

Islamic Cultural Intelligence in Nursing: Bridging Knowledge Regarding Muslim Religious Practices in a Selected Government Hospital in Metro Manila

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ABSTRACT

The Philippines is a culturally diverse nation, with Islam being the second largest religion, comprising 6.4% of the population. As the Muslim community grows, there is a need to enhance nurses' understanding of Muslim religious practices to provide more culturally sensitive healthcare. This study aims to assess the level of nurses' knowledge regarding Muslim religious practices and to analyze how demographic factors may impact this knowledge, with the goal of informing strategies to strengthen Islamic culturally competent nursing practice. This quantitative descriptive-comparative study assessed the knowledge regarding Muslim religious practices among 100 ward staff nurses at a selected government hospital. A validated 25-item, 4-point Likert scale was used, with quota and convenience non-probability sampling techniques for participant selection. The study identified significant differences in the level of knowledge regarding Muslim religious practices, particularly in dietary practices (p -value = 0.008) and pregnancy and childbearing practices (p -value = 0.035), when categorized by years of experience. Nurses with 5-10 years of experience achieved the highest mean score (3.153) in dietary practices, while those with 2-3 years of experience attained the lowest mean score (2.450). Conversely, nurses with less than 2 years of experience demonstrated the highest level of knowledge (Mean = 3.627) in Muslim pregnancy and childbearing practices, whereas those with 2-3 years of experience exhibited the lowest level of knowledge (Mean = 2.875). In conclusion, the study reveals a significant correlation between nurses' experience and their knowledge of Muslim religious practices. Nurses with 2-3 years of experience showed the greatest knowledge gaps, highlighting the need for targeted educational interventions. Nursing programs should prioritize enhancing cultural competence among nurses through targeted seminars and effective information dissemination initiatives.

Keywords: Islamic Cultural Intelligence, Muslim Religious Practices, Nursing Cultural Competency.

INTRODUCTION

The global landscape of diverse religions presents a significant challenge for healthcare providers and systems aiming to deliver culturally competent medical care. Cultural intelligence, a cornerstone in healthcare, is defined by the ability of healthcare providers and organizations to provide healthcare services that align with the cultural, social, and religious preferences of patients and their families. Implementing culturally competent care holds the potential not only to enhance the quality of patient care but also to improve healthcare outcomes. This challenge is particularly relevant considering the substantial presence of Muslims globally, who are widely recognized as the fastest-growing religious group which stands as the second-largest religion in the world (World Population Review 2023)^[47].

The Universal Declaration of Human Rights (UDHR), established by the United Nations General Assembly in 1948, underscores the fundamental principle that healthcare is an inherent human right. It declares that every individual is entitled to the highest achievable standard of health. This declaration carries significant relevance for Muslims and people of all religious backgrounds, emphasizing the universal applicability of this right. Recognizing and respecting the cultural and spiritual values held by Muslims are of paramount importance in the provision of healthcare. An individual's cultural and religious background profoundly shapes their

perspectives, behaviors, and beliefs concerning health, illness, and the delivery of healthcare services. These influences manifest diversely, encompassing dietary preferences, concepts of modesty, notions of privacy, restrictions on physical contact, and abstinence from alcohol consumption. However, perceptions of limitations in medical care within the Muslim population may potentially elevate the risk of various diseases. These perceived limitations may encompass preferences for healthcare providers of a specific gender, concerns related to modesty, and misconceptions regarding the causes of certain illnesses, often rooted in Islamic cultural beliefs and practices.

This research aims to identify the current state of Islamic cultural intelligence in nursing within a selected government hospital in Metro Manila, focusing specifically on the level of knowledge regarding Muslim religious practices. Despite the substantial presence of the Muslim community in various regions, there is a notable lack of investigation into healthcare professionals' knowledge and proficiency in delivering culturally competent care to this population. The study aims to identify existing gaps in knowledge, skills, and application among healthcare providers, shedding light on barriers that hinder effective healthcare delivery to Muslims. By enhancing cultural intelligence among nurses, the study contributed to a more culturally sensitive healthcare environment. This, in turn, can lead to improved patient satisfaction, trust in healthcare services, and overall well-being for Muslim patients in Metro Manila. The findings from this research have the capacity to inform and influence healthcare practices, fostering a more inclusive and equitable approach to patient care.

BACKGROUND OF THE STUDY

The motivation behind initiating this study, titled "Islamic Cultural Intelligence in Nursing: Bridging Knowledge Regarding Muslim Religious Practices in a Selected Government Hospital in Metro Manila," arises from the researchers' direct experiences, observations, and stories shared by both nurses and Muslim individuals within healthcare settings. The increasing Muslim community in Metro Manila underscores the need for this research to ensure that Muslim patients receive culturally aligned medical care. The researchers have come across situations where a lack of knowledge and understanding of Muslim religious practices among healthcare professionals, particularly nurses, has posed challenges in providing culturally sensitive care. These personal experiences serve as a driving force for this research, raising knowledge about significant gaps in understand

Real-life scenarios, like the one where nurses grapple with the dilemma of a parent insisting on discharging their son before dawn to honor the Muslim tradition of burial before sunlight, have served as a profound awakening for the impetus behind this research. In such instances, nurses find themselves at a crossroads, torn between allowing the patient to leave without proper discharge papers or prioritizing the cultural and religious practices intrinsic to the Muslim community. This narrative could potentially signify an instance indicative of a deficiency in cultural intelligence within nursing practices. The stories shared by nurses and experienced within healthcare settings shed light on the challenges of delivering patient-centered care that respects diverse religious practices.

In the dynamic healthcare landscape of Metro Manila, the growing Muslim community underscores the need to enhance competencies and understanding of Muslim religious practices for a more inclusive and culturally attuned approach. This is crucial to ensure the delivery of high-quality, culturally sensitive care. The identification of potential cultural competency gaps highlights the importance of addressing disparities between healthcare protocols and the nuanced cultural sensitivities of the Muslim community. This research aims to contribute valuable insights toward fostering a more inclusive and culturally sensitive healthcare environment, catalyzing positive change in healthcare practices. Through its findings, the study seeks to empower healthcare providers to navigate similar situations with sensitivity, promoting a harmonious and patient-centered healthcare experience for the Muslim community in Metro Manila.

Statement of the Problem

1. What is the profile of nurse respondents in a selected hospital in terms of:

1.1. Sex;

- 1.2. Religion; &
- 1.3. Years of experience?
2. What is the level of knowledge of the nurse respondents regarding Muslim religious practices in terms of:
 - 1.4. Dietary Practices;
 - 1.5. Treatment Customs;
 - 1.6. Concept of Death; &
 - 1.7. Pregnancy and Childbearing Practices?
3. Is there any significant difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to profile?
4. What training program can help nurses better understand Muslim Religious Practices?

Statement of the Hypotheses

After a thorough in-depth analysis of the collected data and information, the researchers arrived at the following conclusions:

Ho1. There is no significant difference between the nurse respondents' level of knowledge regarding Muslim religious practices when grouped according to profile.

Ha1. There is a significant difference between the nurse respondents' level of knowledge regarding Muslim religious practices when grouped according to profile.

Theoretical Framework

This study is theoretically grounded in Leininger's Cultural Care Diversity and Universality Theory, Patricia Benner's Theory of Nursing Practice Expertise, and Kristen Swanson's Theory of Caring and Healing. These theoretical frameworks provide the foundational basis for understanding and exploring the cultural care aspects, nursing practice expertise, and the dimensions of caring and healing within the context of the research.

Leininger's Cultural Care Diversity and Universality Theory

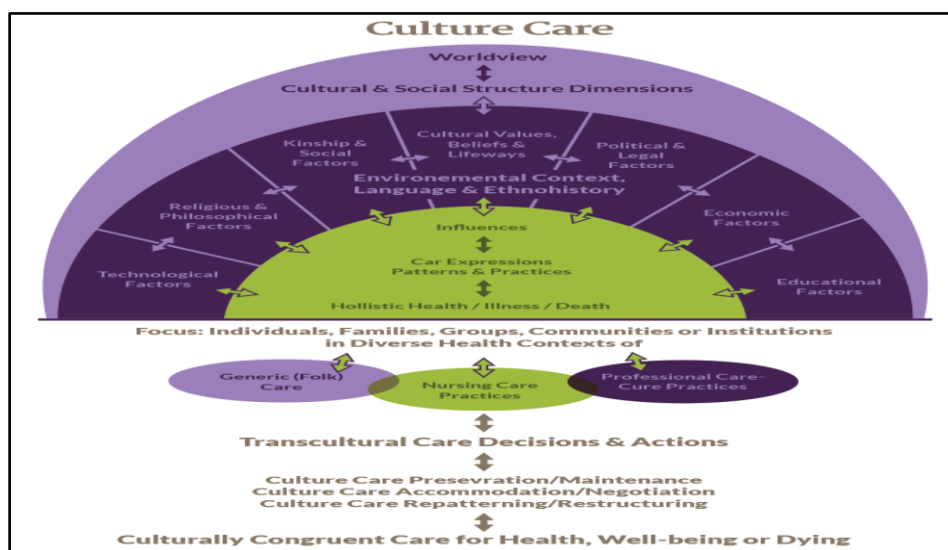


Image: 1: Leininger's Cultural Care Diversity and Universality Theory

Leininger's Cultural Care Diversity and Universality Theory, as discussed by Petipirin (2019), serves as a foundational model for delivering culturally responsive nursing care. In the context of Muslim patients in a government hospital in Metro Manila, the theory emphasizes the importance of understanding both universal human needs and culture-specific practices. It guides nurses to integrate patients' religious values, beliefs, and rituals into care delivery, ensuring that interventions are respectful and culturally appropriate. By applying this framework, nurses can foster stronger patient-provider relationships, enhance communication, and improve health outcomes among culturally diverse populations.^[38]

Kristen Swanson Theory of Caring and Healing

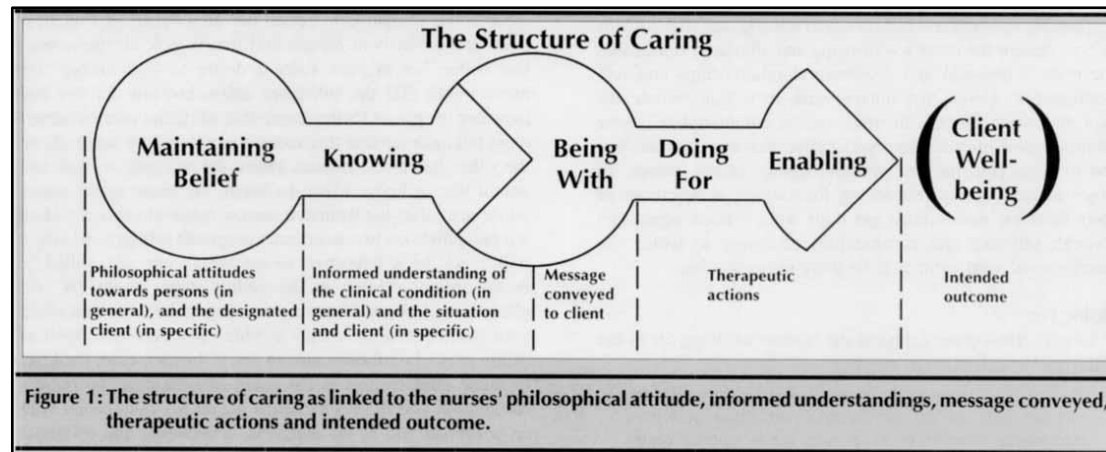


Image 2: Kristen Swanson Theory of Caring and Healing

Swanson's Theory of Caring, as noted by Psych-Mental Health Hub (2019), provides a comprehensive framework for integrating cultural intelligence into nursing care for Muslim patients in Metro Manila. The theory's components guide nurses in delivering culturally attuned care: "Knowing" emphasizes understanding religious customs, such as prayer and dietary laws; "Being With" supports empathetic engagement and active listening; "Doing For" involves modifying care to respect religious routines; "Enabling" empowers patients through culturally relevant education; and "Maintaining Belief" promotes continuous respect for spiritual practices. Through this model, nurses can provide patient-centered care that honors the cultural and religious identities of Muslim individuals.^[40]

Patricia Benner's Theory of Nursing Practice Expertise



Image 3: Patricia Benner's Theory of Nursing Practice Expertise

Patricia Benner's Theory of Nursing Practice Expertise, as referenced by Petipirin (2019), provides a foundation for developing clinical and cultural competence through staged professional growth. Applied to the care of Muslim patients in a Metro Manila government hospital, the theory highlights the value of experiential

learning in recognizing and responding to cultural and religious needs. The concept of clinical wisdom allows expert nurses to deliver intuitive, culturally sensitive care. Additionally, Benner emphasizes the importance of ongoing education and mentorship, fostering a supportive environment where both novice and experienced nurses can enhance their cultural intelligence.^[37]

Conceptual Framework

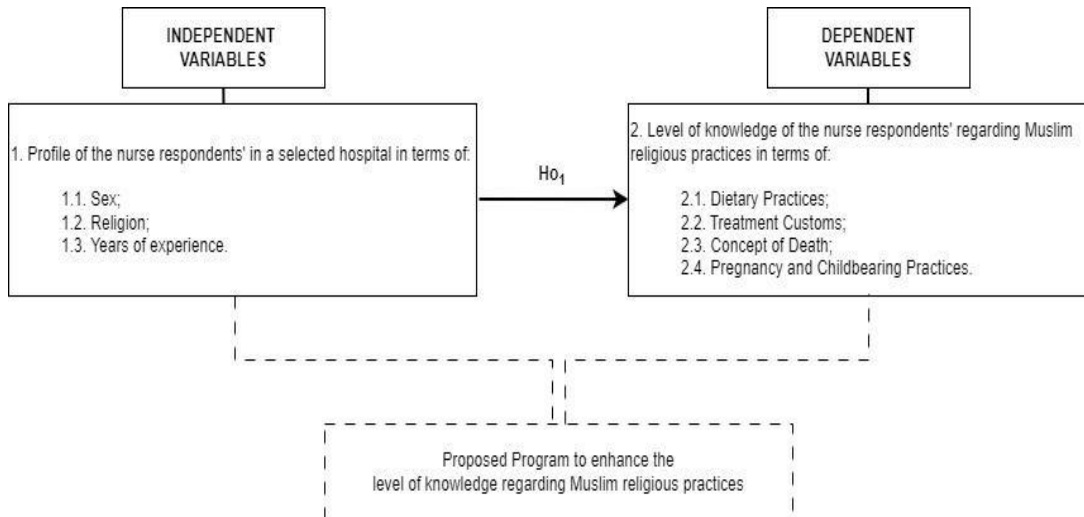


Figure 1: Islamic Cultural Intelligence in Nursing: Bridging Knowledge Regarding Muslim Religious Practices in a Selected Government Hospital in Metro Manila.

This paradigm of the study shows the conceptual framework which presents the interdependencies among independent variables and dependent variables. The first part of the conceptual framework underlies the independent variables. For independent variables, it includes the profile of the nurse respondents in a selected hospital in terms of: Sex, Religion, and Years of experience. The second part of the conceptual framework underlies the dependent variables which includes the level of the knowledge of the nurse respondents on Muslim religious practices in terms of: Dietary Practices, Treatment Customs, Concept of deaths, Pregnancy and Childbearing Practices.

