surgeries, namely Aborlan Medicare Hospital, Narra Municipal Hospital, and Southern Palawan Provincial Hospital. A total of 90 respondents were studied and a timeframe of 2 months was used for the study, which was expected to be sufficient for the collaboration with hospital chiefs and administrators for permission for the study to be conducted in their respective hospitals, obtaining informed consent from patients, interviewing them, and letting them answer a questionnaire, collating the data, providing statistical treatment, and data analysis.

Definition of Terms

This research paper's "Definition of Terms" section acts as a fundamental component, giving clear and simple explanations of essential terminology and concepts used throughout the study. Furthermore, it enables the researcher to offer operational definitions for technical words and measures, therefore standardizing the data-gathering process.

The following terms are used in this study:

Anxiety. A psychological state characterized by feelings of worry, unease, or fear caused by a multitude of factors but is most commonly due to the impending unknown. It may range from mild anxiety featuring feelings of nervousness and apprehension to severe attacks featuring physical, behavioral, and cognitive impairing symptoms. In this study, the meaning and characteristics were communicated to the respondents and was measured through a scale that was answered by the patients depending on how much anxiety they experienced at a point in time.

Barriers. Obstacles that impede the passage or transfer of information or objects from one point to another. In this study, this refers to barriers to preoperative teaching that impede the transfer of information from the nurse to the patient. It is evaluated in terms of communication issues, inadequate nurse-patient ratios, and lack of teaching resources, as reported by the respondents.

Dietary Restriction. Refers to guidelines given to patients regarding food and fluid intake, often aimed at ensuring surgical safety and optimal recovery. In this study, dietary restrictions include fasting and nutritional instructions provided by nurses to respondents before surgery.

Elective Surgery. It is a planned medical procedure that is scheduled in advance because the procedure is not an emergency. In this study, it refers to any non-urgent surgical procedure scheduled by the physician that was experienced by the respondents.

Nurse-Initiated. Acts within or outside the hospital setting involve the nurse as the proponent. This is used in the study to characterize the patient education given specifically by nurses who interacted with them.

Nurse-Patient Ratio. Refers to the proportion of nurses available to care for a set number of patients in a healthcare setting. In this study, it refers to the perceived adequacy or inadequacy of nurse availability for patients during preoperative teaching sessions.

Perception. Defined as the process by which patients interpret, organize, and give meaning to sensory information. In this study, it refers to the measurable patient-reported evaluations of nurse-initiated

preoperative teaching and the barriers that affect it. This is assessed through a structured questionnaire to gain insight on the impact of preoperative teaching on the respondents.

Postoperative Expectations. Encompasses the anticipations or instructions given to patients regarding recovery, such as pain management, wound care, and rehabilitation milestones. In this study, postoperative expectations include the knowledge imparted by nurses about recovery times, physical activity, and warming signs of complications.

Postoperative Phase. This is a phase of surgery that happens after the procedure is completed. Its timeframe is indefinite, and this is where the recovery of a patient from the procedure takes place. This study pertains to the period in time when the patient has successfully undergone a procedure and is currently stable enough for an interview.

Preoperative Teaching. It is the process of educating a patient who will undergo a surgical procedure regarding the purpose of the procedure, steps involved, expected outcomes, and risks. It also includes instructions for preoperative preparation and postoperative recovery. In this study, it was used as a dependent variable to assess how different factors affect the perception of patients towards this variable.

Respondent. A person who participates in an activity. Used interchangeably with the term "Participant". In this study, respondent pertains to the patients who fulfilled the subject selection criteria and were included in the study.

Socio-demographic Profile. Refers to the social and demographic characteristics of individuals or populations, such as age, gender, education, marital status, occupation, and income, which are used to analyze and understand societal behaviors, health outcomes, and access to services. In this study, it includes the respondents' age, sex, civil status, highest educational attainment, number of surgeries experienced, and type of surgery undergone. They are collected to describe the profile of the sample.

Teaching Resources. Any material or tool used to facilitate knowledge transfer, such as pamphlets, videos, or visual aids. In this study, teaching resources refer to the availability and adequacy of educational materials used by nurses during preoperative teaching sessions.

Therapeutic Communication. A technique used by healthcare providers to establish a supportive and understanding relationship with patients, often aimed at alleviating anxiety and fostering trust. In this study, therapeutic communication involves the nurse's ability to empathize, listen, and address patient fears and concerns during the preoperative teaching session.

Chapter 2
REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents a multitude of literature readings and studies that are considered relevant to the present study.

Related Literature

The American Nurses Association (2021) discussed that a holistic and individualized approach to patients is within the registered nurse's scope of practice. Therefore, a nurse is expected to carry out steps that include health promotion and disease prevention. It is natural for nurses to educate a patient and their families regarding medical concerns. Aside from being a direct giver of care and health advocate, a nurse is also a teacher capable of spending more time with patients compared to other healthcare team members. Because of this, a nurse is presented with more opportunities to communicate with the patient and provide relevant teaching to answer questions and supplement what the patient and their family already know.

Registered nurses also follow a standard of practice. The Association of Perioperative Registered Nurses (2021) published the updated standards of practice for the registered nurse. Among the standards of practice mentioned was the identification of learning needs in collaboration with the patient, support person, and care provider. This is because the registered nurse should collect relevant patient data that may be needed in the operation or invasive procedure in the span of the perioperative phase.

Brunner & Suddarth's textbook of medical-surgical nursing (14th ed.), published by Smeltzer, S. et al. (2022), emphasized that nurses who are involved in the preoperative phase of surgery are faced with the responsibility of reviewing patient history, securing consent, performing necessary physical assessments and relevant tests, addressing preoperative anxiety, providing emotional support, making sure that the patient complied with preoperative instructions such as fasting, and teaching them about what to expect during the surgery and what to do afterward.

During the preoperative phase, it is the responsibility of members of the healthcare team, especially nurses, to obtain informed consent. During this time, a patient is amply supplied with the necessary information about the procedure, which gives them the power to make decisions. It is a powerful tool that is grounded in autonomy and respects the patient. Securing informed consent is synonymous with preoperative education, as you cannot legally obtain it without first educating the patient (Hariri E. et al., 2022).

Elective surgeries necessitate ward nurses to carry out doctors' orders and secure consent for the procedure and type of anesthesia. In this preoperative phase, the ward nurse updates the attending physician regarding the patient's status, availability of materials, cardiopulmonary clearance, preop medications, NPO time, and other pertinent data. The time spent by the patient in the ward becomes an opportune moment for nurses to communicate the procedure overview, diet plan, and expectations about the surgery Aborlan Medicare Hospital, (2017).

Moral competence in terms of loving-kindness, compassion, sympathetic joy, equanimity, responsibility, discipline, honesty, and respect for human values, dignity, and rights should be the basic characteristic of an excellent nurse. Garnering the mentioned competence breeds behaviors that are directed towards improved quality of care. Those who have these characteristics are expected to promote the welfare of their patients (Riputola R. et al., 2021).

Nurses are recognized to be naturally intelligent, possessing the capability to think, learn, and reason. However, social, spiritual, and emotional intelligence are much needed in this line of work, where nurses serve as models to patients and guide them toward health. There is a strong relationship between these three types of intelligence and having them enables a nurse to adapt to various situations (De Las Armas, E., 2022).

Gustini, G. et al., (2023) revealed that nurses are critically important in fostering patient comfort and readying them for surgery and that therapeutic communication and providing information to patients positively affects the patient's anxiety and, therefore, improving their overall surgical experience.

Nurses come across a variety of ages perioperatively. It is undeniable that communicating effectively with patients of all ages, especially with elderly patients, is a key to delivering quality health care.

Setiyani R. et al., (2020) explored the communication challenges with older adult patients. Challenges such as less functioning, language structure, bridging the gap in generations, and intimacy of connection were obtained. Improving communication with patients is one of the first steps to effective health teaching.

Assertiveness is a skill that nurses should have as it improves patient advocacy and enhances communication with the healthcare team. Assertive nurses are known to manage their stress better as they

can express their needs and their patients' needs. It is found that variables such as self-esteem, psychological empowerment, and empowering leader behaviors contribute to this skill being developed by Filipino nurses Oducado, RM., (2021).

Effective health teaching requires empathy. Being able to reflect on a patient's experience, especially their perception of pain, increases empathy. Although the effects and experiences of pain on patients are poorly understood in the healthcare system, nurses should be able to engage in their experiences to enhance the quality-of-care Hargett, (2023).

Several literatures discussed the importance of preoperative teaching to patients. Barboza H. et al., (2023) examined the effectiveness of preoperative education and music intervention on postoperative outcomes, such as anxiety and pain. It was revealed that preoperative education, together with music intervention, reduced the severity of anxiety and pain in patients during the first and second preoperative days and first to third postoperative days.

Preoperative education has also been found to be responsible for helping patients in their surgery by giving them realistic expectations. This leads to a higher level of satisfaction with their recovery due to the impact of education on their anxiety and preparedness Giardina, J. et al., (2020).

Health teaching is considered a form of psychosocial support. This is largely needed in patients with mental health disorders such as high levels of anxiety, isolation, depression, and suicidal ideation, among others Okonji E. et al., (2020).

According to Garcia-Padilla, P. et al., (2023), good communication between professionals and patients is the solution to effective health care. A clinician’s ability to explain, listen, and empathize with their patient deeply impacts the biological and functional health outcomes of a patient, as well as their satisfaction and overall care experience.

As members of the healthcare team, nurses are also expected to collaborate with physicians to determine the most appropriate course of action in treating patients perioperatively. One of the responsibilities of nurses is communicating this care plan to the patient. Adequate and timely delivery of information according to the patient’s individual needs makes it possible for patients to achieve satisfaction with their pain management. Doing so also requires a caring attitude and careful attention to the pain that a patient experiences. Satisfaction with pain management is influenced by good communication and information transfer, together with appropriate pain management and empathy (Mubita W. et al., 2020).

Willemin D. et al., (2022) identified that during preoperative admission, patients are ill-prepared regarding the procedure and that their lack of knowledge leads to anxiety. This problem led them to evaluate the effectiveness of a preoperative educational initiative to better prepare patients for surgery. By providing staff in-service who emphasized preoperative nursing interventions and developing a list of suggested questions for patients to ask the operative team, they made sure that 100% of their surveyed patients were able to receive all the necessary information to prepare them for surgery. This quality patient teaching tailored to their needs positively impacted their experience and resulted in greater patient satisfaction.

Brodersen, F. et al., (2023) assessed the effect of preoperative patient education on postoperative recovery in abdominal surgery and examined different patient education strategies for their effectiveness. In their literature, they performed a systematic review of studies to investigate the effect of preoperative education on postoperative recovery. Most of the included studies revealed a reduction in the length of hospital stay, postoperative complications, and adverse events. They concluded that patients with preoperative education also seemed to have lower psychological stress and experience less anxiety.

Rucinski, K. & Cook, J., (2020) evaluated the effectiveness of preoperative education on postoperative opioid use in managing the pain of postoperative orthopedic patients. Education that is specifically related to opioid use was found to be effective in reducing opioid requests among the patients. They have also found that verbal information is more effective rather than written information when giving education to patients.

Preoperative teaching includes various aspects of care, such as helping the patient understand the surgical procedure, discussing dietary and nutritional preparation, addressing their emotional, spiritual, and mental concerns, and setting postoperative expectations. Knowing this, the success of a patient's surgery is reliant on effective preoperative teaching.

Liu et al., (2022) reviewed the Enhanced Recovery After Surgery (ERAS) protocols. They found that nutritional readiness and managing patient expectations before surgery must be addressed. Including family members and openly discussing the fears of the patient significantly reduced anxiety and improved their recovery. Their study highlighted the importance of including nutritional discussion and psychological support in preoperative education, especially for vulnerable populations such as the elderly.

Banasiewicz et al., (2023) explored the function of pre-habilitation programs as part of preoperative teaching, where they focused on preparing emotionally and physically. They concluded that optimizing nutrition, supporting the patient psychologically, reducing their anxiety, and promoting their readiness for surgery are the components of an effective pre-habilitation program. Additionally, their findings emphasized that paying attention to the psychological and emotional factors of a patient holistically improves their surgical outcomes and reduces their fears. Their study is suggestive of the need to reinforce healthcare systems to include a structured rehabilitation program as part of their preoperative education protocols.

Individualized counselling significantly reduces a patient's anxiety by addressing their concerns and expectations. Debono et al., (2021) highlighted the vital role of personalized interventions in preoperative education to align its educational content with the patient's individual needs, as this promotes adherence and patient satisfaction.

Effective strategies are required to reduce anxiety and improve the patient's participation in hospital protocols that aim for their recovery. These strategies include providing clear and empathetic communication and the delivery of a detailed rehabilitation plan. Preparing patients for the surgery through clear and accurate preoperative discussions enhances their overall surgical experience Taylor et al., (2022).

Enhancing the quality of patient education in the preoperative phase requires multifaceted interventions. Delineating the facilitators and barriers to patient education by nurses may provide a framework for nurse-managers to devise methods to enhance the quality of patient education, which overall elevates the quality of nursing care Wang, S. et al., (2024). Patient education is best paired with activities that make the patient engage with the content. Incorporating this strategy optimizes patient care, especially in surgical settings wherein participation is much needed Campbell K. et al., (2020).

Therapeutic communication is known to reduce preoperative anxiety. Studies indicate that nurses who actively listen, provide reassurance, and address a patient's concerns contribute to reducing their anxiety, resulting in better preoperative and intraoperative stability. Alcorano, J., (2023) determined the extent of therapeutic communication skills exhibited by Medical-Surgical nurses in the Philippines. It was found that the nurses surveyed were competent in therapeutic communication skills, specifically using acting-response and active listening-response techniques.

Patient-centered care is a fundamental goal of the Philippine healthcare system. It is an excellent basis for evaluating the quality of care given by professionals and institutions. Emphasizing patient-centered care is linked to promoting patient satisfaction, which is associated with improved health outcomes. The satisfaction of patients with the healthcare they receive reflects the performance of doctors, especially nurses.

Natividad C. et al., (2020) revealed that when doctors and staff facilitate prompt individualized attention to needs and care for the concerns of the patients, the patients are most satisfied.

Barriers that arise from systemic issues, resource limitations, and patient-related problems hinder the effective delivery of preoperative education.

Despite the importance of preoperative nursing education, nurses sometimes are unable to provide this adequately due to the short stay period of patients in their respective areas of responsibility. Almutary, H. and Almashi, A., (2024), explored these challenges in delivering preoperative education and emphasized limited time and resource availability as the prominent barriers that cause unmet informational needs.

Delivering effective patient education can be a challenge in settings where patient turnover is high, and the process itself demands much of a nurse's time and effort. Cumbersome patient turnover processes may sacrifice nursing workload performance, which may result in poor care outcomes. There should be charge nurses who may facilitate the turnover process so that staff nurses can focus on their patients only Lingcon, J. & Alinsub, C., (2020).

Hernández-Padilla et al., (2021) examined the role of communication challenges in preoperative education. Language barriers, cultural differences, and different levels of health literacy limit the ability of healthcare providers to communicate important information effectively.

Anxiety, lack of readiness to adopt the teaching, and harboring misconceptions about surgery are also factors that prevent patients from engaging actively in the preoperative teaching process. As stated by Padilla et al., (2020), personalized approaches are instrumental in counteracting these factors.

Bleicher et al., (2023) elaborated how policies of health facilities and how they allocate resources affect the delivery of preoperative education. The lack of standardized protocols and reliance on generic educational materials often fall short of addressing patients' educational needs on an individual level.

Despite having widespread access to technology nowadays, Merrell et al., (2020) reviewed how it fails to bridge the knowledge gap in patients' understanding of their surgical procedure. Technological barriers like limited access to gadgets, paired with low digital literacy, compromise the effectiveness of delivering preoperative teaching when using educational tools related to modern technology.

Related Studies

Surgery is a major life event that causes significant mental and physical challenges for patients. Burdens such as psychological stress, physical pain, and risk of complications are present. These burdens are further influenced by the type of surgery, frequency of procedure, and patient-related characteristics.

Stress response is a natural phenomenon, especially when exposed to harmful stimuli such as surgery. However, a maladaptive stress response may cause postoperative complications. Psychological interventions are found to interact with the pathophysiology of surgical stress response and may potentially influence wound healing, immunity, perception of pain, and mood Villa, G. et al., (2020).

Obeagu and Akinleye, (2024) studied the mental and social impacts of surgery. Their study on HIV patients revealed that repeated surgeries worsened the psychological burdens of patients due to concerns about postoperative recovery.

Chronic wounds, which often require repeated surgical interventions, pose mental and physical burdens to patients. Gupta et al., (2021) investigated these burdens and emphasized the socioeconomic implications, including financial strain and diminished quality of life. Patients frequently reported their frustration and helplessness due to longer recovery periods and pain associated with wound care.

Physical exercise, optimized nutrition, and psychological counselling constitute a comprehensive approach in preparing patients for surgery. Consequently, this approach significantly reduces postoperative complications and improves the mental resilience of patients Fulop et al., (2021).

The psychological toll of prolonged waiting periods for surgeries was explored by Gagliardi et al., (2021). The research discovered that anxiety, stress, and feelings of uncertainty were common among patients in the preoperative phase.

Cohen et al., (2021) studied the dynamics of chronic pain and psychological stress in surgical patients. It was revealed in their study that chronic pain often worsens mental health issues such as anxiety and depression, especially in cases of repeated surgeries.

Many patients are exposed to opioids for the first time after a general surgery. To minimize postoperative opioid use, Sanchez, N. et al., (2020) conducted a study to determine the effects of preoperative patient education on the postoperative use of opioids. In their study, they concluded that preoperative education helped patients to be more confident and prepared to manage their postoperative pain, which consequently decreased the need for opioids.

Anxiety among patients undergoing surgery remains a significant concern. Factors such as age, sex, civil status, and educational attainment cause variations in anxiety levels.

In terms of age and sex, Chen et al., (2021) studied how these factors contribute to preoperative anxiety among patients. In their study, they found that younger patients showed higher levels of anxiety due to their perception of risks and uncertainties. Older patients, however, reported relatively lower anxiety that may be attributed to more significant life experience and acceptance. Additionally, female patients consistently showed higher levels of anxiety compared to male patients, that may be possibly connected to more emotional expressiveness and concern for their recovery.

A meta-analysis was conducted by Bedaso et al., (2022) to investigate how educational attainment affects preoperative anxiety. Patients with higher educational levels better understood surgical procedures, which possibly assisted in mitigating their fear. Contrary to this, patients with lower educational levels have higher anxiety that stems from limited health literacy, which leads to misconceptions about the risks and outcomes of surgery. The study emphasized the importance of tailoring educational interventions to accommodate patients better in terms of educational level to bridge the gap.

Civil status is also related to preoperative anxiety levels. Yang et al., (2020) explored the relationship of civil status to preoperative anxiety levels among orthopedic patients undergoing trauma surgery. It is found that married patients elicited lower anxiety levels due to emotional and practical support from their spouses. On the other hand, single and widowed patients were found to be more anxious as they lacked immediate familial support.

Kassahun et al., (2022) studied how gender also affects the surgical experience of patients. The research reported that females have higher anxiety levels related to heightened awareness of surgical risks and complications as opposed to males, who were less likely to vocalize their anxiety. This led to the implication that male patients may be underreporting levels of stress and therefore, highlights the need for gender-sensitive approaches to better address the emotional needs of patients preoperatively.

Various sociodemographic factors also affect surgical anxiety. Patients with higher educational levels and stable civil statuses have lower anxiety levels due to access to support systems and information. Obispo-Portero et al., (2022) detailed that older patients were less concerned about their surgery compared to younger patients, while females expressed more anxiety than males.

According to the World Health Organization (2023), anxiety disorders are brought about by the complex interaction of social, psychological, and biological factors. It is closely related to and affected by physical health. Women of younger age, between 18-29 years old, who are students, unemployed, have a previous psychiatric history and have experienced negative impacts on their quality of life, are at higher risk for increased anxiety and depression symptoms.

The type of surgery that a patient undergoes significantly impacts their anxiety levels due to the procedure's invasiveness, complexity, expected outcomes, and associated risks. Various studies have explored this and highlighted the multifactorial nature of preoperative and postoperative anxiety.

The ASA classification refers to the American Society of Anesthesiologists classification that allows physicians to assess a patient's risk for general anesthesia and surgical intervention. Although ASA scores are simple to calculate, the scoring is correlated with assessing perioperative risks thus, it can be helpful in predicting risks for surgery. In a study conducted by Sencaj et al., (2024), they determined that a higher preoperative ASA score is positively associated with worse anxiety levels preoperatively and contributes to worse anxiety and pain at the final postoperative evaluation. Their study predicts worse anxiety and pain interference in patients who experienced Lumbar Interbody Fusion, a major surgery.

Metzner, et al., (2024) reviewed preoperative optimizations programs implemented in British Columba to address anxiety among patients undergoing high-risk surgeries. They found that preoperative optimization that includes mental health counselling, nutritional preparation, and fitness regimens significantly reduced anxiety levels. Additionally, patients who faced more invasive procedures benefited most from these programs.

Compounded anxiety experienced by patients with mental health disorders undergoing complex surgeries is worse compared to those who do not have pre-existing mental health conditions such as anxiety or depression. Therefore, patients who fit these criteria require additional psychological support to mitigate anxiety and enhance postoperative outcomes Gradin, M., (2024).

Research into integrating mental health care in trauma surgery found that patients undergoing complex trauma procedures often experienced high anxiety levels. As studied by Hendrickson et al., (2024), preoperative screenings that included psychological assessments were critical in identifying at-risk patients. Therefore, early mental health interventions despite the urgency of trauma surgery, helped reduce preoperative anxiety, improving surgical outcomes and patient satisfaction.

Complex dental extractions also cause heightened anxiety among patients due to their concerns about surgical complications and recovery challenges. Hwang et al., (2024) emphasized the importance of patient education and preoperative reassurance to reduce psychological distress, particularly in cases that involve multiple or advanced procedures.

Repeated surgeries heighten the anxiety of patients due to several psychological, physiological, and situational reasons. This happens due to how the human mind and body respond to cumulative stress, anxiety, and the implications of undergoing repeated surgical interventions.

Michelucci et al., (2024) investigated in their study the anxiety and quality of life changes in patients undergoing repeated surgeries specifically for hidradenitis suppurativa, a chronic inflammatory skin condition where effective management requires both medical and surgical interventions. Factors like

wound healing complications and the emotional toll of these interventions significantly heightened the anxiety levels of the respondents. Therefore, the researchers suggested a comprehensive approach to address both surgical and psychological aspects that can enhance patient outcomes.

Roemheld Syndrome is described as a set of symptoms that center around the digestive system and its proximity to the heart. The symptoms would be shortness of breath, fatigue, anxiety, palpitations, and even angina pectoris. Some patients with this disease require repeated surgical correction for persistent symptoms, and patients who undergo this repeated surgery have elevated anxiety levels due to uncertainty about procedural outcomes Mathis et al., (2024).

Zhou et al., (2024) studied the psychological distress in patients undergoing repeated biliary tract surgeries. They found that the detection rate of psychological distress in patients with biliary tract malignant tumors is notably high. The predictive model they constructed for psychological distress includes predictors such as disease progression, sleep disruptions, and cumulative anxiety over repeated interventions.

Synthesis

Preoperative teaching is among the major responsibilities of the perioperative team. It is given prior to surgery by the surgeon, anesthesiologist, or nurse, using techniques to communicate the care plan, procedure expectations, risks, possible complications, and postoperative care. However, it has been identified that during the preoperative admission, patients are ill-prepared regarding the procedure knowledge-wise. This lack of knowledge leads to anxiety. It is important to emphasize that by delivering effective and timely preoperative teaching, patients are freed from anxiety.

Partnering preoperative teaching with music intervention is also found to reduce the severity of anxiety and pain in patients. Nurses are vital to the role of preoperative teaching because it is part of their responsibility to foster patient comfort and ready the patients for surgery. Therapeutic communication given by nursing agencies positively affects the overall surgical experience of patients. Nurses also face barriers such as limited teaching aids, tight schedules, and language barriers in delivering preoperative teaching.