The one-tailed arrow represents the difference of level of knowledge of nurse respondents on Muslim practices when grouped according to profile.

The dashed line represents the proposed programs for the nurse respondents to enhance the level of knowledge regarding the Muslim practices which were defined by the study findings.

Scope and Limitation

The research was designed to examine a group of 100 ward staff nurses, deliberately excluding chief and head nurses to ensure a concentrated focus on those directly involved in bedside patient care. Ward nurses were selected based on their regular engagement in clinical settings, making them the most suitable participants for assessing cultural knowledge. The participants consisted of both male and female nurses with varying years of experience, categorized as novice (0–2 years), advanced beginner (2–3 years), competent (3–5 years), proficient (5–10 years), and expert (>10 years). The study also reflected a diverse range of religious affiliations, including Roman Catholic, Christian, Iglesia ni Cristo, and Others. To maintain neutrality and avoid any potential conflict of interest, Muslim nurses were intentionally excluded. Their omission allowed for an objective analysis of how demographic variables—such as sex, religion, and years of experience—may influence nursing knowledge related to Muslim religious practices.

The investigation did not limit itself to general cultural understanding but instead focused specifically on Muslim religious practices, such as dietary practices, treatment customs, concepts of death, pregnancy, and childbearing practices. Morning-shift staff nurses were chosen as participants due to accessibility and consistency in data collection. The exclusion of chief and head nurses was further justified by their

administrative roles, which often removed them from the nuances of direct care, potentially influencing their exposure to cultural interactions at the bedside.

The study was conducted in a secondary-level government hospital situated in Metro Manila, in an area characterized by a significant Muslim population. This location was strategically selected to ensure diverse cultural exposure and to support the relevance of the research findings in actual clinical settings.

One limitation encountered during the research process was the inability to secure timely approval to include private hospitals as part of the study locale. Due to this constraint, the scope of the research was limited to a single government hospital. Consequently, the original title, “Cultural Competence in Nursing: Bridging Understanding of Muslim Religious Practices in Selected Private and Government Hospitals in Metro Manila”, was revised to “Islamic Cultural Intelligence in Nursing: Bridging Knowledge Regarding Muslim Religious Practices in a Selected Government Hospital in Metro Manila.” Although a pilot study had been previously conducted in a private hospital, the final data collection and analysis were confined to the chosen government institution.

Significance of the Study

The significance of this study lies in its exploration of the factors contributing to the inadequate understanding and application of healthcare practices and beliefs concerning Muslim patients among nurses in a selected government hospital in Metro Manila. The study aims to address this gap by enhancing cultural intelligence among nurses, with the ultimate goal of reducing healthcare disparities and improving health outcomes for Muslim patients. The outcome of the study is relevant to the following:

Muslim Community stands to benefit significantly from this study as it addresses the inadequacies in nurses' knowledge regarding Muslim religious practices. By promoting cultural intelligence among healthcare providers, the study aims to improve healthcare experiences for Muslim patients, fostering a more inclusive and respectful environment.

Nurses and other Health Allied Professionals will benefit from the study by acquiring a deeper understanding and knowledge of Muslim religious practices, contributing to their cultural intelligence. Through increased cultural intelligence, they can establish stronger and more meaningful relationships with Muslim patients. This can enhance trust and rapport, significantly impacting treatment plan compliance and satisfaction with care.

Nursing Students can benefit from the study by gaining a deeper understanding and enhance knowledge regarding the importance of cultural intelligence in healthcare. The findings may inspire curriculum enhancements and training programs that better prepare students for the challenges of providing care in a multicultural and diverse society.

Professors in nursing education can leverage the study's insights to enhance the quality of education provided to students. The emphasis on cultural intelligence regarding Muslim religious practices can inform curriculum development, leading to a more comprehensive and inclusive educational experience for future nurses.

The Dean and Program Head benefits by gaining valuable insights into the cultural intelligence of nursing professionals, and other allied health professionals allowing for informed curriculum enhancements and targeted training programs.

School Administrators understand the specific needs and challenges faced by nursing graduates in navigating culturally sensitive healthcare environments, enabling them to tailor academic support accordingly.

Hospitals can utilize the findings to implement refined training protocols, fostering a more culturally competent nursing workforce and ultimately enhancing the quality of care provided to diverse patient populations.

Hospital Administrators can benefit by gaining insights into cultural nuances associated with Muslim religious practices. This understanding can inform the implementation of policies and training programs to foster

cultural intelligence among healthcare staff, resulting in improved patient care experiences and a reduction in potential healthcare disparities.

Philippine Nurses Association (PNA) can utilize the findings that can contribute to the development of training programs and resources for nurses nationwide, promoting cultural sensitivity. Additionally, the outcomes may be used to establish guidelines and standards for cultural intelligence within the PNA.

Department of Health (DOH) can integrate research outcomes into policy development, promoting cultural intelligence in healthcare delivery. By doing so, the DOH can align its initiatives with the diverse needs of the population, particularly those related to Muslim religious practices, and advance health equity on a broader scale.

Policymakers can leverage the outcomes of this research to formulate informed healthcare policies that promote cultural intelligence within nursing practice, contributing to a more inclusive and equitable healthcare system.

Researchers actively engaged in cultural intelligence and healthcare studies will find value in the study's contributions. The identification of factors hindering understanding and the proposal of a model for cultural intelligence training can inform future research endeavors and interventions aimed at improving healthcare practices in diverse cultural contexts.

Future Researchers in the field of cultural intelligence and healthcare disparities can build upon the findings of this study. The research contributes to the body of knowledge in this area, providing a foundation for further exploration and the development of interventions to address similar issues in different healthcare settings.

Future Healthcare Professionals such as aspiring nurses, and the healthcare team will benefit from the study's emphasis on cultural intelligence training. The insights gained from the research can empower these professionals with the knowledge and skills needed to provide better care to patients from diverse cultural backgrounds.

Definition of Terms

The following terms are defined operationally for better understanding of the content of the study:

Islamic Cultural Intelligence is the ability of the nurse respondents to understand, adapt to, and work effectively with Muslim people.

Level of knowledge is the understanding of the nurse respondents regarding ideas about Muslim Religious Practices.

Nurse respondents refers to the registered nurses working at a selected government hospital in Metro Manila who participate in this research study which will be gauged in terms of the following:

Sex refers to the biological classification of the nurse respondents as either male or female.

Religion refers to the religious affiliation of the nurse respondents, which may include Roman Catholic, Iglesia Ni Cristo, and Christian excluding Islamic religion.

Years of experience refers to the length of years nurse respondents have been practicing as registered nurses, categorized according to Patricia Benner's Theory of Nursing Practice Expertise.

Muslim Religious Practices are faith-based customs followed by Muslims, including daily prayers, fasting during Ramadan, giving to charity, dietary rules (halal), modest dress, and rituals for birth, illness, and death. These practices guide both spiritual life and daily behavior. in terms of the following:

Dietary Practices refers to measurable behaviors related to food intake, such as meal frequency, caloric intake, nutrient consumption, adherence to specific diets, and eating out habits. These are tracked using tools like food diaries, questionnaires, or dietary recalls for consistent assessment.

Treatment Customs refers to the measurable practices and beliefs related to health and healing within that culture. This can include the use of traditional medicines, healing rituals, reliance on spiritual practices, or preferences for specific healthcare providers. These customs are observed or measured through interviews, surveys, or ethnographic studies to assess their role and significance in the culture's approach to treatment.

Concept of Death refers to the measurable or observable ways in which death is understood and recognized. This can include biological markers (such as cessation of heartbeat and brain activity), legal definitions (such as a death certificate), or cultural and religious practices that signify death (such as funerary rites or mourning periods). These criteria allow for the consistent identification and study of death across various contexts.

Pregnancy and Childbearing Practices refers to the specific, measurable behaviors and actions related to pregnancy, childbirth, and postnatal care. This can include the frequency of prenatal visits, dietary and health habits during pregnancy, the type of childbirth (e.g., natural or cesarean), use of traditional or medical birthing practices, and postnatal care routines (such as breastfeeding or postpartum support). These behaviors are typically measured through surveys, interviews, medical records, or observation.

Government Hospital is a healthcare institution funded and operated by the government which will be included as one of the locales of the study.

Secondary Hospital refers to a healthcare facility that provides specialized medical services, such as surgeries and diagnostics, typically after primary care. It has advanced equipment and professionals, serving as a referral point for more complex patient needs, and is measured by factors like bed capacity and types of services offered.

REVIEW OF RELATED LITERATURE AND STUDIES

This Chapter provides a comprehensive exploration of the existing body of knowledge relevant to the research topic, incorporating both local and foreign literature, as well as a review of related studies. This thorough examination aims to contextualize and build upon the foundations laid by previous research, informing the current study's framework and contributing to a nuanced understanding of the subject matter.

Cultural Intelligence in Nursing

Cultural intelligence in nursing is increasingly recognized as a vital component in ensuring equitable, compassionate, and effective healthcare delivery, particularly for culturally and religiously diverse populations, including Muslim communities.

Swanson's Theory of Caring and Healing, as cited by Psych-Mental Health Hub (2019), outlines five core processes: knowing, being with, doing for, enabling, and maintaining belief. These guide nurses in delivering care that is compassionate, respectful, and patient-centered ^[41]. The "being with" stage is especially relevant in enhancing cultural intelligence, as it emphasizes emotional presence and support. This is particularly significant when addressing Muslim religious practices, such as dietary practices, treatment customs, concepts of death, pregnancy, and childbearing practices, which require empathy and cultural sensitivity ^[41].

In the same context, Leininger's Cultural Care Diversity and Universality Theory, as presented by Petipirin (2019), supports the delivery of culturally congruent care through three approaches: preservation or maintenance, accommodation or negotiation, and repatterning or restructuring ^[38]. The model highlights the importance of integrating patients' cultural beliefs and values into nursing care. Leininger's culturological assessment considers communication styles, gender roles, food preferences, and socioeconomic background, offering a comprehensive guide for culturally informed practice. This theory, when applied to Muslim patients, ensures that care is respectful, appropriate, and aligned with religious and cultural expectations ^[38].

Rahman et al. (2023) ^[30] investigated the influence of halal hospital attributes on healthcare satisfaction among Muslim patients. Their findings reveal that culturally specific elements such as halal-certified food, gender-concordant healthcare providers, and accommodations for prayer and fasting play an essential role in improving patient satisfaction. The study emphasizes that these practices, rooted in Islamic beliefs, contribute to building trust, compliance, and loyalty among Muslim clients. Similarly, Attum et al. (2023) ^[5] supported this perspective by underscoring the importance of prayer spaces, religious dietary accommodations, and gender sensitivity in promoting holistic and respectful care. Together, these studies demonstrate that healthcare organizations equipped with cultural intelligence are better positioned to meet the unique needs of Muslim patients.

In contrast, Claeys et al. (2020) ^[12] revealed that many healthcare providers fail to recognize their ethnocentric tendencies when caring for culturally diverse patients. Their study identified the presence of micro-racism and stereotyping due to a limited understanding of cultural sensitivity, leading to strained provider-patient relationships. Similarly, Hassan et al. (2020) ^[21] noted that healthcare professionals in the UK lacked sufficient awareness of Muslim women's religious and cultural needs, particularly during childbirth. These findings highlight how inadequate cultural knowledge can negatively affect care quality and patient experiences, especially for Muslim clients. Both studies emphasize the urgency of integrating cultural competence into nursing education and professional development to mitigate these barriers.

Ayesh (2022) ^[6] further complements these observations by arguing that healthcare providers must understand the religious underpinnings of Muslim health behaviors to deliver effective and compassionate care. This includes recognizing the significance of modesty, prayer, dietary rules, and family involvement in decision-making. Supported by Geleta et al. (2021) ^[19], who reported a lack of institutional policies, language services, and religious awareness, the literature underscores the combined importance of provider training and systemic support in achieving culturally competent care.

Similarly, El-Messoudi et al. (2023) ^[15] explored how transcultural nursing is taught in Spanish universities. While 29 out of 47 schools offered transcultural education, many programs failed to encourage students to reflect on their own cultural biases. This gap limits the development of true cultural awareness and hinders the goal of preparing nurses to work in diverse settings. Organia (2023) ^[34] supported this observation by emphasizing the need to integrate cultural awareness and reflection as core elements of nursing curricula. The study calls for schools and institutions to address these shortcomings to better prepare nurses for culturally diverse clinical environments.

The positive impact of cultural intelligence on nursing care is evident in the study by Moratillo (2021) ^[29], which found that nurses with higher cultural intelligence exhibited greater empathy, adaptability, and ability to deliver patient-centered care. This is further supported by Barral et al. (2023) ^[8], whose study in the Southern Philippines revealed that nurses with strong self-perceived cultural competence achieved more meaningful and respectful interactions with patients. These studies collectively suggest that cultural intelligence is a vital factor in improving patient outcomes and satisfaction, especially in diverse populations.

Teixeira et al. (2023) ^[47] further stress the role of transcultural nursing leadership in promoting inclusive care and reducing disparities. Their findings emphasize that leaders who model cultural sensitivity help cultivate productive, diverse, and collaborative healthcare teams. This leadership approach, built on cultural awareness, encourages the delivery of culturally congruent care across healthcare systems. Similarly, Organia (2023) ^[34] advocates for leadership in nursing education and practice to promote cultural competence, especially in addressing the needs of Muslim patients.

Supported by Hyun et al. (2022) ^[23], recent trends in nursing education show that newly graduated nurses tend to possess strong cultural competence. This is attributed to curricular reforms that prioritize cultural education and align with the global demands of healthcare. Regulatory bodies now require training in cultural sensitivity as a core professional standard, preparing new nurses to care for diverse patient populations from the start of their careers. These nurses are also equipped with the skills necessary for effective communication, respect for religious values, and culturally safe care. Continued professional development further enhances their capabilities in delivering inclusive and respectful care throughout their careers.

In the context of women's health, Meenu et al. (2023) ^[27] emphasized the need to address the unique cultural and religious needs of Muslim women. Their study highlighted how modesty, consent, and religious obligations are often overlooked in clinical care. In support, Latif (2020) ^[25] advocated for a multifaceted strategy that includes immersion experiences, reflective practices, and inclusive policies to cultivate cultural safety. These findings suggest that delivering culturally competent care requires not only awareness but also a systemic commitment to equity, particularly in gender-sensitive contexts.

Recognizing the importance of spirituality in health, Berdida et al. (2021) ^[9] emphasized that religious beliefs can significantly influence patient behavior, resilience, and healing. They call for collaboration among healthcare professionals, researchers, and religious leaders to develop ethical protocols that integrate spiritual beliefs into healthcare conversations. Doing so creates a more holistic, trust-based care model that affirms the patient's worldview. Similarly, Peres and Sharaby (2020) ^[36] defined cultural competence as a dynamic combination of self-awareness, acceptance of differences, and the ability to adapt care to diverse cultural contexts. This definition reinforces the idea that culture directly shapes how patients perceive illness, treatment, and health communication.