Numerous foreign studies and literature have already established and discovered the effects of preoperative teaching to patients as given by nurses. However, there is a significant disparity in the body of knowledge for the Philippine setting. This study, therefore, aims to supplement the body of knowledge regarding the impacts of nurse-initiated preoperative teaching by bringing it into the Philippine context. It employed Orem's Self-care Deficit Nursing Theory, Watson's Theory of Human Caring, and Deming's System of Profound Knowledge to lay a theoretical foundation. Ultimately, the study yielded an output in the form of an augmentation plan to strengthen the preoperative teaching practices of nurses among the selected hospitals in Southern Palawan.

Theoretical Framework

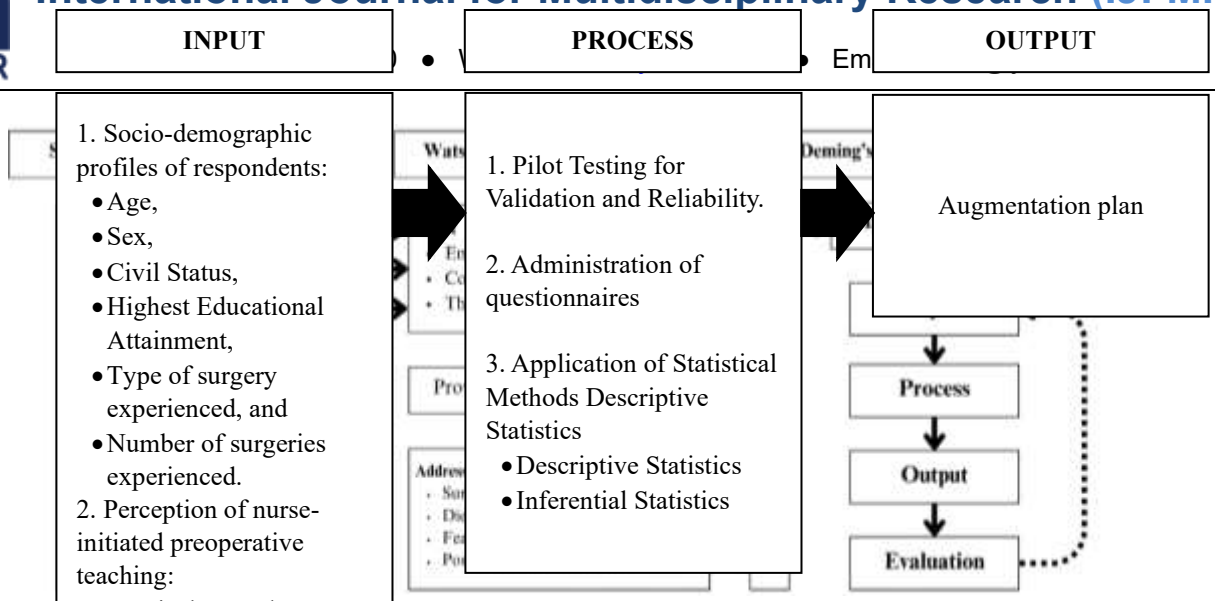
This study has adopted Orem's Self-care Deficit Nursing Theory (1971, as cited by Gonzalo, A., 2024). The theory served as a guide in framing the study by helping the researcher in finding the relationships between the aforementioned variables and interpreting the results.

The Self-care Deficit Nursing Theory (SCDNT) was based on three theories: the theory of self-care, the theory of self-care deficit, and the theory of nursing systems. The SCDNT describes the theory of self-care as the steps done by a patient to maintain their life, health, and well-being. The theory of self-care deficit describes the occurrence of the inability to perform self-care, which happens when the ability for

self-care is less than the need. The theory of nursing systems describes how nursing agencies can assist the patient in satisfying their self-care needs, classified as wholly compensatory, partly compensatory, or supportive-educative in nature. Orem's SCDNT explains how nursing knowledge can assess a patient and their therapeutic self-care demand and, in doing so, provide the appropriate nursing interventions that can range from supporting effective self-care to compensation for limitations. Dorothea Orem's Self-care Deficit Nursing theory, therefore, highlights the patient's individual ability to pursue self-care, their tendency to face limitations in doing so, and the role of nursing in supporting them toward the continuation of therapeutic self-care. In this study, the concept of self-care deficit was used to describe the state of patients who underwent surgery. Inexperience, knowledge gaps, and psychological challenges pose limitations to the patient's health, causing a deficit that requires the utilization of a nursing agency to provide the appropriate nursing interventions in the form of empathetic preoperative teaching. This preoperative teaching is expected to supply the needs of those who received it, yielding a better surgical experience. However, the effect of the lack of preoperative teaching is yet to be determined by those who did not receive it.

Another theory that was used in this study is Jean Watson's Theory of Human Caring (2008, as cited by Ghanbari-Afra, L. et al., 2022). The theory defines caring as a fundamental aspect of nursing that involves a deep connection between the nurse and the patient. Caring, or caritas, emphasizes empathy, compassion, and respect for the patient as a person. It also involves factors that serve as guidelines for nursing practice, such as practicing loving-kindness, instilling faith-hope, cultivating sensitivity to self and others, developing a helping-trusting relationship, promoting transpersonal teaching-learning, and creating a healing environment, among others. The concepts of instilling faith-hope in patients, cultivating a healing environment for them, and developing a trusting relationship encompasses the preoperative education process as it encourages the nurse to focus on the needs of the patient, creating an environment where the patient will feel valued and cared for despite the stressors present in their internal and external environments.

Lastly, the Deming System of Profound Knowledge (1993, as cited by Chinapoo, C., 2020) was used to highlight the need for continuous quality improvement. The system is based on four key components: 1) Appreciation for a System where we recognize that healthcare is a system that is comprised of different departments that interact and influence one another. Preoperative, intraoperative, and postoperative care comprise a larger system, meaning that implementing preoperative education is a multi-department effort, and improving it requires the movement of the larger system. 2) Knowledge of Variation, which emphasizes that understanding this will help an organization to identify issues that may be simply due to natural causes or reflect a deeper problem within the system that requires intervention. 3) Theory of Knowledge, where the need for empirical evidence is emphasized because decision-making within the organization must be based on theory and data. 4) Psychology, which focuses on the need to understand human behavior and motivation. In this study, the concept of psychology was applied to consider how the respondents perceived preoperative teaching. Deming's System of Profound Knowledge served as a guide to the researcher and health institutions to view the issues holistically, identify ineffective practices, and formulate interventions that are grounded in empirical data.



ure 2.1: Theoretical Framework

Conceptua

The respor roviding preoperative teaching to patients have been discussed previously raphic profiles of the respondents may cause variation in responses, and nurses Southern Palawan may be subject to different protocols and actual practice, wh trict patients from receiving preoperative teaching from nurses. From a cor tudy took an evidence-based approach in the assessment, analysis, and formul proach intends to focus the concepts of this study into a systematic and logical mpact of nurse-initiated preoperative teaching to the respondents of selected ho n.

Research Paradigm

The Input-Process-Output (IPO) model was used in this research. It became beneficial in providing a logical flow of information, activities, and consequences that enabled the researcher to understand the relationships between the variables.

Figure 2.2: The Research Paradigm

The input represents the essential components and data that are integral to initiating and conducting this study. It included obtaining independent data on the following variables: 1) socio-demographic profile of the respondents, specifically age, sex, civil status, highest educational attainment, type of surgery experienced, and number of surgeries experienced, 2) perception of the respondents towards nurse-initiated preoperative teaching in terms of the surgical procedure overview, diet and nutrition, addressing fears and anxiety, and postoperative expectations, and 3) perception of the respondents towards the barriers affecting preoperative teaching in terms of communication, nurse-patient ratio, and teaching resources.

The process refers to the series of actions and treatments that were employed in this study to achieve the desired outcomes. It included the application of 1) Pilot Testing for Validation and Reliability, 2) Administration of questionnaires, and 3) application of descriptive statistics using frequencies, percentages, and measures of central tendency and inferential statistics using a T-test, Analysis of Variance, and Fisher's Exact Test.

The output encompasses the results and findings derived from the study and took the form of an augmentation plan that aims to improve the implementation of nurse-initiated preoperative teaching in the selected hospitals in Southern Palawan by serving as a basis for capacity-building for nurses,

standardization of teaching materials, integration of technology, an avenue for patient feedback, and evaluation.

Chapter 3
METHODOLOGY

This chapter presents the research design, locale, respondents, instruments, data collection and analysis, and ethical considerations that the study utilized.

Research Design

The "Impact of Nurse-Initiated Preoperative Teaching in Selected Hospitals in Southern Palawan" study is descriptive-comparative research that focused on quantitative data through a cross-sectional approach. This is to describe preoperative teaching received by patients and compare the differences in results across various demographic groups. Additionally, it examined how patients perceived the barriers that affect the effectiveness of preoperative teaching. The study collected data from respondents from a single point in time to assess their perceptions and experiences regarding preoperative teaching; thus, did not require long-term observation.

The research utilized a self-administered structured questionnaire to collect data from respondents. The questionnaires were distributed by a designated representative in the absence of the researcher to ensure minimal influence on responses. Respondents completed the questionnaire at their bedside, with their guardian present to assist them in answering as needed, providing a supportive environment for accurate and thorough responses. The questionnaire was designed to be answerable within 30 minutes, ensuring it is not overly time-consuming. Once completed, the respondents placed their responses in a provided closed envelope to maintain confidentiality and anonymity. To further protect respondent identity, alphanumeric coding was used instead of personal identifiers. The sealed envelopes were collected by the representative at the end of the shift and securely stored to ensure the privacy of the responses.

Research Participants

A purposive sampling method was used to select 90 participants using an inclusion criterion that involved the following: The study's respondents were postoperative patients who have undergone elective surgery at the selected hospitals in Southern Palawan, namely Aborlan Medicare Hospital, Narra Municipal Hospital, and Southern Palawan Provincial Hospital. The age limit of the respondents was between 18 and 60 years old on the day of the interview. The respondents should be able to converse and understand Filipino and English. If they could not speak the languages mentioned, an interpreter was asked to assist the patient and researcher in achieving understanding. The basis for selecting the number of respondents was based on the preferred Sample-to-Variable ratio of 20:1, as discussed by Hair et al. (2018). With three predictors in the regression analysis, the required minimum was 60. Thus, a sample of 90 was considered adequate.

In addition, respondents must be mentally competent and able to provide informed consent, ensuring they fully understood the study's purpose, procedures, and risks. Only patients with stable vital signs who are in the postoperative phase (recovering within 24 to 72 hours post-surgery) and did not experience severe complications post-surgery were included to ensure that the study's focus remains on the educational impact. Respondents must also be physically and cognitively able to participate in the interview process and were willing to engage in the study.

Respondents were excluded from the study if they did not meet the inclusion criteria or if specific circumstances arose that compromised their ability to participate.

These included patients under the age of 18 or over 60 years old at the time of data collection, patients who have undergone non-elective or emergency surgeries, and non-postoperative patients. Additionally, individuals who were not admitted as inpatients in the selected hospitals or those who were unable to comprehend and communicate in Filipino or English was excluded. Patients with severe cognitive impairments, altered consciousness, or those requiring sedation that prevents meaningful interaction were also disqualified. Moreover, individuals who were unwilling to provide informed consent or whose guardians refused to support their participation were excluded. Finally, respondents whose health conditions deteriorated during the study or are discharged before completing the required data collection procedures were excluded to ensure the validity and integrity of the research process.

Apart from respondents voluntarily withdrawing from the study, several foreseeable circumstances served as withdrawal criteria. These included the deterioration of a respondent's health condition, making participation unsafe or inappropriate, or a lack of compliance with the study protocol, such as failing to complete the questionnaire or adhere to timelines. Communication barriers, such as cognitive impairment, sedation, or language difficulties, also necessitated withdrawal if they hinder the collection of valid data. Additionally, respondents whose elective surgeries were canceled, postponed indefinitely, or converted to emergency procedures were withdrawn. Guardians or family members who refused to allow the respondent's continued participation, even with the respondent's consent, was used as basis for withdrawal. Similarly, respondents whose answers were deemed invalid due to comprehension issues, willful misreporting, or inconsistencies were removed. Institutional factors, such as the revocation of approval by the hospital or ethics committee, or respondents being discharged before data collection is completed, further justified withdrawal. Ethical concerns, such as undue influence or coercion, and adverse psychological effects, including heightened anxiety or distress during participation, also necessitated removing respondents from the study to ensure their well-being.