Acena et al. (2021) ^[1], building on earlier works by Mataoui and Sheldon (2016), Rassool (2014), Andrews (2013), and Wehbe-Alamah (2008, 2015, 2018), described the Islamic perspective of health as a divine trust and caregiving as a religious duty. The study emphasized that Muslim caregiving practices include not only physical care but also spiritual support, financial assistance, and prayer. By incorporating these values into patient care through cultural intelligence, nurses are better able to align interventions with patient expectations. The study also emphasized that cultural intelligence is not limited to ethnicity or gender but rather reflects the nurse's capacity for empathy, adaptability, and respect for human diversity.

Lastly, Gallego (2020) ^[18] focused on the importance of transcultural care in clinical settings, particularly among Meranao clients from Lanao del Sur. The study revealed that mental health interventions often overlook regional cultural values, leading to ineffective care. Gallego called for targeted education on the Meranao way of life, including their spiritual beliefs and cultural perceptions of mental illness. This culturally grounded approach is necessary for developing trust and improving treatment outcomes in mental health care. In contrast to studies focused on general medical settings, Gallego's research highlights the specific need for culturally competent care in psychiatric nursing.

Level of Experience

According to Petiprin (2019) ^[37], Patricia Benner's Theory of Nursing Practice Expertise presents a developmental model in which nurses progress through five stages: novice, advanced beginner, competent, proficient, and expert. Novices, often first-year students, tend to follow rules rigidly and lack situational experience. Advanced beginners begin recognizing patterns but still lack holistic understanding. Competent nurses plan and prioritize care with improved efficiency. Proficient nurses perceive situations more broadly and act with increased confidence, while expert nurses possess deep, intuitive insight based on extensive experience. In the context of cultural competence, Benner's theory implies that with increased experience, nurses gradually develop the confidence, insight, and sensitivity necessary to provide culturally appropriate care, especially for patients from diverse backgrounds such as Muslims.

This implication is supported by the findings of Berie et al. (2021) ^[10], who observed that experienced nurses demonstrate higher levels of cultural competence. This includes heightened cultural awareness, sensitivity, and communication skills. Increased exposure to diverse patients allows seasoned nurses to become more adept in recognizing cultural nuances and adapting their care accordingly.

Similarly, the study of Songwathana et al. (2020) ^[43] found that nurses with more than six years of experience are more likely to be familiar with the religious and cultural beliefs of Muslim patients, particularly in sensitive areas such as death and dying. Frequent encounters with culturally diverse patients help nurses internalize religious customs and beliefs, leading to more respectful and effective care delivery.

In support of this, Osmanovic et al. (2023) ^[35] emphasized that years of experience, along with educational background and cultural training, significantly contribute to a nurse's cultural competence. Their study among nurses in acute care settings revealed that those with more clinical experience were more capable of navigating intercultural situations, especially when supported by formal education and institutional training.

Naser et al. (2021) ^[31] also revealed that the level of experience influences nurses' understanding of Muslim religious practices, particularly in nutrition-related care. This aligns with Liu et al. (2022) ^[26], who found that nurses with more years in practice had greater self-efficacy in delivering culturally competent care. As a result, experienced nurses are more confident and capable of addressing religious practices, beliefs, and patient preferences in a sensitive and appropriate manner.

In conclusion, these studies highlight that clinical experience, as described in Benner's framework, plays a vital role in the development of cultural competence. Nurses become increasingly equipped to meet the cultural and religious needs of Muslim patients through continued practice, exposure, and education.

Dietary Practices

According to Attum et al. (2023), Muslims fast during Ramadan from sunrise to sunset, abstaining from food and liquids, including water. Since Ramadan follows the lunar Hijri calendar, it shifts about ten days earlier each year, which can pose health risks, especially for diabetic patients or during long summer fasts. Patients preparing to fast should be advised to consume slow-releasing carbohydrates before dawn and after dusk to maintain energy levels.^[5]

Furthermore, Attum et al. (2023) highlight the importance of avoiding medications containing pig-derived substances like gelatin, recommending halal alternatives. Magnesium stearate of animal origin should also be avoided. Although alcohol in medications remains controversial, providers must confirm patient preferences before administration. Recreational drugs are prohibited in Islam, causing some Muslims to refuse opiate analgesics and request alternatives.^[5]

In contrast, many studies show nurses and healthcare professionals often lack sufficient cultural competence to care for Muslim patients during Ramadan. Hillier et al. (2024) found that healthcare professionals worldwide demonstrate varying knowledge levels about Ramadan fasting, with significant gaps especially in managing diabetes. Although some HCPs, such as in Singapore, showed good understanding, many lack the specific knowledge to provide culturally sensitive care. Training programs improve knowledge, but workload challenges can limit implementation. Enhancing HCPs' cultural competence is essential for better healthcare outcomes.^[22]

Supporting this, Al-Hamdan et al. (2021) found many providers unaware of dietary restrictions like pork and alcohol and the need for halal food, negatively impacting care quality during Ramadan when fasting and meal timing are critical.^[3]

Lastly, Rubio (2022) stresses the importance of cultural competence in mental health care. Addressing patients' cultural needs, including religious dietary restrictions, is key to building trust and ensuring accessible treatment. Culturally insensitive behaviors from providers can harm patients with mental health issues. These findings reinforce the need for a holistic approach to culturally sensitive care.^[42]

Treatment Customs

Muslim patients have cultural and religious customs that healthcare providers should be aware of to give respectful and effective care. For example, Muslim women often prefer same-gender doctors and nurses to maintain modesty in interactions with the opposite sex. They typically wear Islamic coverings such as the hijab, and healthcare staff should seek permission before uncovering any part of the body for medical procedures. Placing a sign on the door requesting staff to knock before entering allows patients time to cover themselves. Similarly, a sign asking staff to return in a few minutes can provide privacy for prayer (Taheri, 2020).^[46]

In non-emergency situations, Islamic teachings emphasize modesty in medical care. As outlined by Alden (2006), cited in Alqufly et al. (2019), patients are advised to consult a same-gender Muslim physician first, followed by a same-gender non-Muslim, then an opposite-gender Muslim, and finally, an opposite-gender non-Muslim. However, in life-threatening cases, these restrictions are eased in favor of necessary treatment.^[4]

Attum et al. (2023) highlighted that while traditional Muslim families are often nuclear, extended families frequently influence decisions. Healthcare providers should ask whether the patient wishes to involve family members in medical decisions, as this can significantly impact care planning.^[5]

Modesty is also significant for Muslim men, many of whom keep beards and wear modest clothing, such as garments that cover the knees. Although modest dress is often associated with women, many Muslim men follow similar religious guidelines (Attum et al., 2023).^[5]

During Ramadan, Islamic Jurisprudence permits minor blood draws (under 10 mL) for medical testing without breaking the fast. In contrast, larger blood withdrawals, such as those required for donation or certain treatments, may invalidate the fast due to the physical strain they can cause (Shaykh 'Abd al-Rahman al-Jaziri). Understanding this distinction is important for healthcare providers when scheduling procedures for fasting patients. Supporting this, a study by Oqal et al. (2023) found that most pharmacy personnel were aware that minor blood sampling does not break the fast. The study also emphasized the need for continued education to ensure healthcare professionals can accurately advise patients and align care with religious practices. This highlights the value of cultural sensitivity in improving patient trust and ensuring timely, respectful care during Ramadan.^[33]

Concept of Death

The Adam Cremation Institute (2020) article "Muslim Funeral Traditions: 10 Things You Should Know About Their Beliefs" outlines the Islamic customs surrounding death and funerals, emphasizing their religious and cultural significance. When a Muslim is near death, family and friends gather to offer support, and immediately after death, the body is prepared by closing the eyes and mouth, covering it with a sheet, and positioning it to face Mecca. The body is then cleansed multiple times, shrouded in three white sheets, and tied with ropes. The funeral ceremony, characterized by prayers and silence, is led by an Imam or the eldest male family member, with men and women seated separately. The deceased is carried to the burial site by male family members, reflecting the community's collective participation and reverence for the dead.^[2]

The Islamic values, as detailed by Suprayitno & Setiawan (2021) study on Nurses' roles in palliative care: An Islamic perspective, are integral to nursing practice, especially in palliative care. These values include providing professional care, offering family time, and incorporating religious practices like reciting the Holy Qur'an and encouraging prayers. Despite the clear importance of these practices, their integration into nursing care is often challenged by insufficient policies and guidelines. This gap in effective practice underscores the need for improved training and communication skills among nurses to enhance their cultural competence. To develop competency in caring for Muslim patients, nurses should acquire a thorough understanding of Islamic beliefs and practices and evaluate their own cultural sensitivity. Regular training and education focused on palliative care, cultural competence, and communication skills are essential. By fostering a deeper understanding of Muslim religious practices and integrating Islamic values into nursing practice, nurses can provide more compassionate and respectful care, particularly in palliative settings. This approach not only respects the patients' beliefs but also enhances the overall quality of care.^[44]

Attum et al. (2023) emphasize the importance of cultural competence in the care of Muslim clients and families. This includes respecting and understanding patients' fears and uncertainties about death, as well as their practices for preparing the dying and deceased. By being aware of these cultural nuances, nurses can offer more personalized and respectful care, ensuring that their actions are in harmony with the patients' religious and cultural values. Additionally, the findings on cultural practices for individuals who are dying, such as providing mental and physical comfort and preparing for burial, highlight practical steps that nurses can take to support their Muslim patients. This knowledge aligns with the need for nurses to be sensitive to the specific

religious practices and beliefs of their patients, thus improving the overall quality of care and ensuring that the patients' end-of-life experiences are respectful and culturally appropriate.^[5]

Pregnancy and Childbearing Practices

Firdous et al. (2020) conducted a qualitative systematic review and thematic synthesis exploring Muslim women's experiences with maternity services in the UK. Their findings revealed critical challenges faced by Muslim women in accessing culturally sensitive and religiously respectful maternity care. Key concerns included the lack of accommodation for modesty-related preferences, dietary restrictions, and the frequent unavailability of female healthcare providers. The study underscores the pressing need for a more inclusive maternity care framework that respects Islamic values, especially during sensitive reproductive health phases.^[16]

In support of this, Hassan et al. (2020) examined the experiences of healthcare professionals providing maternity care to Muslim women in the UK. Their study found that many healthcare workers exhibited limited understanding of Islamic practices surrounding pregnancy and childbirth. This lack of cultural familiarity led to care that was often misaligned with the expectations and needs of Muslim patients. As a result, the authors emphasized the importance of specialized training programs that educate providers on religious practices and how these influence maternal healthcare experiences and decisions.^[21]

Similarly, Mehrpisheh et al. (2020) explored the religious significance of breastfeeding in Islam. Their study, grounded in Qur'anic guidance and Hadith, emphasized breastfeeding as both a religious and ethical obligation. The Islamic tradition encourages mothers to breastfeed for up to 24 months, highlighting breast milk as a divine and complete form of nourishment critical for the child's physical, mental, and spiritual development. This underscores the need for healthcare providers to respect and support such religious practices in perinatal care planning, particularly in predominantly Muslim populations.^[28]

Aligned with these insights, Attum et al. (2023) highlighted the broader need for cultural competence among healthcare providers working with Muslim clients. Their study emphasized the value of understanding religious rituals, values, and practices to improve care quality.^[5] Likewise, Moratillo (2021) found that many inpatient staff nurses lacked sufficient knowledge of Islamic customs, particularly around pregnancy and childbearing.^[29] Both studies reinforce the necessity of culturally competent education as a core element in professional nursing development to ensure equitable and respectful maternal care.

Synthesis

Patricia Benner's Theory of Nursing Practice Expertise posits that as nurses advance through stages of clinical experience, they also refine their cultural competence, developing a deeper understanding of patient diversity (Petipirin, A., 2019).^[37] Similarly, Swanson's Theory of Caring emphasizes empathetic engagement, which plays a crucial role in understanding patients' religious and cultural values, particularly within the Muslim community (Psych-Mental Health Hub, 2019).^[41] Complementary to both, Leininger's Cultural Care Diversity and Universality Theory underscores the need to provide care that is culturally congruent, encouraging nurses to respect and accommodate diverse practices, including those of Muslim patients (Petipirin, A., 2019).^[38]

These theories align with various studies that stress the significance of culturally sensitive care in addressing the needs of Muslim patients. For instance, Attum et al. (2023)^[5], Al-Hamdan et al. (2021)^[3], and Hillier et al. (2023)^[22] highlight the importance of understanding halal dietary needs, fasting practices, and prayer requirements in clinical settings. In contrast, studies reveal that many healthcare providers lack adequate training to accommodate such needs, pointing to persistent gaps in cultural competence during Ramadan and other religious observances.

In terms of practice, cultural competence is also linked to professional experience. Berie et al. (2021)^[10] found that experienced nurses possess greater cultural awareness and sensitivity, a finding supported by Osmancevic et al. (2023)^[35], who identified education, training, and years of experience as significant predictors of cultural knowledge. Similarly, Liu et al. (2022)^[26] and Naser et al. (2021)^[31] report that extended clinical exposure enhances nurses' confidence and competence in navigating religious and cultural differences. In contrast,

newly graduated nurses often lack practical experience, making structured training programs essential in bridging this knowledge gap.

Regarding specific cultural practices, dietary observance during Ramadan requires careful management for patients with chronic conditions such as diabetes. While Oqal et al. (2023) ^[33] found that many pharmacy staff are aware that minor blood sampling does not invalidate fasting, Hillier et al. (2024) ^[22] and Al-Hamdan et al. (2021) ^[3] note that many healthcare professionals remain unaware of basic Islamic dietary guidelines. These findings suggest that continuous professional education is necessary to provide accurate, respectful guidance.

Similarly, treatment customs such as same-gender healthcare provision and modesty considerations are central to Muslim healthcare preferences. Studies by Taheri (2020) ^[46] and Alqufly et al. (2019) ^[4] confirm that while exceptions are made in emergencies, Muslim patients generally prefer same-gender providers. Moreover, Attum et al. (2023) ^[5] emphasize that traditional Muslim families involve family members in decision-making and uphold modesty norms, which must be acknowledged in patient care.

With respect to end-of-life care, Suprayitno and Setiawan (2021) ^[44] and the Adam Cremation Institute (2020) ^[2] document rituals such as cleansing the body, orienting it towards Mecca, and conducting gender-segregated prayers. These practices reflect deeply held religious values. Similarly, Attum et al. (2023) ^[5] argue that understanding Muslim death customs enhances palliative care by fostering respect and emotional support for patients and their families.

In the context of pregnancy and childbirth, Firdous et al. (2020) ^[16] and Hassan et al. (2020) ^[21] report that Muslim women often experience culturally insensitive maternity care due to providers' limited knowledge of religious practices. These include preferences for female providers, dietary restrictions, and modesty during examinations. Similarly, Mehrpisheh et al. (2020) stress the Islamic emphasis on breastfeeding as a religious obligation. Moratillo (2021) ^[29] and Attum et al. (2023) ^[5] further support the need to enhance nursing education on Islamic maternity care to promote better outcomes and patient satisfaction.

In synthesis, the literature consistently supports the integration of cultural intelligence and competence in nursing practice. Theoretical models by Benner, Swanson, and Leininger provide a foundational framework, while empirical studies reinforce the value of experience, education, and culturally informed training. Although experienced nurses tend to demonstrate higher levels of cultural competence, ongoing education is necessary for all nurses to address the unique needs of Muslim patients effectively. By bridging gaps in knowledge and practice, healthcare institutions can promote equitable, respectful, and high-quality care.

METHODOLOGY

This part of the research study presents a detailed account of the methodology employed, encompassing the research design, sources of data, population of the study, research instruments, the construction and validation of the instrument/s, data-gathering procedures, and the planned statistical treatment. This section serves as a systematic guide, outlining the structured approach applied for data collection and analysis, ensuring methodological soundness and the reliability of the study's findings.

Research Design

The study utilized a quantitative descriptive-comparative design in determining the cultural intelligence of nurses. Specifically, this study utilized quantitative descriptive type of research to describe and quantify the profile of the nurse respondents' and the level of knowledge regarding Muslim religious practices in a selected government hospital in the Metro Manila area. Nurse Participants' response to the surveys serves as the fundamental data that address the topic.

According to Kandel (2020), quantitative research is essential for examining relationships between variables through measurable data and objective statistical analysis. This approach effectively identifies patterns and supports drawing reliable conclusions across populations.^[24] In this study, it is used to quantify the level of knowledge among nurses regarding Muslim religious practices based on their demographic profiles. Similarly,

Formplus (2020) explains that descriptive-comparative research allows for the systematic comparison of groups without manipulating variables, ensuring an unbiased evaluation of differences.^[17] The combination of these research designs provides a strong foundation for exploring how nurses' backgrounds may influence their understanding of Muslim religious practices, ultimately contributing to improved cultural competence in nursing care.

Sources of Data

The researchers in this study employed quota and convenience non-probability sampling techniques. Quota sampling, defined as a mutually exclusive technique relying on predetermined proportions of the population, was utilized to ensure a representative sample. In this method, the researchers aimed to include participants from various subgroups, such as different age groups, genders, or years of experience. On the other hand, convenience sampling, also known as grab, opportunity, accidental, or haphazard sampling, was employed to select participants based on their accessibility. This method, as described by Hannooodee (2023), involves choosing individuals who are readily available for the study.^[20] In this case, the study's respondents were nurses from a selected government hospital. The Primary sources in this study are the nurse respondents which are considered as original materials or data that researchers use to present the research's findings or support their arguments based on the experiences of nurses in a selected government hospital in Metro Manila. Additionally, the journals and articles are the secondary sources which are included in the reviewed related literature to support the study focus.

Population of the Study

The population of this study for the Pilot Testing was twenty-five (25) staff nurses from a selected secondary hospital in Metro Manila. Secondary Hospital refers to a hospital which has capabilities and facilities for providing medical care to cases requiring hospitalization and the expertise of physicians with training of not less than six (6) months on certain specialties. Hence, the study's primary respondents comprised approximately one hundred (100) staff ward nurses from government hospitals categorized as secondary level. It specifically targets a diverse group of staff nurses in the ward due to the fact that they are more hands-on with patients. The head nurses, the nurse supervisor, and the chief nurses are not included in the study. The inclusion criteria encompassed both male and female nurses in the ward with varying levels of expertise: novice (0–2 years), advanced beginners (2–3 years), competent (3–5 years), proficient (5–10 years), and experts (>10 years). The deliberate exclusion of Head Nurses, Nurse Supervisors, and Chief Nurses from the study is designed to uphold clarity and specificity in the assessment of cultural intelligence among frontline nursing staff. This strategic decision ensures a focused exploration of the perspectives and practices in patient interactions specific to this cohort, enhancing the precision of the research inquiry. The objective was to identify whether these demographic factors affect nurses' knowledge of Muslim religious practices, especially among those employed during the morning shift. The research focused on government and public healthcare institutions to ensure a representative sample.

Research Instruments

The primary research instrument utilized in this study was adapted and enhanced from the structured questionnaire originally developed by Lacsa-Domocmat (2016) in her study entitled "Nurses' Competency in Caring for Muslim Patients." Official permission to use and modify the instrument was obtained through formal communication, supported by a request letter endorsed by the Dean of the College of Nursing and the Research Development Office. To ensure alignment with the specific objectives of the present study, the instrument was revised with a particular focus on Parts 4, 5, 6, 7, and 9 of the original tools. These revisions aimed to better assess the level of knowledge of staff nurses regarding Muslim religious practices in clinical settings. Additionally, the questionnaire was refined based on the recommendations of expert validators, whose insights contributed to improving the content's cultural accuracy and contextual relevance.

The introductory part of the research material used is the consent form given to the participants to inform the participants that all of the personal information given will be treated with confidentiality and anonymity.

The first part of the questionnaire assesses the demographic profile of the nurses' participants such as their sex, religion, and years of experience in the practice. This part aims to identify the difference between these demographic factors to the level of knowledge regarding Muslim religious practices in the healthcare setting between groups according to profile. This also aims to identify the difference of level of knowledge of nurse respondents on Muslims practices when grouped according to profile. The outcomes of this section aim to assess the level of knowledge of nurse respondents regarding Muslim religious practices in terms of dietary practices.

The second part of the questionnaire consists of ten questions which aims to assess the level of knowledge of nurses' participants regarding the customs and traditions of Muslim religious practices in the healthcare setting such as the appropriate dietary practices, this includes what food to eat, how food should be prepared, how the food should be eaten, when they could eat food, and when to administer medications. The results of this section also aim to validate the level of knowledge of nurse respondents regarding Muslim practices in terms of treatment customs such as preference of the sex of the attending nurse, taboos on hair of female clients, and health decision making

The subsequent part of the questionnaire consists of five questions to assess the level of knowledge of nurse respondents in regards with treatment customs of Muslim religious practices in relation to healthcare practices such as who can provide nursing care to different genders of Muslim clients, what nursing intervention can be done to whom, and how the nursing intervention should be done, this also includes the decision making of the clients regarding their continuity of care.

This fourth part of the questionnaire, which consists of five questions aims to assess the level of knowledge of the nurse respondents regarding Muslim religious practices in terms of the concept of death of halal practices such as the timing of burials, handling and covering of the deceased's body, customary family rites when death is imminent, and specific prohibitions in the treatment of the deceased.

While the last part of the questionnaire is composed of five questions to assess the level of knowledge of nurse participants regarding the pregnancy and childbearing practices of the Muslim community.

Construction and Validation of the Instrument/s

The questionnaire used in this study was adapted from the instrument developed by Maria Carmela Lacsadomocmat, PhD, RN, in her study "Nurses' Competency in Caring for Muslim Patients." With permission, the researchers utilized and selectively modified Parts 4, 5, 6, 7, and 9 of her questionnaires to align with the objectives of the present study titled "Islamic Cultural Intelligence in Nursing: Bridging Knowledge Regarding Muslim Religious Practices in a Selected Government Hospital in Metro Manila." To ensure the cultural and theological accuracy of the adapted instrument, the modified questionnaire underwent a rigorous content validation process before the pilot study. The researchers consulted three recognized Muslim scholars—specifically, two sheikhs and one imam based in Quiapo, Manila—who are experts in Islamic Studies. Their validation ensured that the questionnaire was not only contextually appropriate but also respectful and aligned with authentic Islamic beliefs and practices.

The validators recommended several revisions and points of clarification to enhance the clarity and accuracy of the questionnaire. Specifically, they advised the researchers to revise seven questions from the original set. In the section on Dietary Practices, two questions were modified. The first question, "I know that some ice cream, gelatin (e.g., Jell-O) or products that contain gelatin (e.g., gelatin capsule for medication) are also prohibited since their ingredient is commonly pork," was recommended to be combined with the existing question, "I know that pork and all its by-products are forbidden to Muslims." The revised version reads: "I know that Muslims abstain from consuming pork and its by-products. This extends to items like ice cream, gelatin (e.g., Jell-O), and products containing gelatin (e.g., gelatin capsules for medication), as they commonly derive from pork and are therefore considered prohibited." The second question, "I know that Halal foods are the only foods that Muslims are allowed to eat," was suggested to be integrated with the item "I know that Muslims can eat fish, eggs, and vegetarian foods." This resulted in the revised statement: "I know that

Muslims adhere to dietary guidelines that permit them to consume Halal foods, consisting of items like fish, eggs, and vegetarian dishes.”

In the section on Treatment Customs, two questions were also revised. The first, “I know that the final decision for any consent should be from the father or husband,” was amended to acknowledge that consent may come from the nearest kin if the husband is unavailable. The revised question now reads: “I know that the final decision regarding consent should involve any family member, not solely the father or husband.” Another item, “I know that Muslim patients could receive injections, blood tests, skin patches, or gargling as long as no fluid goes down the throat to break their fast,” was removed. This decision was based on the observation that the concept was already addressed in another question under Dietary Practices: “I know that the following will break the fast of a Muslim person: ear and nose drops, suppositories, inhaled medications.”

No modifications were advised for the questions under the Concept of Death section, indicating that the existing items were acceptable and sufficiently accurate.

In the section on Pregnancy and Childbearing Practices, the validators recommended three revisions. The question “I know that in Muslim term, ‘nasasaniban’ is used to describe a difficult labor” was removed due to its association with superstition and inaccuracy. Another item, “I know that after giving birth, it is important to give to the parents the placenta for them to bury it,” was revised to clarify that this is a customary practice rather than a religious obligation under Islamic law. The revised version now reads: “I know that after giving birth, the Muslim patient can ask for the placenta in order for them to bury it, especially if it is related to the Muslim religious practices of the certain Muslim tribe.” Additionally, the question “I know that it is important for a Muslim woman in labor to have a companion to utter a special prayer for her” was removed, as the validators explained that this is a matter of personal choice and not a requirement under Sharia law.

Furthermore, the validators recommended the inclusion of three new questions to the instrument. Two questions were added under Dietary Practices: “Muslims may choose to use separate utensils and cookware for handling pork or haram foods to maintain purity and prevent cross-contamination with halal foods. This practice, known as ‘taharat,’ ensures adherence to Islamic dietary guidelines and preserves the integrity of halal meals,” and “I know that Muslims may observe specific dietary restrictions during religious occasions or events, such as Eid al-Fitr or Eid al-Adha, where traditional dishes and sweets are prepared according to cultural and religious customs.” One additional question was introduced under Pregnancy and Childbearing Practices: “I know that according to Islamic tradition, when a Muslim mother is required to breastfeed a baby, it is recommended that she be provided with a secluded environment, such as a private room, to ensure privacy and maintain modesty.”

Data Gathering Procedures

The study took place in a government-owned secondary-level hospital located in Metro Manila. Situated in an urban setting characterized by a substantial Muslim community. The study aims to encompass a comprehensive examination of nursing perspectives. A total of 100 nurses was randomly selected from a hospital, employing a judicious combination of quota and convenience non-probability sampling techniques. This approach is designed to ensure the inclusion of a diverse and representative sample of nurses operating in disparate healthcare settings.

Prior to the primary investigation, a pilot study was executed at another secondary level hospital. This preliminary phase involved a more limited sample size, with the participation of 25 respondents. The purpose of the pilot study is to refine the research instruments and methodologies, enabling a meticulous assessment of the tools' efficacy and the study's overall feasibility. The insights gained from the pilot study will inform necessary adjustments before the commencement of the full-scale investigation.

In adherence to procedural protocols, the researchers, being students, initiated the research process by first seeking approval from their research adviser. Subsequently, formal approval was sought from the Dean of Nursing, Emily Aquino, as the initial step toward conducting the study. This authorization not only marks the

green light for the research but also serves to elicit support from the academic sphere through potential recommendations to hospitals, thereby bolstering the study's scope.

Following the dean's approval, the researchers drafted an authorization letter directed to the selected hospital, accompanied by a comprehensive copy of the research proposal. Simultaneously, an additional letter was crafted specifically for the head nurse or chief nurse of the designated hospital.

The subsequent phase involves orchestrating a meeting with pertinent authorities at the chosen hospital. During this meeting, the researchers presented and discussed the research proposal, elucidating the study's objectives, methodology, and significance. Special emphasis was placed on articulating the benefits that the research is poised to bring to the hospitals and the nursing staff. Subsequent to this presentation, the researchers waited for the verdict on the approval of their proposed study.

Upon securing the necessary approvals, the researchers formalized their permission to conduct the study within the specified hospitals by obtaining a permit or an official approval letter. Prior to the main study, a pilot study was conducted at a separate hospital. This preliminary phase involves refining the research instruments and procedures based on insights gleaned from a more modest sample size.

After the pilot study, the researchers worked with the hospital administration and created an appropriate schedule for the main study. This collaboration ensured that the researchers' availability matched the hospital's operational needs. The study was conducted in sequential batches, with a set number of questionnaires distributed to participants in each batch, targeting 100 staff nurses per hospital.

To ensure ethical considerations, the researchers developed an informed consent form that outlines the study's purpose, procedures, and potential risks and benefits. They obtained signed consent from each participating nurse before commencing the study. Administer the modified questionnaire to the selected nurses. Ensure clarity in instructions, explaining to them the purpose of the study, the ethical requisites such as the privacy of the respondents, the confidentiality and anonymity of their responses, volunteerism in participation, that they can withdraw from the study anytime, that there is no remuneration, and that they can seek clarification for items in the questionnaire and provide them ample time for completion. Through effective coordination with the Head and personnel of the Nursing Affiliation Office, the researchers successfully gathered the questionnaires. The collected data underwent tabulation and were subjected to thorough interpretation and analysis.

Statistical Treatment

The application of statistical methods in the treatment of data is integral to the systematic analysis and interpretation of information collected in descriptive-survey research. Presented herewith are fundamental formulas for the statistical treatment of data commonly employed in the realm of descriptive-survey research.

Percentage Distribution

This study utilizes statistical methodologies to investigate demographic factors, including gender, religion, and years of experience, pertaining to nursing staff in wards. To ensure comparability, the frequencies associated with each variable undergo a normalization process. This entails dividing the frequency of each characteristic by the total number of respondents and subsequently multiplying the result by 100. It is noteworthy that this formula remains applicable for computing the percentage of results on scaling the percentage of the responses of the respondents, ensuring a cohesive approach to the comprehensive analysis of the surveyed nurse staff's demographic characteristics.

Formula:

$$\%f = \frac{f \times 100}{n}$$

Where:

$\%f$ = Relative Frequency

f = Frequency

n = Total number of Respondents

Cronbach's Alpha

Cronbach's alpha, also referred to as coefficient alpha, was formulated by Lee Cronbach in 1951 to assess the reliability or internal consistency of measurements. It evaluates whether multi-question Likert scale surveys are dependable indicators, particularly for capturing latent variables such as conscientiousness, neurosis, or openness, which are challenging to directly measure. Essentially, Cronbach's alpha determines the extent to which a group of test items are closely associated with each other.

Formula:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where:

N = the number of items.