Research Instrument

This study utilized a structured questionnaire comprised of close-ended statements. The structured questionnaire, developed by the researcher, consisted of three (3) Parts: Respondents' Socio-demographic Profile, Preoperative Teaching Received, and Barriers to Preoperative Teaching.

The first part of the questionnaire aimed to obtain independent data on the socio-demographic profile of the respondents, namely age, sex, civil status, highest educational attainment, type of surgery experienced, and number of surgeries experienced.

The second part of the questionnaire aimed to obtain data on the respondents' perception of nurse-initiated preoperative teaching in terms of surgical procedure overview, diet and nutrition, addressing fears and anxiety, and postoperative expectations.

The third part of the questionnaire aimed to obtain data on the respondents' perception of barriers affecting preoperative education in terms of communication, nurse-patient ratio, and teaching resources.

Data Collection Procedure

Prior to collecting the data, this research was subjected to thesis concept approval by the panelists, reviewed for validation, and certified by the ethics committee. A request letter for approval from the Dean to permit the researcher to conduct the study was secured. Thereafter, the researcher sought approval of

the Chief of Hospital (COH) from each of the selected hospitals in Southern Palawan. Upon approval, the researcher collaborated with the chief nurse and nursing supervisors to allow them to select a representative from the staff to assist in distributing the self-administered questionnaires to the admitted patients and collecting them after the shift.

The informed consent process was conducted by the researcher or a trained research assistant who is not affiliated with the healthcare provider. The researcher or a designated trained research assistant allocated a maximum of 10 minutes to discuss the Informed Consent Form (ICF) with the patient in the presence of their guardian. Considering the patient's condition, the individual facilitating the discussion stepped away afterward to allow the patient sufficient time and space to read, comprehend, and sign the ICF at their convenience. The guardian then called the attention of the discusser once the patient has duly consented to participate in the study or if further clarification was needed. After obtaining the signed consent, the researcher or assistant provided the questionnaire, allowing the patient to read and respond at their most convenient time.

Answering the questionnaire was estimated to take approximately 30 minutes. However, due to the patient's circumstances, they were allowed to hold and answer the questionnaire at their own pace to remove feelings of time pressure and the likes. Once the patient has completed answering the questionnaire, they called the attention of the representative, researcher, or assistant, whoever is available at that moment, by themselves or through their guardian. All in all, the discussion of the informed consent and answering of the questionnaire took approximately 40 minutes.

Answered questionnaires were collected by the representative after each shift and stored in a secured envelope. After a given period, the researcher returned to each hospital and collected and verified the data. The extent of participation involved providing demographic information, perceptions of nurse-initiated preoperative teaching, and views on barriers to such teaching. No follow-up or additional sessions was required after this single interaction, ensuring minimal disruption to their postoperative recovery process.

Data Analysis Procedure

The data analysis of this study involved a pilot testing with 20 respondents that yielded Cronbach's alpha values of 0.88, indicating good internal consistency. Afterwards, the researcher administrated questionnaires and applied statistical and analytical techniques to draw insights from data and create logical conclusions. The obtained quantitative data from the questionnaire was subject to statistical analysis, specifically descriptive and inferential statistics.

The descriptive statistics that were used are 1) Frequencies and percentages that summarized socio-demographic variables and identified the proportion of respondents who agreed or disagreed with various aspects of preoperative teaching and barriers, and 2) Measures of central tendency that calculated the average Likert scale score for variables and determined their central value.

Lastly, the inferential statistics that were used are 1) T-test which compared the mean scores between two groups of data, 2) ANOVA or Analysis of Variance that compared the mean scores across three or more groups of data, and 3) Fisher Exact tests that assessed the relationship between categorical variables. All statistical analyses were conducted using IBM SPSS Statistics, with statistical significance established at $p < 0.05$.

Ethical Considerations

In conducting this study on the respondents, the researcher found that their well-being is a top priority. It

is the responsibility of the researcher to focus on the rights and interests of the respondents. It is, therefore, important that the researcher refers to an ethical guideline to ensure that they have adhered to the principles of good research (Mirza, H. et al., 2023). As part of the researcher's responsibility towards good research practice, the researcher only chose adult-age respondents who were capable of understanding and agreeing to informed consent, which is an internationally recognized ethical requirement, to fully inform the respondents about the relevant aspects of the study, especially about any potential harm that it may pose to the participants (Newman, P. et al., 2021).

This study entitled “Impact of Nurse-Initiated Preoperative Health Education in Selected Hospitals in Southern Palawan" serves as a significant component of the nursing body of knowledge and was therefore reviewed by the Palawan State University Board of Ethics Committee before receiving approval. Upon approval of the committee, it was forwarded to the graduate school dean to allow the researcher to conduct the research and seek the approval of the point persons from the hospitals involved. All parts of this study adhered to the ethical guidelines and maintained the confidentiality of information gathered, mainly to ensure the privacy of participants, preventing the unwarranted disclosure of their information.

The researcher hereby declares that there are no conflicts of interest related to this study. No financial, personal, or professional relationships have influenced the design, execution, or interpretation of the research. All aspects of the study were conducted with integrity, and the researcher maintains objectivity and impartiality in presenting the findings. The researcher confirms that no external factors or competing interests have affected the credibility or unbiased nature of this work.

The researcher and the designated representative had the authority to discuss the study and obtain informed consent from the respondents on the day and shift when the questionnaire was administered. They ensured that all respondents fully understood the purpose of the study, their involvement, and their rights, including the voluntary nature of participation and the option to withdraw at any time without consequence. Informed consent was obtained prior to the collection of any data, ensuring that respondents were fully informed and agreed to participate in the study.

The confidentiality and privacy of the data collected in this study were strictly safeguarded. All respondent information were coded and stored securely to ensure anonymity, with access limited to the researcher and authorized personnel only. The data was kept in a password-protected database, and physical records were stored in a locked cabinet. In cases where access is required, the PSU Research Ethics Review Committee is granted permission to review the data to ensure compliance with ethical standards. The data was archived for a maximum of two years following the completion of the study, after which all collected responses will be permanently destroyed through shredding and burning to further protect respondent privacy.

Patient respondents in this study on the impact of nurse-initiated preoperative health education may be considered vulnerable due to the anxiety, stress, and potential emotional or cognitive challenges associated with surgical procedures. To ensure their protection, several measures were implemented. Informed consent was obtained through clear, accessible communication, ensuring that respondents fully understood the study’s purpose, procedures, and their rights, including the voluntary nature of participation and the ability to withdraw at any time without consequence. Confidentiality was maintained by coding data and securely storing responses, ensuring that personal identifiers are not linked to the collected data. Emotional support was provided by nursing staff to address any discomfort or concerns during the study process. The preoperative health education was presented in simple language and supported with visual aids to ensure comprehension. Ethical oversight from the PSU Research Ethics Review Committee was conducted to

ensure the study adheres to ethical standards and that the rights and well-being of the respondents were upheld throughout the research process.

Selecting respondents for this study involved the approval of the chief of hospital and the involvement of the chief nurse to authorize the nurse in charge to furnish a list of admitted patients who meet the inclusion criteria. To ensure the confidentiality and privacy of the respondents, several safeguards were implemented throughout the study process. First, all patient information was treated as confidential and stored securely, with access restricted to the researcher and authorized personnel only. Any data shared with the researcher were de-identified, ensuring that personal identifiers are not linked to the collected responses. Additionally, data was stored in a password-protected database, and any physical records were kept in a locked and secure location. During the recruitment process, all interactions with respondents was conducted in private settings to prevent unauthorized disclosure of personal information.

Respondents' participation was voluntary, and their right to privacy was respected. These measures, along with continuous ethical oversight by the PSU Research Ethics Review Committee, ensured that respondents' confidentiality and privacy are upheld throughout the study.

In the study on the impact of nurse-initiated preoperative health education, several potential risks to participants existed, along with corresponding protection and mitigation strategies. Emotional distress or anxiety may arise as participants engage with information about their health status and surgery, so emotional support was provided by the researcher and nursing staff, and respondents were reminded of their voluntary participation, with the option to withdraw at any time. To prevent privacy breaches, all data was coded, securely stored, and accessible only to authorized personnel, with personal identifiers separated from responses. Additionally, encrypted communication channels were used for data transmission. Coercion or pressure to participate is another concern, but the researcher emphasized the voluntary nature of participation, ensuring that respondents understand their right to withdraw without affecting their medical care. Preoperative health education may be misunderstood by some participants, so clear, simple language and visual aids were used to facilitate understanding, and nurses were available to address any questions or confusion. Finally, to mitigate the risk of data misuse, all data were securely stored and de-identified, with access restricted to authorized individuals. After two years, all collected responses will be securely shredded and burned to ensure complete data destruction. These strategies help to protect respondents' well-being, confidentiality, and privacy throughout the study.

The direct benefits to the participants in this study included receiving nurse-initiated preoperative health education, which may enhance their understanding of the surgical process, reduce preoperative anxiety, and improve their preparedness for post-surgical care. This education may also contribute to better postoperative recovery by ensuring that participants are well-informed about their care and expectations. Indirectly, participants may have experienced increased confidence in their ability to manage their health post-surgery, leading to a greater sense of control and empowerment over their recovery process. Additionally, the participation may help foster a sense of involvement in their own healthcare, which can improve their overall healthcare experience.

The potential benefits of the study to both the participants and society are significant. For participants, the study provided an opportunity to improve their surgical experience through enhanced preoperative education, potentially leading to better health outcomes and reduced postoperative complications. On a broader societal level, the findings of the study could contribute to the development of improved preoperative education protocols that can be adopted by hospitals and healthcare systems. This could result in better patient outcomes across a wider population, as effective preoperative education is shown to

reduce anxiety, improve postoperative recovery, and enhance patients' overall satisfaction with their care. Ultimately, the study's impact could help shape nursing practices and policies, contributing to the continuous improvement of patient education and care delivery in healthcare settings.

Possible compensations for the participants in this study included access to additional healthcare resources, such as free consultations or educational materials that may enhance their understanding of postoperative care. These compensations were administered by the researcher at the conclusion of their participation in the study, ensuring that respondents are aware of the available resources that could benefit their health and recovery. The provision of these compensations was done in a way that ensures voluntary participation, without any undue influence on respondents' decisions.

For those who assisted the researcher, such as nursing staff, research assistants, or hospital personnel, compensations included stipends, professional development opportunities (such as training in research methodologies or nursing education techniques), or recognition in the study's final report or publication. The researcher coordinated with hospital administration to ensure that the compensation is provided fairly and transparently. These forms of compensation acknowledge the important role these individuals played in supporting the research process and ensure their contributions are appropriately recognized. All compensations were administered with careful consideration of ethical guidelines, ensuring that they did not interfere with the voluntary nature of participation or the research's integrity.

The study on the impact of nurse-initiated preoperative health education is unlikely to have significant positive or negative impacts on the religious community to which participants belong. The primary focus of the study is on enhancing participants' understanding of preoperative care and ensuring they are informed and prepared for their surgical procedures, which does not directly intersect with religious beliefs or practices.

However, there may be some indirect effects based on the values and practices of the religious community. For instance, certain religious groups may have specific beliefs regarding medical procedures, health care, or healing practices that could influence how participants engage with the preoperative education. In such cases, the researcher ensured that the information provided respected and aligned with the religious values of the participants. The study was conducted with sensitivity to cultural and religious diversity, and all educational materials were offered in a non-coercive manner. Participants were informed that their involvement in the study was voluntary, and they had the right to withdraw at any time without any consequences, including if the study conflicts with their religious views. Additionally, the researcher provided respondents with the option to seek guidance from religious leaders or counselors if they felt that the preoperative health education conflicted with their personal or religious beliefs. This ensured that participants were fully informed of their rights and that their participation in the study did not interfere with their religious practices or beliefs. The study aimed to protect the autonomy and cultural sensitivity of participants while maintaining a neutral stance regarding religious matters.

CHAPTER 4
RESULTS AND DISCUSSION

This chapter presents the findings and presentation of the study in illustrative tables and analysis as well as the interpretation based on the statistical treatment data.

Respondents' Socio-demographic Profile

The following tables summarizes the frequency and percentage of patients by age, sex, civil status, educa-

tional attainment, operation type, surgery complexity, and number of prior procedures. Descriptive statistics provide an overall picture of the study population and serve as the baseline for subsequent comparative analyses.

Table 4.1: Respondent Distribution by Age

Age Group	Counts (n)	Percentage
18-25	19	21.1
26-35	35	38.9
36-45	21	23.3
46-55	10	11.1
56-60	5	5.6

Table 4.1 shows that patients aged 26–35 years form the largest segment (38.9 %) of the sample. The next most common group is 36–45 years (23.3 %), followed by 18–25 years (21.1 %). Only 16.7 % of respondents are 46 years and older.

This pattern mirrors provincial census data, where adults in their 20s and 30s account for most hospital admissions, and it supports Chen et al. (2021), who noted that younger surgical patients tend to present more frequently and express higher informational needs while older patients voice greater comorbidity-related anxiety. These findings imply the need to develop multimodal materials (print, video, SMS) to meet the tech-oriented majority and support the older adults' preference for face-to-face and printed aids. Family-assisted teach-back may be advised for the older adults to strengthen comprehension and reduce anxiety.

Table 4.2: Respondent Distribution by Sex

Sex	Counts (n)	Percentage
Female	46	51.1
Male	44	48.9

Table 4.2 reveals an almost even split, with females comprising 51.1 % and males 48.9 %, confirming gender balance. Kassahun et al. (2022) observed that female patients often report greater preoperative anxiety, driving greater informational needs, which is a point worth considering when tailoring teaching strategies. The implication of this result leads us to continue using gender-neutral scripts but integrate brief anxiety screening to identify women who may benefit from added reassurance. Additionally, hospitals may provide optional video supplements, to provide materials for those who prefer self-paced digital procedural reviews.

Table 4.3: Respondent Distribution by Educational Attainment

Educational Attainment	Counts (n)	Percentage
Elementary Undergraduate	2	2.2
Elementary Graduate	5	5.6
Highschool Undergraduate	13	14.4
Highschool Graduate	11	12.2
College Undergraduate	16	17.8

College Graduate	32	35.6
Master-level Education	11	12.2

As shown in Table 4.3, the single largest category is college graduates (35.6 %), while master-level holders represent 12.2%. Elementary-level respondents remain scarce (< 7 %). Bedaso et al. (2022) reported that higher educational attainment is associated with lower surgical anxiety because educated patients process information more readily, which is consistent with the sample's generally positive teaching scores. This implies that preoperative teaching materials must be kept within elementary-level readability supplemented with pictograms for low-literacy patients. Extended modules provided through internet links and reading lists may also be provided for those who desire to understand deeper details about their procedure, which may apply to high school graduates and above.

Table 4.4: Respondent Distribution by Civil Status

Civil Status	Counts (n)	Percentage
Married	45	50
Single	30	33.3
Separated	10	11.1
Widowed	5	5.6

Table 4.4 indicates that married patients dominate (50%), followed by singles (33.3 %). Separated (11.1 %) and widowed (5.6 %) respondents form smaller fractions. The high proportion of married individuals suggests that nurses frequently need to involve spouses in preoperative discussions, echoing Yang et al.'s (2020) recommendation to leverage family support to reduce anxiety. Watson's theory also underscores the role of social support in healing; therefore, these findings imply the need for inviting loved ones into teach-back sessions to create a shared understanding and foster post-discharge support. Family education handouts may also be provided to reinforce the instructions at home.

Table 4.5: Respondent Distribution by Type of Surgery

Type of Surgery	Counts (n)	Percentage
Major	65	72.2
Minor	25	27.8

Table 4.5 shows a distinct skew toward major procedures (72.2 %) compared with minor (27.8 %). This reflects the service profile of the participating level-1 hospitals, which routinely perform cesarean sections, cholecystectomies, and similar major operations. Darville-Beneby et al. (2023) emphasized that comprehensive preoperative teaching is particularly critical for major cases. These implies the importance of allocating equitable teaching time to minor cases using a protected teaching window, to ensure they are not short-changed. Checklists may also be embedded in patient records to reinforce critical safety points in all preoperative rounds.

Table 4.6: Respondent Distribution by Type of Operation

Type of Operation	Counts (n)	Percentage
General	50	55.6

Gynecological	12	13.3
Plastic/Reconstructive	11	12.2
Orthopedic	10	11.1
Head & Neck	7	7.8

Table 4.6 demonstrates that general surgery accounts for 55.6 %, with gynecologic procedures next (13.3 %). Orthopedic (11.1 %), plastic/reconstructive (12.2 %), and head-and-neck cases (7.8 %) compose the remainder. Barboza, et. al. (2023) reported specialty-specific emotional needs that are especially present in orthopedic and gynecologic procedures which may affect teaching satisfaction. These findings have the following implications: the nursing service of each hospital must retain a core teaching script for general content, plus tailored information intended for each specialty. This tailored information can be in the form of micro-modules labeled as Gynecologic Essentials, Orthopedic Essentials, etc. Also, collaborating with surgical teams to integrate procedure-specific visual aids will prove useful in this scenario.

Table 4.7: Respondent Distribution by Number of Experienced Surgeries

Number of Surgeries	Counts (n)	Percentage
1	62	68.9
2	18	20
3+	10	11.1

Table 4.7 indicates that first-time surgical patients constitute 68.9 % of respondents, whereas 20 % have had two surgeries and 11.1 % report three or more. First-time patients lack baseline procedural knowledge, whereas repeat patients may carry misconceptions. Hendrickson et al. (2024) noted that repeat-surgery patients often require tailored teaching to remove misconceptions from prior experiences; the sample distribution suggests that nurses frequently engage with both novice and experienced surgical clients. For novices, this implies the provision of a comprehensive orientation covering the entire surgical journey if possible. For repeat patients, a refresher teach-back may prove useful to update protocols and correct past misunderstandings.

Perception Towards Nurse-initiated Preoperative Teaching

The following tables presents the item-level means, weighted focus means, and grand mean for the four instructional focuses, namely Surgical Overview, Diet & Nutrition, Addressing Fears & Anxiety, and Post-operative Expectations. These summaries reveal the specific teaching elements that were rated highest and lowest on the five-point Likert scale.

Likert Description	Likert Scale	Likert Scale Interval
Strongly Agree	5	4.21 to 5.00
Agree	4	3.41 to 4.20
Neutral	3	2.61 to 3.40
Somewhat Disagree	2	1.81 to 2.60
Disagree	1	1.00 to 1.80

Table 4.8a: Perception Towards Surgical Overview

Statement	Mean	Qualitative Rating
The nurse provided a clear and thorough explanation of the surgical procedure I was about to experience. *Ipinaalam sa akin kung ano ang dapat asahan sa panahon ng aking paggaling.*	4.52	*Strongly Agree*
I was clearly informed about the potential risks and benefits of the surgery. *Binigyan ako ng malinaw na mga tagubilin ng nars kung paano aalagaan ang lugar ng operasyon.*	4.51	*Strongly Agree*
The nurse ensured I understood the purpose of the surgery. *Tinuruan ako tungkol sa mga babalang palatandaan na nangangailangan ng medikal na atensyon.*	4.43	*Strongly Agree*
I was encouraged by the nurse to ask questions about the surgical procedure. *Ipinaliwanag ng nars ang ligtas na antas ng pisikal na aktibidad pagkatapos ng operasyon.*	4.47	*Strongly Agree*
Written or visual materials were provided to support my understanding of the surgery. *Ipinaalam sa akin ang mga estratehiya para sa pamamahala ng sakit para sa hindi komportableng pakiramdam pagkatapos ng operasyon.*	4.5	*Strongly Agree*
Weighted Mean	4.49	***Strongly Agree***

Table 4.8a summarizes the perception of patients towards the focus of surgical overview, given during preoperative teaching. Patients 'strongly agreed' that nurses covered the basics of the operation (weighted mean = 4 .49). The highest-rated item was "*The nurse provided a clear and thorough explanation of the surgical procedure*" (4 .52). Consistently high scores for risk/benefit discussion, encouragement of questions and provision of printed or visual aids confirm that core information needs were met. The nursing implications of this finding recommends keeping the present script but continue pairing the verbal briefing with concise leaflets or infographic because these reinforce retention and satisfy the supportive-educative role emphasized by Smeltzer et al. (2022). Nurses may also schedule a brief "teach-back" check before transfer to the operating room so last-minute doubts can be corrected.

Table 4.8b: Perception Towards Diet and Nutrition

Statement	Mean	Qualitative Rating
I was given clear instructions on dietary restrictions before the surgery. *Binigyan ako ng malinaw na mga tagubilin tungkol sa mgarestriksyon sa pagkain bago ang operasyon.*	4.47	*Strongly Agree*
The nurse explained why fasting was necessary before the procedure. *Ipinaliwanag ng nars kung bakit mahalaga ang pag-aayuno bago ang operasyon.*	4.48	*Strongly Agree*
I received guidance on maintaining proper nutrition for recovery. *Nakakuha ako ng gabay tungkol sa tamang nutrisyon para sa paggaling.*	4.46	*Strongly Agree*
Postoperative dietary recommendations were explained to me. *Ipinaliwanag sa akin ang mga rekomendasyon sa diyeta pagkatapos ng operasyon.*	4.51	*Strongly Agree*
The importance of hydration before and after surgery was emphasized by the nurse. *Binibigyang-diin ng nars ang kahalagahan ng hydration bago at pagkatapos ng operasyon.*	4.51	*Strongly Agree*
Weighted Mean	4.48	***Strongly Agree***

Guidance on fasting, hydration and diet was likewise rated strongly agree (weighted mean = 4 .48). Hydration and fasting rules shared the top mark (4 .51), showing that nurses managed to translate abstract ERAS requirements (Liu et. al., 2022) into patient-friendly terms. Because perioperative nutrition is a proven pillar of recovery programs, it is recommended integrating a simple checklist that flags at-risk patients for dietitian referral. Including that checklist in the bedside chart ensures consistency across shifts.

Table 4.8c: Perception Towards Addressing Fears and Anxiety

Statement	Mean	Qualitative Rating
The nurse acknowledged and addressed my fears about the surgery.	4.54	*Strongly Agree*

Kinilala at inasikaso ng nars ang aking mga takot tungkol sa operasyon.		
Strategies to manage anxiety and fear were discussed with me. *Tinalakay sa akin ang mga estratehiya upang pamahalaan ang pagkabalisa at takot.*	4.47	*Strongly Agree*
The nurse's empathetic communication helped reduce my anxiety. *Ang makiramay na pakikipag-usap ng nars ay nakatulong upang mabawasan ang aking pagkabalisa.*	4.5	*Strongly Agree*
I felt reassured after receiving preoperative teaching from the nurse. *Nakaramdam ako ng kapanatagan matapos makatanggap ng preoperative teaching mula sa nars.*	4.47	*Strongly Agree*
The nurse encouraged me to share my emotional and psychological concerns. *Hinihikayat ako ng nars na ibahagi ang aking mga emosyonal at sikolohikal na alalahanin.*	4.48	*Strongly Agree*
Weighted Mean	4.49	***Strongly Agree***

Table 4.8c reports that respondents felt their worries were heard (weighted mean = 4 .49). The single highest item was "The nurse acknowledged and addressed my fears" (4 .54). Empathic communication therefore operates as a covert anxiolytic, echoing the findings of Gustini et al. (2023) that therapeutic dialogue alone can reduce preoperative stress. This implies to embed a one-minute "emotional vital-sign" screen in the pre-operative checklist and give nurses permission to pause routine tasks for brief guided-imagery or breathing cues that are quick, no-cost options endorsed by Villa et al. (2020) for anxiety control.