\bar{c} = average covariance between item-pairs.

\bar{v} = average variance.

Table 1: Cronbach's Alpha and Internal Consistency

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.80$	Good
$0.8 > \alpha \geq 0.70$	Acceptable
$0.7 > \alpha \geq 0.60$	Questionable
$0.6 > \alpha \geq 0.50$	Poor
$0.5 \geq \alpha$	Unacceptable

Cronbach's alpha is used to assess the internal consistency of a measurement tool. An alpha of 0.90 or above indicates excellent reliability; 0.80–0.89 is considered good; 0.70–0.79 is acceptable; 0.60–0.69 is questionable; 0.50–0.59 is poor; and below 0.50 is unacceptable. These classifications assist researchers and practitioners in evaluating the reliability of their scales, with higher alpha values indicating stronger internal consistency and, by extension, greater confidence in the scale's ability to measure the intended construct reliably. This statistical treatment was utilized to ensure the reliability of the questionnaire used in this study.

Weighted Mean

The weighted mean is derived through the allocation of distinct degrees of influence to values within a dataset, contingent upon specific attributes. This method of averaging acknowledges the significance of each data point by assigning respective weights, thereby establishing their relative importance in computing the overall

average. The assigned weights function as equivalents to multiple items with identical values, collectively contributing to the determination of the overall average.

In this study, the researcher used the weighted mean to assess the respondents' overall average response. Its significance lies in providing a more nuanced average by considering and reflecting the varying importance of individual data points, particularly useful when certain values hold greater significance in the dataset.

Formula:

$$\bar{x} = \frac{\sum wx}{\sum w}$$

Where:

x = is the repeating value

w = is the number of occurrences of x (weight)

\bar{x} = is the weighted mean

The researcher utilized a Four-Point rating scale to classify the level of knowledge among nurse respondents regarding the Extent of knowledge on Muslim Religious Practices.

The scales had the following range of category

Table 2: Level of Knowledge Four-Point Likert Scale

Interpretation		Mean Range
FK	Fully Knowledgeable	4 = 3.26 - 4.00
K	Knowledgeable	3 = 2.51 - 3.25
U	Unknowledgeable	2 = 1.76 - 2.50
FU	Fully Unknowledgeable	1 = 1.00 - 1.75

Analysis of Variance (ANOVA)

The researcher employed Analysis of Variance (ANOVA) to investigate whether there exists a significant difference in the level of knowledge concerning Muslim religious practices among nurses, with a focus on various demographic groups according to their profiles. The one-way ANOVA was utilized to compare dietary practices and years of experience, as the results of the normality test indicated normal distributions for all variables. This statistical method was utilized to discern potential variations in knowledge levels across different groups based on their respective characteristics.

Formula:

$$TSS = \sum x^2 - \frac{(\sum x)^2}{N}$$

Where:

TSS = total sum of squares

x = individual values in each column

N = total sample size

Formula:

$$SBB = \frac{(\sum X_c)^2}{n} - \frac{(\sum |x|)^2}{n}$$

Where:

SSB = sum of squares between columns

$\sum x_c$ = sum of the individual values per column

n = size of the sample per column

Mann-Whitney U-Test

The Mann-Whitney U test, also known as the Wilcoxon rank-sum test, is a non-parametric test used to compare differences between two independent groups. It assesses whether the distribution of ranks in one group differs from the distribution in the other group, making it a useful alternative to the t-test when the data do not meet the assumptions of normality.

Formula:

$$U = n_1 n_2 + \frac{n_1(n_2+1)}{2} - R_1$$

Where:

n_1 and n_2 = Sample sizes of the two groups.

R_1 = Sum of the ranks for the first group.

Kruskal-Wallis Test

The Kruskal-Wallis test is a non-parametric method used to determine whether there are statistically significant differences between the medians of three or more independent groups. It is an extension of the Mann-Whitney U test to multiple groups and serves as a non-parametric alternative to one-way ANOVA.

In this study, the Kruskal-Wallis test was utilized, as the results of the normality test indicated abnormalities in the variables of Treatment Customs, Concept of Death, and Pregnancy and Childbearing Practices when compared against years of experience.

Formula:

$$H = \frac{12}{N(N+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} - 3(N+1)$$

Where:

N = Total number of observations across all groups.

k = Number of groups.

R_i^2 = Sum of ranks for the i -th group.

n_i = Number of observations in the i -th group.

Tukey Pairwise Comparison

Tukey's pairwise comparison, also known as Tukey's Honest Significant Difference (HSD) test, is a statistical method used to find means that are significantly different from each other. This test is particularly used after an analysis of variance (ANOVA) to conduct pairwise comparisons between group means while controlling for the overall type I error rate.

This statistical treatment was utilized in the study because it revealed a significant difference between years of experience and dietary practices. Since the normality test showed no abnormalities in dietary practices and ANOVA was applied, the Tukey pairwise comparison is suitable for determining the mean of each value under Years of Experience when compared against the Dietary Practices.

Formula:

$$HSD = q\sqrt{\frac{MSw}{n}}$$

Where:

HSD = Honest Significant Difference

q = Studentized range statistic, which depends on the number of means and the degrees of freedom for the error term.

MSw = Mean square within groups

n = Number of observations per group.

Fisher Fairwise Comparison

Fisher Fairwise Comparison is a post-hoc analysis used to identify specific group differences following a significant result from an omnibus test, such as the Kruskal-Wallis test. It involves conducting pairwise comparisons to determine which group means differ significantly. While Fisher Fairwise Comparison offers greater statistical power, it is less conservative in controlling the familywise error rate, increasing the risk of Type I errors.

In this study, Fisher's pairwise comparison was applied to assess the mean differences in Pregnancy and Childbearing Practices across varying years of nursing experience. This test was appropriate, as the initial analysis using the Kruskal-Wallis test revealed a significant difference between these variables.

Formula:

$$LSD = t_{\alpha/2, df} \cdot \sqrt{2 \cdot \frac{MSw}{n}}$$

Where:

$t_{\alpha/2, df}$ = Critical value from the t-distribution for a given significance level α and degrees of freedom df

MSw = Mean square within groups (from the ANOVA table).

N = Number of observations per group.

Presentation, Analysis, and Interpretation of Data

This chapter presents results and discussion relating to the statement of the problem. The discussions are based on the summarized results of the findings using tabular presentation.

Reliability Test Result

Output 1. Reliability Result for the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Dietary.

Table 3: Reliability Statistics of Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Dietary

Reliability Statistics	
Cronbach Alpha	N of Items
.858	10

Table 4: Item Statistics of Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Dietary

Item Statistics			
Dietary Practices Item Number	Mean	Standard Deviation	N
DP1	2.840	.9434	25
DP2	3.400	.9129	25
DP3	3.480	.8718	25
DP4	3.160	.8505	25
DP5	2.840	.8981	25
DP6	2.600	.8165	25
DP7	2.240	.8307	25
DP8	1.800	.6455	25
DP9	2.960	.8406	25
DP10	2.600	.9574	25

Table 5: Item-Total Statistics of Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Dietary

Item- Total Statistics				
Dietary Practices Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DP1	25.080	26.660	.507	.850
DP2	24.520	24.677	.770	.825
DP3	24.440	25.090	.761	.827

DP4	24.760	24.940	.804	.823
DP5	25.080	26.160	.602	.841
DP6	25.320	26.893	.583	.843
DP7	25.680	28.393	.385	.859
DP8	26.120	30.610	.205	.868
DP9	24.960	26.873	.564	.844
DP10	25.320	27.060	.453	.855

Output 1 shows the reliability test findings for the level of knowledge of the nurse respondents regarding Muslim religious practices as to dietary. The computed Cronbach's alpha value of 85.8% indicates a good level of consistency within the questionnaire. Notably, removing item DP8 from the questionnaire would enhance Cronbach's alpha to 86.8%.

Output 2. Reliability Result for the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Treatment Customs

Table 6: Reliability Statistics of for the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Treatment Customs

Reliability Statistics	
Cronbach Alpha	N of Items
.750	5

Table 7: Item Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Treatment Customs

Item Statistics			
Treatment Customs Item Number	Mean	Standard Deviation	N
TC1	2.640	.9074	25
TC2	2.640	.9074	25
TC3	2.440	.7118	25
TC4	1.760	.6633	25
TC5	2.680	.8524	25

Table 8: Item-Total Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Treatment Customs

Item- Total Statistics				
Treatment Customs Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TC1	9.520	5.843	.374	.764
TC2	9.520	4.927	.635	.658

TC3	9.720	5.793	.586	.686
TC4	10.400	6.333	.459	.727
TC5	9.480	5.343	.568	.686

Output 2 displays the reliability test findings for the level of knowledge of the nurse respondents regarding Muslim religious practices as to treatment customs. The computed Cronbach's alpha value of 75.8% indicates an acceptable level of consistency within the questionnaire. Notably, removing item TC1 from the questionnaire would enhance Cronbach's alpha to 76.4%.

Output 3. Reliability Result for the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to the Concept of Death

Table 9: Reliability Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to the Concept of Death

Reliability Statistics	
Cronbach Alpha	N of Items
.917	5

Table 10: Item Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to the Concept of Death.

Item Statistics			
Concept of Death Item Number	Mean	Standard Deviation	N
CD1	3.040	1.0599	25
CD2	2.280	.9363	25
CD3	2.680	1.0693	25
CD4	2.720	1.1000	25
CD5	2.520	1.1590	25

Table 11: Item-Total Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to the Concept of Death.

Item- Total Statistics				
Concept of Death Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CD1	10.200	13.417	.878	.879
CD2	10.960	15.540	.669	.920
CD3	10.560	13.257	.893	.875
CD4	10.520	13.677	.795	.896
CD5	10.720	13.877	.711	.915

Output 3 presents the reliability test findings for the level of knowledge of the nurse respondents regarding Muslim religious practices as to the concept of death. The computed Cronbach's alpha value of 91.7% indicates an excellent level of consistency within the questionnaire. None of the indicators should be removed, as Cronbach's alpha will decrease.

Output 4. Reliability Result for the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Pregnancy and Childbearing

Table 12: Reliability Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Pregnancy and Childbearing

Reliability Statistics	
Cronbach Alpha	N of Items
.868	5

Table 13: Item Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Pregnancy and Childbearing.

Item Statistics			
Pregnancy and Childbearing Item Number	Mean	Standard Deviation	N
PCB1	2.880	1.0536	25
PCB2	2.240	.9695	25
PCB3	2.680	1.0693	25
PCB4	2.040	.8888	25
PCB5	3.040	1.0198	25

Table 14: Item-Total Statistics of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices as to Pregnancy and Childbearing.

Item- Total Statistics				
Concept of Death Item Number	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PCB1	10.000	10.250	.754	.824
PCB2	10.640	11.240	.656	.849
PCB3	10.200	10.250	.738	.829
PCB4	10.840	11.890	.614	.859
PCB5	9.840	10.723	.701	.838

Output 4 shows the reliability test findings for the level of knowledge of the nurse respondents regarding Muslim religious practices as to Pregnancy and Childbearing. The computed Cronbach's alpha value of 86.8%

indicates a good level of consistency within the questionnaire. None of the indicators should be removed, as Cronbach's alpha will decrease.

Output 5. Distribution of Respondents in the Pilot Study Regarding Sex

Table 15: Distribution of Respondents in the Pilot Study Regarding Sex.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	21	84.0	84.0	84.0
	Male	4	16.0	16.0	100.0
	Total	25	100.0	100.0	

Output 5 presents the distribution of respondents in the pilot study concerning sex. It was revealed that 84.0% (or 21 individuals) were female, while the remaining 16.0% (4 individuals) were male. This implies that the majority of the respondents were female.

Output 6. Distribution of Respondents in the Pilot Study Regarding Religion

Table 16: Distribution of Respondents in the Pilot Study Regarding Religion.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christian	1	4.0	4.0	4.0
	INC	1	4.0	4.0	8.0
	Others	3	12.0	12.0	60.0
	RC	20	80.0	80.0	100.0
	Total	25	100.0	100.0	

Output 6 showcases the religious composition of the respondents in the pilot study. The data reveals that 4.0% (1 individual) identified as Christian, 4.0% (1 individual) as Iglesia Ni Cristo, and 12.0% (3 individual) as another religion. In contrast, 80.0% (20 individuals) stated they were Roman Catholic. This highlights a significant representation of Roman Catholics among the respondents.

Output 7. Distribution of Respondents in the Pilot Study Regarding Year of Experience

Table 17: Distribution of Respondents in the Pilot Study Regarding Year of Experience.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	>10	3	12.0	12.0	12.0
	0-1.99	16	64.0	64.0	76.0
	2-2.99	2	8.0	8.0	84.0
	3-4.99	2	8.0	8.0	92.0
	5-10	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

Output 7 presents the length of service distribution among the respondents in the pilot study. The data indicates that 8.0% (2 individuals) had served for 2-2.99 years, 8.0% (2 individuals) for 3-4.99 years, and 8.0% (2 individuals) for 5-10 years. Moreover, 12.0% (3 individuals) reported having served for more than 10 years. However, the majority of the respondents, 64.0% (16 individuals), had a service duration of 0-1.99 years.

Actual Study Results

1. What is the profile of nurse respondents in a selected hospital in terms of:

1.1. Sex;

1.2. Religion; &

1.3. Years of experience?

Table 18. Percentage and Frequency Distribution of the nurse respondents' profile according to Sex.

Sex	Frequency	Percentage	Rank
Male	23	23.00%	2
Female	77	77.00%	1
Total	100	100.00%	

Table 18 presents the percentage and frequency distribution of the nurse' respondents according to sex profile. The results showed that the female has the highest rank with a total number of 77 nurse respondents' which got a total percentage of 77.00% than the male that only got a total number of 23 individuals with a total percentage of 23%. It indicates that most of the nurse respondents are women and only a small percentage are men.

Table 19. Percentage and Frequency Distribution of the nurse respondents' profile according to Religion.

Religion	Frequency	Percentage	Rank
Roman Catholic	80	80.00%	1
Christian	12	12.00%	2
Iglesia Ni Cristo	5	5.00%	3
Others	3	3.00%	4
Total	100	100.00%	

The table 19 presents the percentage and frequency distribution of the nurse respondents' profile according to religion. Roman Catholic is ranked 1st with a total number of 80 nurse respondents' which got a total percentage of 80.00%. Followed by Christians with a total number of 12 individuals which got a total percentage of 12.00%. Iglesia ni Cristo is next in rank with a total number of 5 individuals which got a total percentage of 5.00%. Lastly, Other religions which are in the last rank, only have a total number of 3 individuals which got a total 3.00%. It indicates that the majority of the nurse' respondents are identified as Roman Catholic. Followed by Christians and Iglesia ni Cristo and the remaining are identified with other religions with a small proportion.