Table 4.8d: Perception Towards Postoperative Expectations

Statement	Mean	Qualitative Rating
I was informed about what to expect during my recovery period. *Ipinaalam sa akin kung ano ang dapat asahan sa panahon ng aking paggaling.*	4.48	*Strongly Agree*

Clear instructions were provided by the nurse on how to care for my surgical site. *Binigyan ako ng malinaw na mga tagubilin ng nars kung paano aalagaan ang lugar ng operasyon.*	4.43	*Strongly Agree*
I was educated on warning signs that would require medical attention. *Tinuruan ako tungkol sa mga babalang palatandaan na nangangailangan ng medikal na atensyon.*	4.44	*Strongly Agree*
The nurse explained safe levels of physical activity after the surgery. *Ipinaliwanag ng nars ang ligtas na antas ng pisikal na aktibidad pagkatapos ng operasyon.*	4.47	*Strongly Agree*
I was informed about pain management strategies for postoperative discomfort. *Ipinaalam sa akin ang mga estratehiya para sa pamamahala ng sakit para sa hindi komportableng pakiramdam pagkatapos ng operasyon.*	4.51	*Strongly Agree*
Weighted Mean	4.47	***Strongly Agree***

Table 4.8d shows us that preparation for the recovery phase also scored very high (weighted mean = 4 .47). Clarity of pain-management strategies led (4 .51), followed closely by explanation of red-flag symptoms and allowed activity levels. For the nursing implications, we can link this teaching directly to the surgeon's discharge orders so messages remain congruent and reinforce with a color-coded "When to Call" magnet at the patient's bedside. Mubita et al. (2020) show that congruent, empathic information improves satisfaction with pain relief and overall recovery.

Grand Mean for Teaching Perception	4.48	***Strongly Agree***

Collectively, the twenty statements on nurse-initiated teaching produce a grand mean of 4.48, firmly within the "Strongly Agree" range. These results indicate that patients perceive the nursing staff's preoperative teaching as comprehensive, clear, and emotionally supportive across all four focuses.

Statement of the Problem 3: Differences in Perception

In this section, the researcher aimed to investigate the different variables that show the different perceptions of the respondents towards nurse-initiated preoperative teaching.

To establish the basis for the succeeding analyses, the researcher first delineated the variables under investigation. The dependent variable is each patient's perception of nurse-initiated pre-operative teaching, quantified as the overall teaching score. The arithmetic means of the twenty Likert statements in Part 2 of the questionnaire (No.1–No.20) is established as the overall teaching score. Scores range from 1 (Disagree) to 5 (Strongly Agree); higher values signify more favorable perceptions of the clarity, completeness, and usefulness of the nursing instruction received.

Five patient-related factors serve as independent variables:

1. **Sex** (male vs female);
2. **Type of surgery** (minor vs major);
3. **Age group** (18–25, 26–35, 36–45, 46–55, 56–60 years);
4. **Highest educational attainment** (elementary, high-school, college undergraduate, college graduate / master level); and
5. **Operation type** (general, gynecologic, head-and-neck, orthopedic, plastic/reconstructive)

The selection of these five factors is grounded in both empirical evidence and theoretical considerations outlined in the review of related literature. Sex was included because several studies have shown that female patients tend to report higher pre-operative anxiety and a greater need for detailed information than male patients (Kassahun et al., 2022), traits that can shape how teaching is perceived. Type of surgery (minor vs major) was retained because procedure complexity directly influences the depth and urgency of information required; Darville-Beneby et al. (2023) demonstrated that more extensive operations prompt nurses to deliver lengthier and more structured teaching sessions, often resulting in higher patient-satisfaction scores.

Age group is another important determinant. Chen et al. (2021) found that younger adults (≤ 35 years) typically seek more autonomy and digital resources, whereas mid-life adults exhibit increased anxiety linked to comorbidities and recovery concerns, differences which can affect their appraisal of nursing education. Educational attainment was included because health-literacy literature consistently indicates that college-educated patients interpret medical information more readily and, consequently, rate educational interventions more favorably (Bedaso et al., 2022).

Finally, operation type (general, gynecologic, head-and-neck, orthopedic, plastic/reconstructive) captures procedure-specific aspects. Studies such as Darville-Beneby et al. (2023) and Barboza et al. (2023) show that patients scheduled for gynecologic and orthopedic surgeries often have unique emotional and informational needs that influence their satisfaction with pre-operative teaching.

By examining these five factors, the researcher sought to pinpoint precisely which demographic or clinical characteristics, if any, are associated with significant differences in patients' perceptions of nurse-initiated pre-operative instruction within the study's Level 1 hospital context.

The following tables illustrate the perceptions towards teaching, measured by the means of teaching score for each independent variable mentioned above together with the applicable nursing implications of each result. All contingency tables used an $\alpha = 0.05$ at 95% confidence level.

Table 4.9 Independent-samples t-test: Teaching Score by Sex

Sex	Count (n)	Mean	t (Welch)	p
Male	44	4.47	0.18	0.86
Female	46	4.49		

Table 4.9 shows that there is no significant difference between male and female patients' perceptions of nurse-initiated teaching ($p > .05$). The absence of a significant sex difference ($p = .86$) suggests that the teaching protocol is equally effective for male and female patients in these Level 1 hospitals. This result contrasts Kassahun et al. (2022), who reported substantially higher pre-operative anxiety among women, indicating they often need more detailed explanations. Within the nursing context, these results imply the following: Maintain gender-neutral core materials while screening both sexes for individual information gaps; build flexible delivery options (e.g., video vs. brochure) so either sex can choose a preferred format; continue to monitor for under-reported anxiety in male patients and provide extra coaching when detected.

Table 4.10 Independent-samples t-test: Teaching Score by Surgery Type

Sex	Count (n)	Mean	t (Welch)	p
Major	65	4.45	−1.24	.22
Minor	25	4.56		

Table 4.10 shows the mean scores for teaching perception by surgery type. Respondents who experienced major surgeries had a Mean of 4.45 while those who underwent minor procedures had a Mean of 4.56. This indicates no significant variation in teaching perception across surgery complexity ($p = .22$). Whether patients underwent minor or major procedures, both groups rated nurse-initiated teaching very highly, mirroring the finding of Darville-Beneby et al. (2023) that robust education can equalize postoperative outcomes regardless of surgical magnitude. These results imply the following: Allocate teaching time equitably to minor and major-surgery lists rather than triaging by case size; embed quick "teach-back" scripts on ward rounds to reinforce essential points for short-stay minor cases; use standardized checklists so that critical safety items (e.g., fasting, wound care) are never omitted when time is tight.

Table 4.11 One-way ANOVA: Teaching score by Age Group

Age Group	Count (n)	Mean	SD	p
18 – 25	19	4.42	0.46	
26 – 35	35	4.47	0.37	
36 – 45	21	4.56	0.50	0.79
46 – 55	10	4.54	0.37	
56 – 60	5	4.36	0.58	

Table 4.11 demonstrates no significant differences among the five age bands ($p = .79$). High teaching scores across ages suggest that the current program meets diverse generational needs. Nevertheless, Chen et al. (2021) found younger adults demand more extensive clarification before surgery, whereas older adults value concise printed summaries. This means the following nursing implications: Offer

multimodal resources through verbal briefing, printed infographics, and QR-linked videos to suit varying tech familiarity; practice the "teach-back" method to confirm comprehension in both younger and older population; and involve family caregivers for seniors who may prefer third-party reinforcement of instructions.

Table 4.12 One-way ANOVA: Teaching score by Highest Educational Attainment

Educational Attainment	Count (n)	Mean	SD	p
Elementary graduate	5	4.61	0.39	
High School graduate	11	4.42	0.49	
College Undergraduate	16	4.53	0.44	0.93
College Graduate	32	4.53	0.43	
Master Level Education	11	4.48	0.42	

Table 4.12 shows that there is no significant difference among elementary-graduate, high-school-graduate, college, and master-level patients' perceptions of nurse-initiated teaching ($p > .05$). The nonsignificant result ($p = .93$) indicates that the teaching protocol is equally effective across all schooling levels in these Level 1 hospitals. This finding supports Bedaso et al. (2022) who concluded that well-structured preoperative education can neutralize health-literacy gaps, leading to uniformly positive patient appraisals. With this in mind, we come to the following nursing implications: Maintain plain-language standards. Keep written modules at, or below, a sixth-grade reading level so that elementary graduates can grasp key points without oversimplifying content for college-educated patients; layer information ("universal precautions" approach). Present essential facts verbally, reinforce with pictorial leaflets, and provide QR-linked videos for those who want deeper detail; Use the teach-back method consistently.

Asking every patient regardless of schooling to restate the instructions ensures genuine comprehension and uncovers hidden misunderstandings; leverage family or caregiver involvement. For respondents with limited formal education, inviting a support person to the teaching session adds an extra cognitive safety net; incorporate bedside demonstrations. Hands-on practice (e.g., incentive-spirometer use) bridges abstract explanations and concrete performance, benefiting all literacy levels but especially elementary and high-school graduates; and audit materials annually. Cross-check readability and cultural relevance against the latest patient feedback to keep resources inclusive and engaging.

Table 4.13 One-way ANOVA: Teaching score by Operation Type

Operation Type	Count (n)	Mean	SD	p	
General	50	4.57	0.40	0.029	**$F(4, 85) = 2.84$; $\eta^2 \approx 0.12$**
Gynecologic	12	4.56	0.38		

Head and Neck	7	4.49	0.38
Orthopedic	10	**4.11**	0.60
Plastic/Reconstructive	11	4.41	0.34

Table 4.13 demonstrates that operation specialty is the lone clinical variable that meaningfully modulates patients' appraisal of pre-operative instruction. The one-way ANOVA produced a statistically significant omnibus result ($F(4, 85) = 2.84$, $p = .029$; $\eta^2 \approx 0.12$), indicating a medium practical effect: roughly 12 % of the variance in perception scores is attributable to operation type. Post-hoc Tukey contrasts pinpoint orthopedic respondents (M=4.11) as the source of divergence, registering a mean that is 0.28–0.46 points lower than the tightly grouped means of general (4.57), gynecologic (4.56), plastic/reconstructive (4.41) and head-and-neck (4.39) cohorts. This aligns with Giardina et al. (2020), who observed information overload and mobility concerns depress satisfaction in joint-replacement patients. Nursing implications include streamlining orthopedic teaching to three essentials: weight-bearing limits, assistive-device use, and pain-control options to prevent cognitive overload. Additional nursing implications include supplying illustrated home-exercise sheets that patients can review post-discharge and coordinating with physiotherapists so early mobilization milestones are reinforced consistently across disciplines.

The following table explores the association between procedure complexity (major vs minor) and dichotomized perception levels (high vs low/neutral). A Fisher's Exact Test of independence ($\alpha = 0.05$) evaluates whether the distribution of perception categories differs significantly by surgery type.

Table 4.14: Fisher's Exact Test: High Teaching Perception by Surgery Type

	Major	**Minor**
High perception (≥ 4)	51 (78.5%)	23 (92.0%)
Low / Neutral (< 4)	14 (21.5)	2 (8.0%)
Total	65	25
Odds ratio=2.865 ; p-value= 0.2107		

Table 4.14 shows that the proportion of patients who rated teaching "High" did not differ between major and minor procedures ($p > .05$). Although Darville-Beneby et al. (2023) emphasized the extra value of teaching before extensive surgery, the present data suggest that teaching perception levels are similar regardless of whether the surgery was major or minor. This observation leads us to the following nursing implications: Maintain comprehensive content for lengthy procedures but insert a brief "teach-back" checkpoint on the evening before surgery to capture lingering doubts; offer a single-page summary (fasting, pain control, early mobilization) to consolidate key messages. use the minor-case flow as a pilot site for new digital aids (e-brochures, QR-linked videos) because satisfaction is already strong, allowing innovations to be tested with less risk; apply the teach-back technique to 100 % of cases; the small "Low/Neutral" group may harbor unvoiced concerns; and flag all Low/Neutral cases for rapid follow-up where a nurse can revisit them post-operatively to clarify misunderstandings and reinforce satisfaction.

The following table presents the teaching score perception by operation type. This explores the association between how patients rated the quality of nurse-initiated preoperative teaching and their type of operation using a Fisher-Freeman-Halton Exact Test at $\alpha = 0.05$.

Table 4.15: Fisher's Exact Test: High Teaching Perception by Operation Type

Operation Type	High Perception (≥ 4)	Low/Neutral (<4)
General	43 (58.11%)	7 (43.75%)
Gynecologic	11 (14.86%)	1 (6.25%)
Head and Neck	6 (8.11%)	1 (6.25%)
Orthopedic	5 (6.76%)	5 (31.25%
Plastic/Reconstructive	9 (12.16%)	2 (12.5%)
Total	74	16
p-value= 0.104		

Table 4.15 shows the comparison of teaching perception scores (dichotomized at 4.0 into High ≥ 4.0 vs Low/Neutral < 4.0) across the five operation types (general, gynecologic, head and neck, orthopedic, plastic/reconstructive.

The analysis resulted in a p-value of 0.104, indicating no statistically significant association between surgical specialty and the proportion of patients who rate nurse-initiated teaching highly ($p > .05$). Although the global test is non-significant, the descriptive pattern highlights an important practical gap: only 50 % of orthopedic patients fell in the High-perception band, compared with 79 – 92 % in the other services. This trend mirrors the observation of Giardina et al. (2020) who noted that joint-replacement candidates often experience information overload on mobility restrictions and pain-control regimens, dampening satisfaction with pre-operative instruction. These results imply that while the current program is broadly effective, the orthopedic subgroup warrants targeted refinement, such as the provision of a concise "Orthopedic Essentials" module focused on weight-bearing limits, assistive-device use, and a laddered pain-management plan, reinforced by structured teach-back at first mobilization.

Perception Towards the Barriers of Preoperative Teaching

The following table displays the descriptive statistics for the three barrier focuses, namely Communication, Nurse–Patient Ratio, and Teaching Resources along with the reverse-scored Q35. The weighted means indicate the degree to which each barrier is perceived to impede effective teaching.

Furthermore, the barriers identified were ranked using the absolute (threshold) method. A low mean signals greater difficulty thus required reverse scoring to apply absolute classification. The barriers are then ranked as Major, Moderate, Minor, or Negligible based on the reverse-mean band.

Likert Description	Likert Scale Interval	Reverse Mean Band	Category
Strongly Agree	4.21 to 5.00	4.21 to 5.00	Major Barrier
Agree	3.41 to 4.20	3.41 to 4.20	Moderate Barrier

Neutral	2.61 to 3.40	2.61 to 3.40	Minor Barrier
Somewhat Disagree	1.81 to 2.60	≤ 2.60	Negligible Barrier
Disagree	1.00 to 1.80		

Table 4.16a: Perception Towards Communication Barrier

Statement	Mean	Rating
The nurse communicated clearly and effectively. *Malinaw at epektibo ang pakikipag-usap ng nars.*	3.61	*Agree*
Language or cultural differences did not hinder my understanding. *Hindi naging hadlang ang pagkakaiba sa wika o kultura sa aking pag-unawa.*	3.53	*Agree*
The time allocated for preoperative teaching was sufficient. *Ang oras na inilaan para sa preoperative teaching ay sapat.*	3.65	*Agree*
The nurse's explanations were easy to understand. *Madaling maintindihan ang mga paliwanag ng nars.*	3.55	*Agree*
I felt comfortable asking questions from the nurse during preoperative teaching. *Komportable akong magtanong sa nars sa panahon ng preoperative teaching.*	3.76	*Agree*
Weighted Mean	3.62	***Agree***
Reverse Mean	2.38	***Negligible Barrier***

Table 4.16a summarizes the perception of patients towards the communication barriers faced during preoperative education. The weighted mean of 3.62 is interpreted as "Agree", meaning patients agreed that although this barrier exists, the nurses were able to neutralize linguistic hurdles in preoperative teaching. The reverse mean of 2.38 classifies this as a "Negligible barrier" because patients generally felt time was sufficient and language did not hamper comprehension. This supports the findings of Hernández-Padilla et al., (2021) who argued that even modest clarification strategies can help overcome communication barriers. The nursing implication of this finding is nurses and hospitals can preserve current practices (plain-language scripts, open-question prompts) but add pictograms or QR-linked micro-videos for low-literacy patients to maintain equity as caseloads diversify.

Table 4.16b: Perception Towards Nurse-Patient Ratio Barrier

Statement	Mean	Rating
The nurse had enough time to focus on my teaching. *May sapat na oras ang nars upang magtutok sa aking pagtuturo.*	1.27	*Disagree*
I did not feel rushed during the teaching session. *Hindi ko naramdaman na nagmamadali ang session ng pagtuturo.*	1.28	*Disagree*
The number of nurses in the ward was adequate for personalized teaching. *Ang bilang ng mga nars sa ward ay sapat para sa personalisadong pagtuturo.*	1.26	*Disagree*
The nurse addressed my individual needs during the session. *Inasikaso ng nars ang aking mga pangangailangan sa panahon ng session.*	1.20	*Disagree*
The nurse's workload did not affect the quality of preoperative teaching. *Hindi nakaapekto ang workload ng nars sa kalidad ng preoperative teaching.*	1.19	*Disagree*
Weighted Mean	1.24	***Disagree***
Reverse Mean	4.76	***Major Barrier***

Table 4.16b shows that the weighted mean of this barrier was a low 1 .24 (patients disagreed that staffing was adequate); the reverse-mean soared to 4 .76, tagging it a major barrier. Respondents felt sessions were rushed and individual needs unmet. Lingcon & Alinsub (2020) linked high turnover and workload to poorer outcomes, and Wang et al. (2024) list inadequate staffing as the chief impediment to patient education. This implies that facilities should establish a teaching window in the preoperative flow sheet, and staff can present the 4.76 reverse mean of this barrier to the hospital administration to justify the addition of a full-time equivalent allocation.

Table 4.16c: Perception Towards Teaching Resources Barrier

Statement	Mean	Rating
Educational materials like pamphlets and videos were used to enhance my understanding. *Gumamit ng mga materyal pang-edukasyon tulad ng pamphlet at video upang mapahusay ang aking pag-unawa.*	1.11	*Disagree*
	1.08	*Disagree*

The resources provided by the nurse were effective for my learning. *Epektibo ang mga materyal na ibinigay ng nars para sa aking pagkatuto.*		
The availability of teaching resources was adequate for my needs. *Sapat ang mga available na materyal sa pagtuturo para sa aking mga pangangailangan.*	1.20	*Disagree*
The technology used by the nurse was useful in clarifying complex information. *Nakakatulong ang teknolohiyang ginamit ng nars sa pagpapaliwanag ng mga komplikadong impormasyon.*	1.51	*Disagree*
I believe that preoperative teaching would be improved with more teaching resources. *Naniniwala ako na mas mapapabuti ang preoperative teaching kung magkakaroon ng mas maraming materyal sa pagtuturo.*	2.45	*Agree*
Weighted Mean	1.4	***Disagree***
Reverse Mean	4.60	***Major Barrier***

Table 4.12c presents the perception towards the barrier of teaching resources. The interpretation of the weighted mean (M=1.4) and reverse mean (rM=4.60) classifies this as a major barrier in the delivery of effective preoperative education. Patients rarely saw pamphlets, videos or technology-based aids. Almutary & Almashi (2024) reported similar deficits in surgical units, and Bleicher et al. (2023) showed that poor expectation-setting around pain occurs when resources are few.

Grand Mean for Barriers Perception	1.84	***Somewhat Disagree***

In summary, across all three barrier focuses, the grand weighted mean is 1.84, reflecting overall disagreement that current conditions support effective preoperative teaching. This outcome is consistent with Hernández-Padilla et al. (2021) who observed that clear, patient-centered communication neutralizes many routine constraints. Additionally, the reverse mean of items flagged two major concerns: nurse-patient ratio and lack of teaching resources. These results prod us to sustain the plain-language scripts, open-ended questioning and teach-back approach that underpin the low composite mean but prioritize action on the two outliers by introducing a protected "teaching window" and to assemble resource-efficient multimedia aids like laminated cards, QR-linked clips to address the resource deficit.

Proposed Augmentation Plan for Preoperative Teaching Practices

Using the empirical findings of this study and built on the theoretical foundations of Orem's Self-care Deficit Nursing Theory, Watson's Theory of Human Caring, and Deming's System of Profound Knowledge, the researcher proposes the following augmentation plan that will support preoperative education, advance patient self-care, foster caring relationships, and continually push the quality improvement of level I hospitals in Southern Palawan. It is divided into three sequential phases:

1. First Phase: Quick Wins (0-3 months);
2. Second Phase: System Build-up (4-12 months); and
3. Third Phase: Consolidation & Policy (12-24 months).

The first phase, Quick Wins, involves cost-effective interventions that are aimed towards the two major obstacles identified in the previous chapter: 1) A protected 15-minute "teaching window" per shift shields education time from routine tasks and allowing nurses to fulfil Orem's supportive-education role that says nurses should supply the therapeutic self-care demand that the patient lacks.; 2) Bilingual teach-back cards and laminated pocket reference cards may standardize explanations, meeting Watson's call for authentic, trust-building dialogue and reduce process variation in Deming's terms. Doing these equips nurses with vernacular teach-back scripts and deploys resource-efficient multimedia aids. The allocation of protected time and administration of standardized culturally sensitive materials expands the self-care agency by ensuring patients understand fasting, pain control measures, and red flag instructions before surgery.

The second phase, System Build-up, introduces a simple high-reach media drive that utilizes culturally grounded cost-effective tools such as recycled tarpaulin flip charts, storyboard murals or other works made by art students, sponsored fasting SMS notifications, second-life smartphone lending boxes that can be lent to inpatients, and QR code posters that contains links that will let patients stream a maximum of two-minute long DOH-validated videos related to their surgeries using their own phones or the ones they borrowed from the hospital. The provision of these media diversifies learning channels, support the self-care agency as stated in Orem's theory, preserve face-to-face caring encounters as stated in Watson's transpersonal caring, and standardize content delivery in Deming's common cause variation. In this phase also, the "Surgical Buddy" peer-educator scheme where surgical patients interact with each other, will be introduced to leverage the Filipino *kapwa* custom and help alleviate anxiety. A PRC-accredited micro-course may also be employed to train at least two "teaching champions" per unit that will create specialized nurses who will focus on delivering effective preoperative patient education as to not impede the carrying out of other essential nursing tasks. The training of these teaching champions reflects Deming's profound knowledge pillar where staff acquire new skills, test them in small cycles, and refine the teaching process.

For the third phase, Consolidation and Policy, we will consolidate the gains. In this phase, the teaching checklist will be embedded into the electronic nursing record or patient chart, whichever is available for the hospital, advocate evidence-based staffing ratios, and mandate an annual barrier-survey audit. These initiatives mirror Deming's systemic view of variation and knowledge: by hard-wiring a checklist into the workflow and auditing its completion, the hospital creates a feedback loop that exposes process variation (missed teaching points) and drives data-informed staffing petitions. At the same time, sustaining a caring environment in which nurses have adequate time and resources upholds Watson's Caritas processes of "creating a healing environment" and "assisting with basic human needs." Finally, looping annual survey results back into practice keeps the program aligned with Orem's dynamic notion of therapeutic self-care demand: as patient profiles or surgical techniques evolve, so too will the educational content and delivery methods.

In summary, the augmentation plan operationalizes Orem's call to foster patient self-care, Watson's imperative to infuse every interaction with authentic caring, and Deming's mandate for continual, system-wide learning. Together these theories justify the phased interventions as ethically grounded, patient-centered, and quality-driven pathways for mitigating the nurse-patient-ratio and resource barriers that surfaced in this study.

Table 4.17: Proposed Augmentation Plan

Title: **Quick Wins towards Policy Integration: Three-Phase Framework for Preoperative Teaching Excellence**

Objective: To enhance effectiveness, equity, and sustainability of nurse-initiated preoperative teaching in level I hospitals in Southern Palawan by systematically upholding current strengths, removing key barriers, diversifying resource-efficient educational media, and embedding of continuous quality-improvement mechanisms.