According to the Philippine Statistics Authority (2023), in 2020, nearly four-fifths, or 85,645,362 individuals (78.8%), identified as Roman Catholic. Islam was the next largest group with 6,981,710 adherents (6.4%), followed by Iglesia ni Cristo with 2,806,524 members (2.6%). The top ten religious affiliations in 2020 were

rounded out by Seventh Day Adventist and Aglipay (0.8% each); Iglesia Filipina Independiente (0.6%); Bible Baptist Church (0.5%); and United Church of Christ in the Philippines, Jehovah's Witness, and Church of Christ (0.4% each). Based on the Philippine Statistics Authority, it is commonly expected that the majority of the nurse respondents in a selected government hospital in Metro Manila are of religious affiliation to Roman Catholic. Following Christians, Iglesia Ni Cristo, and other religions aligned to the ranked religious affiliation according to numbers of population presented in Philippine Statistics Authority.

Table 20. Percentage and Frequency Distribution of the nurse respondents' profile according to Years of Experience.

Years of Experience	Frequency	Percentage	Rank
Less than 2 years (Novice)	51	51.00%	1
2 to 3 years (Advance Beginner)	6	6.00%	5
3 to 5 years (Competent)	13	13.00%	4
5 to 10 years (Proficient)	15	15.00%	3
> 10 years (Experts)	15	15.00%	2
Total	100	100.00%	

The table 20. presents the percentage and frequency distribution of the nurse respondents' profile according to years of experience. Less than 2 years of experience (Novice) is ranked 1st with a total number of 51 nurse respondents' which got a total percentage of 51.00%. Next group are those with 5 to 10 years of experience (Experts) with a total number of 15 nurse respondents' which got a total percentage of 15.00%. Next group are those with more than 10 years of experience with the same amount of frequency and percentage to 5 to 10 years (Proficient) but ranked as 3rd. 3 to 5 years (Competent) ranked as 4th with a total number of 13 nurse respondents' which got a total 13.00%. Followed by 2 to 3 years (Advance Beginner) with only a total number of 6 nurse respondents' which got a total 6.00%. It indicates that most of the nurse respondents' have less than 2 years of experience (Novice) in the clinical setting. Followed by nurse respondents with 5 to 10 years (Proficient) and > 10 years of experience (Experts). 13% of the nurse respondents had 3 to 5 years of experience (Competent) while the small percentage (6%) of nurse respondents had 2 to 3 years of experience (Advance Beginner).

2. What is the level of knowledge of the nurse respondents regarding muslim religious practices in terms of:

2.1. Dietary Practices;

2.2. Treatment Customs;

2.3. Concept of Death; &

2.4. Pregnancy and Childbearing Practices?

Table 21. Level of knowledge of the nurse respondents regarding muslim religious practices in terms of Dietary Practices.

Indicators	Mean	Verbal Interpretation	Rank
2.1.1. I know that Muslims abstain from consuming pork and its by-products. This extends to items like ice cream, gelatin (e.g., Jell-O), and products containing gelatin (e.g., gelatin capsules for medication), as they commonly derive from	3.27	Fully Knowledgeable	3

pork and are therefore considered prohibited.			
2.1.2. I know that Muslims adhere to dietary guidelines that permit them to consume Halal Foods, consisting of items like fish, eggs, and vegetarian dishes.	3.54	Fully Knowledgeable	2
2.1.3. I know that Muslims observe fasting from sunrise to sunset during the month of Ramadan.	3.56	Fully Knowledgeable	1
2.1.4. I know that Muslims are required to wash their hands before and after meals.	3.24	Knowledgeable	4
2.1.5. I know that menstruating Muslim women, pregnant, breastfeeding Muslims, Muslims facing life-threatening conditions, and those on extended journeys are excused from fasting during Ramadan. However, they are expected to make up for the missed fasting days later on.	2.80	Knowledgeable	8
2.1.6. I know that Muslims patients may still decide to fast while admitted in the hospital.	2.88	Knowledgeable	6
2.1.7. I know that when feeding a Muslim patient, the choice to use the right hand while touching the food is influenced by the religious customs of certain Muslim tribes. Consequently, if utensils are utilized, either hand is deemed acceptable.	2.58	Knowledgeable	9
2.1.8. I know that the fasting of a Muslim patient can be broken by using ear drops, nose drops, suppositories, and inhaled medications.	2.21	Unknowledgeable	10
2.1.9. I know that Muslims may observe specific dietary restrictions during religious occasions or events, such as Eid al-Fitr or Eid al-Adha, where traditional dishes and sweets are prepared according to cultural and religious customs.	3.02	Knowledgeable	5
2.1.10. Muslims may choose to use separate utensils and cookware for handling pork or haram foods to maintain purity and prevent cross-contamination with halal foods. This practice, known as "taharat," ensures adherence to Islamic dietary guidelines and preserves the integrity of halal meals.	2.88	Knowledgeable	7
DIETARY PRACTICES	3.00	Knowledgeable	

*Full Knowledgeable 3.26-4.00; Knowledgeable 2.51-3.25; Unknowledgeable 1.76-2.50; Fully Unknowledgeable 1.00-1.75.

Table 21 presents the level of knowledge of the nurse respondents' regarding Muslim religious practices in terms of Dietary Practices.

The first statement is “2.1.1. I know that Muslims abstain from consuming pork and its by-products. This extends to items like ice cream, gelatin (e.g., Jell-O), and products containing gelatin (e.g., gelatin capsules for medication), as they commonly derive from pork and are therefore considered prohibited.” This statement also received a highest mean score of 3.27, as the nurse’ respondents rated themselves as “Fully knowledgeable” in regards to this Muslims dietary practice.

The second statement is the “2.1.2. I know that Muslims adhere to dietary guidelines that permit them to consume Halal Foods, consisting of items like fish, eggs, and vegetarian dishes.” received a highest mean score of 3.54. It shows that the nurse respondents rated themselves as “Fully knowledgeable”.

The third statement is the “2.1.3. I know that Muslims observe fasting from sunrise to sunset during the month of Ramadan.” received the highest mean score of 3.56. As the nurse respondents rated themselves as “Fully Knowledgeable”.

The fourth statement item, “2.1.4 I know that Muslims are required to wash their hands before and after meals,” received a mean score of 3.24. Nurse respondents rated themselves as “knowledgeable” on this item.

The fifth statement item, “2.1.5 I know that menstruating Muslim women, pregnant, breastfeeding Muslims, Muslims facing life-threatening conditions, and those on extended journeys are excused from fasting during Ramadan. However, they are expected to make up for the missed fasting days later on,” received a mean score of 2.88. Nurse respondents rated themselves as “knowledgeable” on this item.

The sixth statement item, “2.1.6 I know that Muslim’s patients may still decide to fast while admitted in the hospital,” received a mean score of 2.88. Nurse respondents rated themselves as “knowledgeable” on this item.

The seventh statement item, “2.1.7 I know that when feeding a Muslim patient, the choice to use the right hand while touching the food is influenced by the religious customs of certain Muslim tribes. Consequently, if utensils are utilized, either hand is deemed acceptable,” received a mean score of 2.58. Nurse respondents rated themselves as “knowledgeable” on this item.

The eighth statement item, “2.1.8 I know that the fasting of a Muslim patient can be broken by using ear drops, nose drops, suppositories, and inhaled medications,” received a mean score of 2.21. Nurse respondents rated themselves as “Unknowledgeable” on this item.

The ninth statement item, “2.1.9 I know that Muslims may observe specific dietary restrictions during religious occasions or events, such as Eid al-Fitr or Eid al-Adha, where traditional dishes and sweets are prepared according to cultural and religious customs,” received a mean score of 3.02. Nurse respondents rated themselves as “knowledgeable” on this item.

The tenth statement item, “2.1.10 Muslims may choose to use separate utensils and cookware for handling pork or haram foods to maintain purity and prevent cross-contamination with halal foods. This practice, known as “taharat,” ensures adherence to Islamic dietary guidelines and preserves the integrity of halal meals,” received a mean score of 2.88. Nurse respondents rated themselves as “knowledgeable” on this item.

Overall, the nurse respondents showed a general weighted mean of 3.00 in their knowledge of Muslims’ Dietary Practices, indicating they are “knowledgeable” about these practices.

Moreover, the majority of the nurses surveyed know that Muslims observe fasting from sunrise to sunset during Ramadan. The research study also indicated that most of the nurse respondents know of halal food options such as fruits, vegetables, eggs, and fish for Muslim clients. Additionally, the research study revealed that many nurse respondents are becoming more knowledgeable about the dietary restrictions for Muslims, including avoiding pork products and medications containing gelatin or pork-based ingredients. Furthermore, it is advisable for nurse respondents to have knowledge regarding privacy and touch concerns, dietary practices, and medications that may be unacceptable. Thus, during Ramadan, the holy month in Islam, nurse respondents should exercise heightened cultural sensitivity and respect and should closely monitor Islamic patients who are fasting, as they abstain from food and drink (Attum et al., 2023).

Thus, as cited in the study conducted by Attum et al. (2023) on “Cultural Competence in the Care of Muslim Clients and Families,” the Qur’an, Surah Al-Baqarah (2:184), states that fasting is for a fixed number of days, and if one is sick or on a journey, they can fast the same number of other days later on. Hence, those who are ill, pregnant, menstruating, or nursing are allowed to skip fasting and make up for it later in the year. In addition, it is crucial to confirm a patient's preferences before using any ingredients that may not be

permissible for Muslims. In Muslim culture, the left hand is viewed as unclean, so it is important to use the right hand when administering medication, handing objects to patients, or assisting with feeding to avoid causing offense.

Additionally, the study of Rubio R.R.M.A. (2022) underscores the significance of considering patients' dietary preferences and any food restrictions rooted in their religious beliefs as part of the holistic approach to mental health care. Moreover, the research highlights the necessity of exercising caution regarding culturally insensitive behaviors, originating either from oneself or colleagues, as these behaviors have the potential to unfairly impact individuals navigating mental health issues. Together, these insights contribute to a comprehensive understanding of the multifaceted skills required to provide culturally sensitive care to patients dealing with mental health concerns. [41]

Therefore, it is crucial for nurses to have cultural competence to provide better care to Muslim clients. As defined by Ayesha (2022) in the study "Cultural Competence in the Care of Muslim Women Patients," cultural competence is the ability of providers and organizations to deliver health care services that effectively meet the social, cultural, and linguistic needs of patients. Hence, health professionals should be aware of cultural and religious factors to provide culturally competent and appropriate health promotion and education to the Islamic population. Thus, nurses must be educated about Islamic teachings to encourage healthy behaviors and provide quality care to their Islamic patients.

Table 22. Level of knowledge of the nurse respondents regarding Muslim religious practices in terms of Treatment Customs.

Indicators	Mean	Verbal Interpretation	Rank
2.2.1. I know that in situations where a Muslim patient's condition is life-threatening, it is permissible to be attended by a healthcare provider of the opposite sex. However, in non-fatal cases, it is preferred that the Muslim patient is attended to by a healthcare provider of the same sex.	2.84	Knowledgeable	2
2.2.2. I know that the head and hair of a woman Muslim patient should not be touched unless during a medical examination and only with permission.	3.05	Knowledgeable	1
2.2.3. I know that the final decision regarding consent should involve any family member, not solely the father or husband.	2.78	Knowledgeable	4
2.2.4. I know that during Ramadan, drawing a small amount of blood, not exceeding 10ml, from a Muslim patient will not invalidate their fast, whereas withdrawing a large amount of blood exceeding 10ml will break their fast.	2.24	Unknowledgeable	5
2.2.5. I know that it is important to ask for permission when shaving the beard (balbas) of a Muslim patient.	2.82	Knowledgeable	3
TREATMENT CUSTOMS	2.75	Knowledgeable	

*Full Knowledgeable 3.26-4.00; Knowledgeable 2.51-3.25; Unknowledgeable 1.76-2.50; Fully Unknowledgeable 1.00-1.75.

The table 22 presents the level of knowledge among nurse respondents regarding Muslim religious practices related to treatment customs.

The first statement shows the next highest mean score of 2.84 for "2.2.1. I know that in situations where a Muslim patient's condition is life-threatening, it is permissible to be attended by a healthcare provider of the opposite sex. However, in non-fatal cases, it is preferred that the Muslim patient is attended to by a healthcare provider of the same sex." This score also falls within the "Knowledgeable" range, showing a reasonable awareness among nurses of these guidelines.

The second statement shows the statement "2.2.2. I know that the head and hair of a woman Muslim patient should not be touched unless during a medical examination and only with permission" received the highest mean score of 3.05, placing it within the "Knowledgeable" range.

The third statement, with a mean score of 2.78 for "2.2.3. I know that the final decision regarding consent should involve any family member, not solely the father or husband," also falls within the "Knowledgeable" range, reflecting an understanding of the decision-making process in many Muslim families.

The fourth statement, with the lowest mean score of 2.24, pertains to the knowledge level regarding medical procedures during Ramadan. It states: "I know that during Ramadan, drawing a small amount of blood, not exceeding 10ml, from a Muslim patient will not invalidate their fast, whereas withdrawing a large amount of blood exceeding 10ml will break their fast." This score falls within the "Unknowledgeable" range, highlighting a notable gap in understanding the effects of medical procedures on fasting practices during Ramadan.

The fifth statement, with a mean score of 2.82 for "2.2.5. I know that it is important to ask for permission when shaving the beard (balbas) of a Muslim patient," indicates that nurses are knowledgeable about this practice.

Overall, the combined mean score for the Level of knowledge of the nurse respondents regarding muslim religious practices in terms of Treatment Customs is 2.75, which places the respondents in the "Knowledgeable" category.

Moreover, the study by Acena et al. (2021) on "Culturally Congruent Care: Providing Best Care to Meaningful Experiences for Patient's Cultural Sensitivity" highlights nurses' understanding of Islamic modesty norms, such as refraining from unnecessary contact with the head or hair of Muslim women unless required for medical examination and with explicit permission. This resonates with the current study regarding nurses' sensitivity to cultural and religious respect in healthcare settings, particularly concerning gender-specific care preferences among Muslim patients.

Additionally, the conducted study by Attum et al. (2023) on "Cultural Competence in the Care of Muslim Clients and Families" discusses Islamic guidelines allowing flexibility in emergencies, such as accepting opposite-sex healthcare providers when necessary for urgent medical intervention. This aligns closely with the current study about reflecting nurses' awareness of accommodating religious beliefs while ensuring effective healthcare delivery, especially in critical situations.

Moreover, based on the book "Islamic Jurisprudence: According to the Four Sunni Schools," as articulated by Shaykh 'Abd al-Rahman al-Jaziri, the permissibility of medical procedures during Ramadan, such as drawing blood, is derived from interpretations of foundational Islamic texts and consensus among jurists. Scholars generally agree that withdrawing a small amount of blood, typically defined as not exceeding 10ml, does not invalidate the fast. This interpretation is based on the understanding that such a minimal quantity does not constitute a significant nutritional intake or a deliberate act to break the fast. However, research indicates that withdrawing a larger amount of blood may potentially invalidate the fast due to its impact on the fasting person's health and ability to fulfill religious obligations during Ramadan.

Furthermore, based on the results regarding knowledge of Muslim treatment customs, the majority of nurse respondents categorized themselves as "Knowledgeable." This emphasizes the importance of continuously developing skills and attitudes to provide culturally competent care to Muslim clients. The study by Moratillo (2021) on "Cultural Competence and Caring Behavior Among Inpatient Staff Nurses in Al Wakra Hospital, Qatar," found that while most nurses rated themselves as culturally competent, some did not perceive themselves as such. The nurse respondents were more culturally sensitive than culturally knowledgeable. Cultural competence is a continuous process of skill development. Nurses must actively engage in becoming

knowledgeable about cultural considerations, be skilled in assessing and communicating in culturally acceptable ways, enhance their sensitivity in dealing with patients from diverse cultural backgrounds, and provide culturally competent care.

Table 23. Level of knowledge of the nurse respondents regarding Muslim religious practices in terms of Concept of Death

Indicators	Mean	Verbal Interpretation	Rank
2.3.1. I know that Muslim burials are performed as soon as possible after death.	3.20	Knowledgeable	1
2.3.2. I know that the body of a deceased Muslim person should only be handled by a person of the same sex.	2.59	Knowledgeable	5
2.3.3. I know that If death appears imminent, a Muslim patient's family may wish to perform certain customary religious rites.	2.81	Knowledgeable	3
2.3.4. I know that the whole body of a deceased Muslim person should be covered by a white sheet.	3.08	Knowledgeable	2
2.3.5. I know that a cross must never be placed on the body of a deceased Muslim person.	2.72	Knowledgeable	4
CONCEPT OF DEATH	2.88	Knowledgeable	

*Full Knowledgeable 3.26-4.00; Knowledgeable 2.51-3.25; Unknowledgeable 1.76-2.50; Fully Unknowledgeable 1.00-1.75.

Table 23 shows the level of knowledge of nurse respondents regarding Muslim religious practices in terms of the concept of death.

The first statement shows the statement “2.3.1 I know that Muslim burials are performed as soon as possible after death” had the highest mean score of 3.20, which is interpreted as “Knowledgeable”.

The second statement with a lowest mean score of 2.59 for “2.3.2. I know that the body of a deceased Muslim person should only be handled by a person of the same sex.” is placed on the interpretation of “Knowledgeable”.

The third statement with “2.3.3. I know that If death appears imminent, a Muslim patient's family may wish to perform certain customary religious rites.” had a mean score of 2.81 which is interpreted as “knowledgeable”.

The fourth statement “2.3.4. I know that the whole body of a deceased Muslim person should be covered by a white sheet.” had a mean score of 3.08 which is interpreted as “Knowledgeable”.

The fifth statement says “2.3.5. I know that a cross must never be placed on the body of a deceased Muslim person.” had a mean score of 2.72, which falls in the interpretation of “Knowledgeable”.

The nurse participants had a mean score of 2.88 in regards to Muslim religious practices, particularly the concept of death, showing that they are “knowledgeable”. It is then expected that the nurse participants apply their knowledge regarding Muslim religious practices in terms of the concept of death in the actual setting, implying the high level of cultural knowledge of the nurse participants.

The Islamic values, as detailed by Suprayitno and Setiawan (2021) study on Nurses' roles in palliative care: An Islamic perspective, are integral to nursing practice, especially in palliative care. These values include providing professional care, offering family time, and incorporating religious practices like reciting the Holy

Qur'an and encouraging prayers. Despite the clear importance of these practices, their integration into nursing care is often challenged by insufficient policies and guidelines. This gap in effective practice underscores the need for improved training and communication skills among nurses to enhance their cultural competence. To develop competency in caring for Muslim patients, nurses should acquire a thorough understanding of Islamic beliefs and practices and evaluate their own cultural sensitivity. Regular training and education focused on palliative care, cultural competence, and communication skills are essential. By fostering a deeper understanding of Muslim religious practices and integrating Islamic values into nursing practice, nurses can provide more compassionate and respectful care, particularly in palliative settings. This approach not only respects the patients' beliefs but also enhances the overall quality of care.

Attum et al. (2023) emphasize the importance of cultural competence in the care of Muslim clients and families. This includes respecting and understanding patients' fears and uncertainties about death, as well as their practices for preparing the dying and deceased. By being aware of these cultural nuances, nurses can offer more personalized and respectful care, ensuring that their actions are in harmony with the patients' religious and cultural values. Additionally, the findings on cultural practices for individuals who are dying, such as providing mental and physical comfort and preparing for burial, highlight practical steps that nurses can take to support their Muslim patients. This knowledge aligns with the need for nurses to be sensitive to the specific religious practices and beliefs of their patients, thus improving the overall quality of care and ensuring that the patients' end-of-life experiences are respectful and culturally appropriate.

Table 24. Level of knowledge of the nurse respondents regarding Muslim religious practices in terms of Pregnancy and Childbearing Practices.

Indicators	Mean	Verbal Interpretation	Rank
2.4.1. I know that unrelated men are not permitted to enter the room of a woman.	2.88	Knowledgeable	2
2.4.2. I know that as soon as a child is born, a Muslim father may wish to recite a prayer call into the baby's right ear followed by a second prayer call into the left ear.	2.48	Unknowledgeable	4
2.4.3. I know that after giving birth, the Muslim patient can ask for the placenta in order for them to bury it, especially if it is related to the Muslim religious practices of the certain Muslim tribe.	2.65	Knowledgeable	3
2.4.4. I know that according to the teachings of the Quran, Muslim mothers strive to breastfeed their infants until they reach the age of two years, which is calculated based on the Islamic lunar calendar. Consequently, this typically means breastfeeding until approximately 22 days before the child's second birthday.	2.33	Unknowledgeable	5
2.4.5. I know that according to Islamic tradition, when a Muslim mother is required to breastfeed a baby, it is recommended that she be provided with a secluded environment, such as a private room, to ensure privacy and maintain modesty.	2.90	Knowledgeable	1
Pregnancy and Childbearing Practices	2.65	Knowledgeable	

*Full Knowledgeable 3.26-4.00; Knowledgeable 2.51-3.25; Unknowledgeable 1.76-2.50; Fully Unknowledgeable 1.00-1.75.

Table 24 shows the level of knowledge regarding Muslim religious practices in pregnancy and childbearing.

The first statement shows the next highest mean score of 2.88 for "2.4.1. I know that unrelated men are not permitted to enter the room of a woman." This score also falls within the "Knowledgeable" range, showing a reasonable awareness among nurses of these guidelines.

The second statement, with a mean score of 2.48 for "2.4.2. I know that as soon as a child is born, a Muslim father may wish to recite a prayer call into the baby's right ear followed by a second prayer call into the left ear." also falls within the "Unknowledgeable" range, reflecting a requirement for the decision-making process in many Muslim families.

The third statement, with a mean score of 2.65 for "2.4.3. I know that after giving birth, the Muslim patient can ask for the placenta in order for them to bury it, especially if it is related to the Muslim religious practices of the certain Muslim tribe." indicates that nurses are knowledgeable about this practice.

The fourth statement, with the lowest mean score of 2.33, concerns knowledge related to breastfeeding practices in Muslim religious teachings. It states: "2.4.4. I know that according to the teachings of the Quran, Muslim mothers strive to breastfeed their infants until they reach the age of two years, which is calculated based on the Islamic lunar calendar. Consequently, this typically means breastfeeding until approximately 22 days before the child's second birthday." This score falls within the "Unknowledgeable" range, indicating a significant gap in understanding about the age at which breastfeeding is encouraged in Muslim religious practices.

The fifth statement shows the statement "2.4.5. I know that according to Islamic tradition, when a Muslim mother is required to breastfeed a baby, it is recommended that she be provided with a secluded environment, such as a private room, to ensure privacy and maintain modesty" received the highest mean score of 2.90, placing it within the "Knowledgeable" range.

Overall, the mean score for knowledgeable about pregnancy and childbearing practices is 2.65, categorizing the nurses as "knowledgeable". This suggests that while they have a good understanding of certain practices, there are areas, particularly prayer calls at birth and the specific duration of breastfeeding, where their knowledge could be enhanced.

However, the study of Mehrpisheh et al. (2020) on The Importance of Breastfeeding Based on Islam Rules and Qur'an that has been revealed to guide human beings contains a complete plan of human life. "Moreover, besides addressing educational, ethical, and religious aspects, Islamic teachings also include valuable scientific insights. The Holy Qur'an contains verses highlighting the significance of breast milk and its optimal provision to children, emphasizing parental responsibility, particularly mothers, in providing this divine nourishment. Islamic scriptures and traditions stress that breast milk is a complete and unparalleled source of nutrition crucial for mental, physical, and holistic child development. Drawing from Islamic sources such as the Qur'an and the teachings of Prophet Muhammad (PBUH), significant points underscore the benefits and guidelines of breastfeeding, emphasizing its importance for a duration of up to 24 months".

A study by Attum et al. (2023) on cultural competence in the care of Muslim clients highlights the need for healthcare providers to understand specific cultural and religious practices. Similarly, a study by Moratillo (2021) on cultural competence among inpatient staff nurses found that many nurses lacked in-depth knowledge about Islamic practices, including pregnancy and childbearing customs.

3. Is there any significant difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to profile?

Table 25. Difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to sex.

Profile	Categories of Knowledge	P-value	Remark
Sex	Dietary Practices	0.251	No Significant Difference

	Treatment Customs	0.572	No Significant Difference
	Concept of Death	0.466	No Significant Difference
	Pregnancy and Childbearing Practices	0.268	No Significant Difference

The table 25 shows the difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to sex. The Mann-Whitney U test was employed to calculate the p-values for each knowledge category. The results indicate that the sex of nurses does not significantly influence the level of knowledge concerning Muslim religious practices, thereby failing to reject the null hypothesis.

Table 26. Difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to religion.

Profile	Categories of Knowledge	P-value	Remark
Religion	Dietary Practices	0.783	No Significant Difference
	Treatment Customs	0.116	No Significant Difference
	Concept of Death	0.195	No Significant Difference
	Pregnancy and Childbearing Practices	0.307	No Significant Difference

The table 26 shows the difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to religion. The Kruskal-Wallis test was employed to calculate the p-values for each knowledge category. The results indicate that the sex of nurses does not significantly influence the level of knowledge concerning Muslim religious practices, thereby failing to reject the null hypothesis.

Table 27. Difference between the nurse respondents' level of knowledge regarding Muslim practices when grouped according to years of experience.

Profile	Categories of Knowledge	P-value	Remark
Years of Experience	Dietary Practices	0.008	With Significant Difference
	Treatment Customs	0.106	No Significant Difference
	Concept of Death	0.580	No Significant Difference
	Pregnancy and Childbearing Practices	0.035	With Significant Difference

The table 27 employs two different statistical analyses: Analysis of Variance (ANOVA) for Dietary Practices, and Kruskal-Wallis tests for Treatment Customs, Concept of Death, and Pregnancy and Childbearing practices. According to the table, significant differences were observed in Dietary Practices and Pregnancy and Childbearing Practices, indicating that years of experience influence nurses' knowledge levels concerning Muslim religious practices, specifically in these areas.

In the study of Hillier, et. al., (2024) Healthcare professionals' knowledge, attitude, practices, and perspective providing care to Muslims in Western countries who fast during Ramadan: a scoping view, that healthcare professionals (HCPs) exhibit varying levels of knowledge about Ramadan fasting practices, often lacking adequate understanding to provide culturally sensitive care. This is evident across studies conducted in Muslim-majority countries and diverse settings. For example, research in Indonesia, Jordan, and Egypt has highlighted deficiencies in HCPs' knowledge regarding managing conditions like diabetes during Ramadan. While some nurses in Singapore showed good knowledge in this area, overall, many HCPs worldwide lack

specific knowledge needed to manage medical conditions during Ramadan. However, studies indicate that HCPs are generally open to learning more about Ramadan fasting practices, particularly regarding clinical implications such as medication management. Training initiatives have shown promise in improving HCPs' knowledge and skills in this regard, though challenges like heavy workloads can hinder effective implementation of such programs. Nonetheless, enhancing HCPs' ability to provide culturally safe care is crucial for improving health system performance.

Table 28. Difference between the knowledge of the nurses regarding dietary practices and the nurse's years of experience.

DIETARY PRACTICES					
Analysis of Variance (ANOVA)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.140	4	.785	3.663	.008
Within Groups	20.359	95	.214		
Total	23.500	99			

Table 28 illustrates variations in nurses' knowledge about dietary practices based on the nurses' respondents' years of experience. The Analysis of variance indicated a significant finding with a p-value of 0.008, suggesting that nurses' years of experience influences their knowledge levels. Specifically, there is a significant difference in the knowledge of nurses regarding dietary practices based on their years of experience.

Table 29. Difference between the knowledge of the nurses regarding dietary practices and the nurse's years of experience.

DIETARY PRACTICES				
TUKEY PAIRWISE COMPARISON				
Years of Experience	N	Mean	Grouping	
5-10 years (Proficient)	15	3.153	A	
Less than 2 years (Novice)	51	3.0824	A	
More than 10 years (Expert)	15	2.960	A	B
3 to 5 years (Competent)	13	2.785	A	B
2 to 3 years (Advance Beginner)	6	2.450		B

*Mean that do not share a letter are significantly different

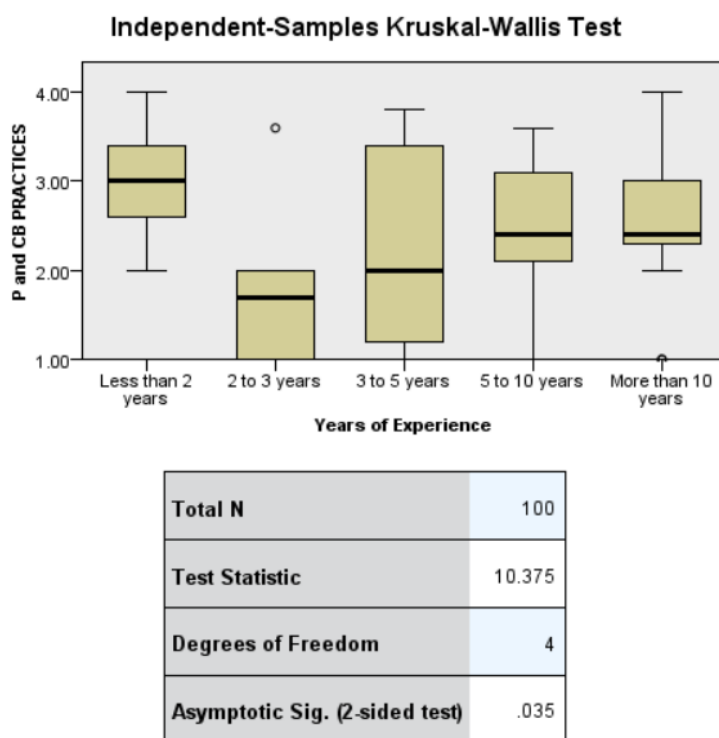
Table 29. shows the difference between the knowledge of the nurses regarding dietary practices and the nurse's years of experience. Tukey Pairwise Comparisons was used to assess the differences of the results. In the table above, the variables with Mean that do not share a letter are significantly different. It showed that nurse participants with 5-10 years of experience (Proficient) have the highest mean score of 3.153, which means that they have the highest level of knowledge about Muslim religious practices regarding dietary practices, followed by nurses with less than 2 years of experience (Novice) with a mean score of 3.084. While

it showed that nurses with 2-3 years of experience (Advance Beginner) have the lowest mean score of 2.450, meaning that they have the lowest level of knowledge about Muslim religious practices regarding dietary practices.