	Goal	Program Activities	Material Resources/Deliverables	Persons Involved	Key Sponsors	Evaluation Metric
Phase 1 Quick Wins	Deliver immediate, high-impact improvements that consolidates nurses' capacity to teach effectively despite constraints.	**Teaching Window** - Allocate one protected 15-minute slot per shift solely for education. **Nurse-led Teach-back Script** - Usage of one-page teach-back cue card translated in English and local dialect ensuring clarity for low-literacy patients.	• Revised duty Roster • Endorsed in shift-handover sheet • 1-page teach-back laminated cue card	• Chief nurse • Nursing supervisors • Unit educator • Language officer • Barangay Health Workers	DOH Hospital Administration LGU RHU	≥ 80 % shifts report slot used as applicable. 90% of patients can recount 2 key instructions correctly.
0-3 months implementation						
Phase 2 System Build-up	Scale and diversify educational delivery to overcome resource limitations and build sustainable teaching capacity.	**Multimedia Aids** - Provide cost-effective multimedia to assist the delivery of effective preoperative teaching. **Peer-Educator Scheme** - Creation of "surgical buddy" peer-educator scheme among patients. **Teaching Champion Course** - Employ a PRC-accredited course that certifies teaching champions per unit.	• Recycled material flip charts • Laminated QR code posters • Free WiFi connection • Telco-sponsored SMS notifications • Educational artworks • Secondhand electronic devices • Buddy system allocation list • Certified teaching champions	• Chief nurse • Nursing supervisors • Staff nurses • Artists • NGO heads • Electronics donors • Supply unit heads • Trainers	DOH Hospital Administration LGU RHU NGOs Civilians	Kits used in ≥ 70 % teaching encounters recorded in ward log. Buddy present in ≥ 50 % elective cases as applicable. 95% of trainees pass as teaching champions and conduct 1 peer coaching session per month.
4-12 months implementation						

Phase 3 Consolidation and Policy	Institutionalize and create a sustainable system to uphold the gains from previous phases through integration, continuous monitoring, and strategic staffing advocacy.	**Embedding of Teaching Checklist** - Integrate preoperative teaching checklist to nursing record to highlight key instructions prior to OR transfer. **Evidence-based Staffing Advocacy** - Petition the addition of at least one full-time perioperative nurse per 12 beds using the evidence of this study. **Annual Barrier Audit** - Conduct annual auditing of barrier scores to identify process variations and reinforce data-driven petitions.	• Nursing records with embedded teaching checklist • Staff request letters, ordinances, human resource plan • Audit report and Fisher exact test results	• Chief of hospital • Human resources • Chief nurse • Nursing supervisor • Staff nurse • Municipal/Provincial executive body • Auditor	DOH LGU Hospital Administration	100% of surgeries have completed checklists in their nursing record. Approval of at least 1 new perioperative nurse position Barrier grand reverse-mean ≤ 2.0
12-24 months implementation						

CHAPTER 5
SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a brief overview of the study's primary findings, implications, and recommendations for future research or actions. The summary summarizes the key aspects of the study, whereas the conclusion connects these findings to the original research questions or aims. Furthermore, recommendations are offered based on the study's findings, providing insights into prospective actions or further research.

Summary of Findings

This research study included insights into the respondents' demographic profiles, perceptions towards nurse-initiated preoperative teaching, and perceptions towards the barriers of nurse-initiated preoperative teaching. This study also determined the correlation between variables, including the statistical significance of the different perceptions of the patients towards nurse-initiated preoperative teaching using appropriate statistical treatment and analysis. Furthermore, it also yielded an augmentation plan for preoperative teaching practices of nurses that is grounded in different theoretical bases.

This study profiled 90 patients who underwent elective surgery in the selected level 1 hospitals in Southern Palawan. Most respondents were aged 26–35 years (38.9 %), with a nearly even split between males and females. Half were married and college graduates comprised the largest educational group (35.6 %). General surgery accounted for 55.6% of procedures, and 72.2 % of all surgeries were classified as major. A majority (68.9 %) were first-time surgical patients, with the remainder having undergone two or more operations.

Across all four instructional focuses: Surgical Procedure Overview, Diet and Nutrition, Addressing Fears and Anxiety, and Post-operative Expectations, the patients registered a uniform positive perception for nurse-initiated preoperative teaching, with item means ranging from 4.47 to 4.49 and an overall focus

mean of 4.48 on the five-point scale (Strongly Agree). These scores confirm that nurses are simultaneously excelling in the cognitive (knowledge transfer), affective (anxiety relief), and psychomotor (self-care skills) dimensions of education where they provided clear procedural explanations, actionable dietary guidance, empathic emotional support, and understandable recovery instructions.

Comparative analysis confirmed that nurses' instructional effectiveness was largely uniform across most socio-demographic strata. Welch t-tests revealed no perceptual gap between male and female respondents ($t = 0.18$, $p = .86$), nor between recipients of major versus minor surgery ($t = 1.24$, $p = .22$). Likewise, one-way ANOVA detected no statistically credible variation among the five age brackets ($F(4, 85) = 0.42$, $p = .79$) or among the five tiers of educational attainment ($F(4, 85) = 0.21$, $p = .93$); η^2 values in both models were < 0.01, highlighting that even though differences exist, they are too small to be of practical concern. These null findings suggest that the current teaching scripts grounded in plain-language explanation and teach-back, functions as a "leveler," that enables high comprehension regardless of sex, age-related learning preference, or formal educational attainment.

Operation type, however, emerged as a key influencer in teaching perception. A significant omnibus ANOVA ($F(4, 85) = 2.84$, $p = .029$; $\eta^2 = 0.12$) indicated that at least one surgical specialty diverged from the general trend. Post-hoc contrasts revealed that patients who experienced orthopedic surgeries, whose mean perception score of 4.11 was appreciably lower than the 4.39 – 4.57 range registered by peers in general, gynecologic, plastic-reconstructive, and head-and-neck samples. Although a Fisher–Freeman–Halton exact test on dichotomized scores (High ≥ 4.0 vs Low < 4.0) did not reach conventional significance ($p = .104$), the odds ratio of 6.27 (95 % CI 1.56 – 25.27) in the orthopedic group underscores a clinically meaningful satisfaction gap: orthopedic patients were more than six times as likely to rate the teaching below the 'high' threshold. Qualitative explanations offered by orthopedic respondents during debriefings referenced information overload on weight-bearing timelines and pain-control regimens, supporting Giardina et al. (2020) who observed that excessive technical detail can blunt educational satisfaction in joint-replacement cohorts.

The analysis of preoperative teaching barriers introduces a cautionary counterpoint. Two structural hurdles surfaced as major barriers: an unfavorable nurse-patient ratio (reverse-scored mean = 4.76) and a scarcity of teaching resources (reverse-scored mean = 4.60). The elevation of the nurse-patient ratio barrier signals that nurses are expected to conduct comprehensive preoperative teaching while simultaneously meeting routine ward demands, a workload profile associated in the literature with fatigue, informational shortcuts, and higher error rates. If staffing levels remain static while surgical output grows which is typical in Philippine Level 1 hospitals, the current high teaching scores may prove unsustainable. Prolonged time pressure can erode the empathic climate praised by respondents, curtail opportunities for teach-back, and ultimately diminish patients' self-care competence upon discharge. At a system level, an unfavorable ratio jeopardizes weakens the hospital's capacity to demonstrate quality indicators.

The second major barrier, lack of teaching resources, carries its own trigger of risks. When printed aids, visual infographics, or brief instructional videos are lacking, nurses must rely almost exclusively on verbal explanation. Such single-modality delivery increases cognitive load for patients who are already anxious about surgery, raises the probability of forgotten instructions, and disadvantages low-literacy or non-English speakers. Resource scarcity also constrains nurses' ability to tailor education to different learning styles, which is a core principle of patient-centered care. Moreover, without tangible materials, teaching sessions leave no object that family caregivers can consult post-operatively, weakening continuity of care once the patient returns home.

From a theoretical standpoint, both barriers negatively affect the operation of Orem's Self-Care Deficit Theory: inadequate staffing limits nurses' time to assess individual self-care requisites, while insufficient media hampers the supportive-educative system that should enable patients to meet those requisites independently. In Watson's Theory of Human Caring, time scarcity and lack of visual tools threaten the caritas factors of cultivating trust and creating a healing environment. Finally, Deming's System of Profound Knowledge views scarce resources and workforce overload as special-cause variations that can destabilize an otherwise capable teaching process. Despite the presence of these major barriers, in essence, nurses are delivering "high performance under constraint," sustaining excellent educational outcomes despite workload pressure and limited printed or multimedia aids.

Consolidating the findings of this study led to the creation of an augmentation plan that demonstrates a phased, theory-guided strategy that can feasibly reinforce nurse-initiated preoperative teaching practices in the resource-constrained level I hospitals in the Southern Palawan. The augmentation plan, divided into 3 phases, introduces protected teaching windows, supplication of multimedia aids, training of "teaching champions", establishing of "surgical buddy" education scheme, embedding of teaching checklists in patient records, requesting of additional manpower, and instituting annual barrier audits.

Conclusions

The study concludes that nurse-initiated preoperative teaching in Level 1 hospitals of Southern Palawan is perceived by patients as uniformly excellent, achieving "strongly agree" ratings across the four focuses of surgical procedure overview, diet and nutrition guidance, anxiety management, and post-operative expectations. The grand mean for perceived barriers fell on the "somewhat disagree" interval, demonstrating that the current conditions do not support the effective delivery of preoperative teaching. Despite the existence of communication barriers, nurses were able to overcome this hurdle and provide clear and adequate preoperative teaching. Additionally, the data also revealed two major vulnerabilities among the barriers: an unfavorable nurse-patient ratio and scarcity of teaching resources that threaten the sustainability of the positive patient perceptions. Moreover, orthopedic patients exhibit a clinically meaningful though not statistically conclusive satisfaction gap, pointing to the need for specialty-tailored refinements. When interpreted through Orem's Self-Care Deficit Theory, Watson's Theory of Human Caring, and Deming's System of Profound Knowledge, the findings depict a system that currently meets patients' self-care information needs and fosters caring relationships yet operates at the margin of its staffing and material capacity.

Recommendations

Based on the findings of this study, from the analysis of socio-demographic profiles and the perception of the patients towards nurse-initiated preoperative teaching and its barriers, the researcher proposes the following recommendations that can be made to support, strengthen, and advance nurse-initiated preoperative teaching practices in the following respective fields:

For the Department of Health, it is recommended to review and update national staffing guidelines to ensure adequate nurse-patient ratios in preoperative units. It is also vital to provide a centralized repository of resource-effective multimedia aids and provide adequate funding and policy support for the development and distribution of standardized, reusable visual aids (infographics and video modules) across all Level-1 hospitals.

For the Hospital Management, adopt the proposed augmentation plan beginning with the protected teaching window in duty schedules. Administrators may also allocate a reasonable budget for the creation of simple high-reach multimedia that may amplify the delivery of preoperative teaching. Additionally, it is important to approve at least one new perioperative nurse post considering the quantitative evidence of this study that highlights the threats of understaffing to care quality.

For the Nursing Service Department, seek and enroll in a PRC or DOH-accredited micro-course that will certify at least two "teaching champions" per unit. They may also pioneer the "surgical buddy" peer-education program as proposed in this study to buffer workload and improve overall patient satisfaction in lieu of preoperative education. Furthermore, nurses are encouraged to continue delivering appropriate preoperative teaching and utilize standardized teach-back scripts to ensure the equal delivery across varying socio-demographic profiles of patients. Lastly, to conduct barrier audits using the checklist results and appropriate statistics, triggering rapid response as needed.

For future researchers, conduct mixed-methods evaluations of the augmentation plan's impact on different areas such as patient anxiety, length of stay, and readmission phenomena. They may also compare the effectiveness of different simple media modalities as suggested in this study and more complicated high-technology alternatives present on higher-income locations and higher-level hospitals. Moreover, they may also utilize this study's design to test its generalizability among patients found in other regions in the Philippines.

Pursuing these recommendations may provide a promising improvement to patient care and system performance across the national and local levels. By securing adequate nurse staffing and standardized teaching resources, higher patient-satisfaction benchmarks may be obtained, and hospital managements will be able to enhance its reputation for patient-centered care and create sustainable nursing practices throughout the entire Philippine healthcare system.

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