According to Patricia Benner's Novice to Expert Theory, proficient nurses possess a holistic understanding of clinical situations, allowing them to anticipate needs and adjust care plans effectively. This aligns with the findings, as proficient nurses demonstrated the highest knowledge of Muslim dietary practices, likely due to their accumulated clinical experience and deeper cultural understanding. In contrast, advanced beginners often rely on learned rules and may struggle with prioritization, which may explain their lower scores. Benner (1982) emphasized that this group benefits greatly from support and guidance to avoid critical oversights in patient care.

Supporting this, Osmancevic et al. (2023) noted that cultural knowledge is influenced by multiple factors, including years of experience, education level, and exposure to cultural training. Similarly, El-Messoudi et al. (2023) found that while many Spanish nursing programs include transcultural education, the depth and application vary. Practical approaches, such as simulations and culturally grounded models like Purnell's or Leininger's, have been shown to enhance competence. However, gaps remain, particularly in encouraging self-awareness of one's own cultural lens.

Taken together, these findings suggest that both experiential learning and structured education significantly contribute to nurses' cultural competence, particularly in addressing the dietary needs of Muslim patients.



1. The test statistic is adjusted for ties.

Figure 2. Difference between the knowledge of the nurses regarding pregnancy and childbearing and the nurse's years of experience using Kruskal-Wallis Test.

Figure 2 illustrates variations in nurses' knowledge about pregnancy and childbearing based on the nurses' respondents' years of experience. The Kruskal-Wallis Test indicated a significant finding with a p-value of 0.035, suggesting that nurses' years of experience influences their knowledge levels. Specifically, there is a significant difference in the knowledge of nurses regarding pregnancy and childbearing based on their years of experience.

Table 30. Difference between the knowledge of the nurses regarding pregnancy and childbearing and the nurse's years of experience using Fisher Pairwise Comparison.

PREGNANCY AND CHILDBEARING				
FISHER PAIRWISE COMPARISON				
Years of Experience	N	Mean	Grouping	
Less than 2 years (Novice)	51	2.9216	A	
More than 10 years (Experts)	15	2.533	A	B
5-10 years (Proficient)	15	2.440		B
3 to 5 years (Competent)	15	2.323		B
2 to 3 years (Advance Beginner)	6	1.833		B

*Mean that do not share a letter are significantly different

In examining the levels of nursing expertise as outlined in Patricia Benner's Novice to Expert Theory, Fisher's pairwise comparison revealed significant differences in nurses' knowledge of Pregnancy and Childbearing Practices among Muslims. As shown in Table 10.2.2, nurses with less than two years of experience (Novices) demonstrated the highest level of knowledge, followed by those with over ten years of experience (Experts). In contrast, Advanced Beginners (2–3 years of experience) showed the lowest level of knowledge in this domain.

Benner (1982) explains that Advanced Beginners often rely heavily on learned rules and lack the experiential understanding needed to prioritize patient needs effectively, requiring clinical guidance to prevent critical oversights. This may explain their lower scores in cultural knowledge. Interestingly, novice nurses outperformed this group, which could be attributed to more recent training.

Supporting this, Hyun et al. (2022) found that newly graduated nurses tend to have higher cultural competence due to the integration of cultural sensitivity into modern nursing curricula, regulatory standards, and globalized healthcare demands. They are trained from the outset to deliver patient-centered, culturally appropriate care. These nurses benefit from ongoing professional development and institutional support that promote cultural proficiency, equipping them to address diverse healthcare needs from the beginning of their careers.

Additionally, the findings align with those of Naser et al. (2021), who concluded that years of experience can influence healthcare providers' knowledge of religious practices, such as in nutrition. Similarly, Liu et al. (2022) reported that clinical experience enhances nurses' self-efficacy in cultural competence, with more seasoned practitioners demonstrating greater confidence when caring for culturally diverse patients.

On the other hand, studies highlight persistent gaps in cultural understanding among healthcare providers. Hassan et al. (2020), in their research on maternity care in the UK, found that many providers lacked knowledge of Muslim women's religious practices during pregnancy and childbirth, calling for training programs focused on cultural and religious competence. Firdous et al. (2020) echoed this in their review, revealing challenges Muslim women face in accessing culturally sensitive care particularly regarding modesty, dietary needs, and gender preferences for care providers.

In conclusion, the findings suggest that both recent academic preparation and long-term clinical experience contribute significantly to cultural competence in maternity care. Conversely, limited exposure or reliance on theoretical knowledge alone, as seen in Advanced Beginners, may hinder culturally sensitive practice. These insights reinforce the importance of continuous education and experience in enhancing nurses' ability to provide respectful, culturally aligned care.

4. What training program can help nurses better understand Muslim Religious Practices?

The dissemination of information regarding Muslim Religious Practices was conducted through a structured approach involving the distribution of a comprehensive pamphlet and an educational video. The pamphlet, meticulously crafted as a single-page document, was divided into six distinct sections, each meticulously detailing various facets of Muslim Religious Practices. This resource served as a concise yet informative reference, providing essential insights into dietary practices, treatment customs, concept of death and pregnancy and childbearing practices of the Muslim community.

In addition to the pamphlet, a meticulously curated educational video was made available to nurses. Spanning six minutes in duration, this video delved deeper into the nuances and specifics of Muslim Religious Practices. It offered a visual and auditory learning experience, presenting detailed explanations and real-life examples to enhance the nurses' comprehension and cultural competence.

Key topics covered included the teachings of the Quran, which emphasize that Muslim mothers should strive to breastfeed their infants until they reach the age of two years, calculated according to the Islamic lunar calendar. This typically translates to breastfeeding until approximately 22 days before the child's second birthday. The materials also provided detailed guidelines on breaking fast during Ramadan, clarifying that the use of ear drops, nose drops, suppositories, and inhaled medications are permissible. Moreover, it was highlighted that drawing a small amount of blood, not exceeding 10ml, does not invalidate the fast, whereas withdrawing a larger amount exceeding 10ml would break the fast.

Furthermore, the educational resources underscored the significance of religious rituals performed immediately after birth. Specifically, they explained that a Muslim father may wish to recite the Adhan (the Islamic call to prayer) into the newborn's right ear, followed by the Iqamah (a second call to prayer) into the left ear. This practice is deeply rooted in Islamic tradition and signifies the introduction of the newborn to the faith.

To ensure a comprehensive understanding, the researchers included supplementary information on various other Muslim religious practices. This holistic approach aimed to reinforce and enhance the knowledge of the nurses, thereby fostering a more culturally competent and sensitive healthcare environment. By integrating these educational resources, the researchers sought to bridge knowledge gaps and improve the quality of care provided to Muslim patients.

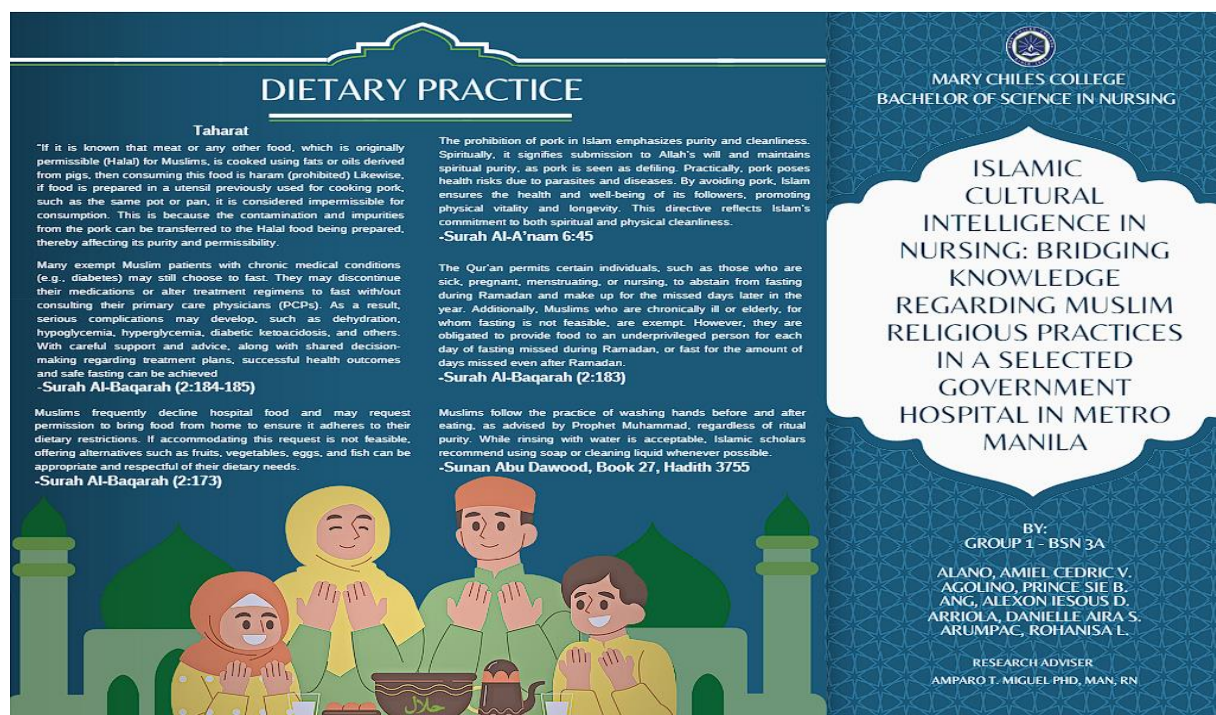


Image 4: Educational Pamphlet Regarding Muslim Religious Practices - Page 1



Image 5: Educational Pamphlet Regarding Muslim Religious Practices - Page 2



Image 6: Educational Video Presentation regarding Muslim Religious Practices uploaded in YouTube.

YouTube: https://youtu.be/Kuj42amH4_s

Table 31: Summary Assessment of the Level of Knowledge of the Nurse Respondents Regarding Muslim Religious Practices

Indicators	Mean	Verbal Interpretation	Rank
2.1. Dietary Practices	3.00	Knowledgeable	1
2.2. Treatment Customs	2.75	Knowledgeable	3
2.3. Concept of Death	2.88	Knowledgeable	2
2.4. Pregnancy and Childbearing Practices	2.65	Knowledgeable	4
OVERALL MEAN	2.82	Knowledgeable	

*Full Knowledgeable 3.26-4.00; Knowledgeable 2.51-3.25; Unknowledgeable 1.76-2.50; Fully Unknowledgeable 1.00-1.75.

Table 31 provides a summary assessment of the level of knowledge of nurse respondents regarding Muslim religious practices across four key indicators: dietary practices, treatment customs, concept of death, and pregnancy and childbearing practices. The mean scores for each indicator fall within the "Knowledgeable" range, indicating a moderate level of understanding among the nurse respondents.

Dietary practices, ranked the highest with a mean score of 3.00, indicate that nurse respondents are "knowledgeable" about the dietary practices of Muslim patients. This suggests that dietary restrictions and requirements are well-understood in clinical settings.

Treatment Customs, with a mean score of 2.75, reflects nurses are "knowledgeable" regarding Muslim treatment customs, albeit slightly less extensive compared to dietary practices and concepts of death. This suggests a solid understanding overall, while also highlighting areas that may benefit from additional education and emphasis.

Concept of Death, with a mean score of 2.88, indicates that nurses are "knowledgeable" about the Muslim concept of death. This underscores the importance of culturally sensitive practices and end-of-life care in clinical settings.

Pregnancy and Childbearing Practices, with a mean score of 2.65, are ranked lowest among the indicators, indicating that nurse respondents are less familiar with this area compared to others, but still considered "knowledgeable" overall. This highlights a potential gap in knowledge that could impact the delivery of culturally competent care in maternal and child health services.

Overall, the mean score of 2.82 categorizes the nurse respondents as "Knowledgeable," indicating a robust understanding of Muslim religious practices. Nevertheless, it emphasizes the ongoing necessity for education and training to continuously enhance their competence, particularly in areas where scores are lower.

In conclusion, while the nurse respondents demonstrate a commendable level of knowledge regarding Muslim religious practices, focused efforts on continuous education and training are essential to address the identified knowledge gaps. By doing so, nurses can provide holistic and culturally competent care, improving patient outcomes and satisfaction among Muslim communities.

Table 32: Summary Assessment of the Difference Between the Nurse Respondents' Level of Knowledge Regarding Muslim Practices When Grouped According to Profile

Profile	Categories of Knowledge	P-value	Remark
Sex	Dietary Practices	0.251	No Significant Difference
	Treatment Customs	0.572	No Significant Difference
	Concept of Death	0.466	No Significant Difference
	Pregnancy and Childbearing Practices	0.268	No Significant Difference
Religion	Dietary Practices	0.783	No Significant Difference
	Treatment Customs	0.116	No Significant Difference
	Concept of Death	0.195	No Significant Difference
	Pregnancy and Childbearing Practices	0.307	No Significant Difference
Years of	Dietary Practices	0.008	With Significant Difference

Experience	Treatment Customs	0.106	No Significant Difference
	Concept of Death	0.580	No Significant Difference
	Pregnancy and Childbearing Practices	0.035	With Significant Difference

The table 32 presents the analysis of whether there is a significant difference in the knowledge of a group of nurse respondents regarding Muslim practices when categorized by profile: sex, religion, and years of experience. The categories of knowledge considered are Dietary Practices, Treatment Customs, Concept of Death, and Pregnancy and Childbearing Practices.

The sex profile shows the p-values for Dietary Practices (0.251), Treatment Customs (0.572), Concept of Death (0.466), and Pregnancy and Childbearing Practices (0.268) all indicate no significant differences in knowledge between male and female respondents.

Regarding Religion, the p-values are 0.783 for Dietary Practices, 0.116 for Treatment Customs, 0.195 for Concept of Death, and 0.307 for Pregnancy and Childbearing Practices. These values suggest no significant differences in knowledge between respondents of different religions.

The years of experience reveals significant differences are noted in two areas. The p-value for Dietary Practices is 0.008, and for Pregnancy and Childbearing Practices, it is 0.035, both indicating significant differences. Meanwhile, the p-values for Treatment Customs (0.106) and Concept of Death (0.580) do not show significant differences.

In summary, the analysis reveals that there are no significant differences in the knowledge of Muslim practices among nurse respondents when grouped by sex and religion. However, years of experience significantly affect knowledge in the areas of Dietary Practices and Pregnancy and Childbearing Practices.

SUMMARY OF FINDINGS

The following were the findings of the study:

1. The respondents as to their sex. 77 are female, comprising 77.00% of the total, and 23 are male, making up 23.00%. This indicates a significantly higher proportion of female nurses compared to male nurses, with females ranking first in frequency and percentage.

The respondents as to their religion 80.00% of the total respondents, Christian makes up 12.00%, Iglesia Ni Cristo accounts for 5.00%, and other religions constitute 3.00%. This indicates that Roman Catholic is the predominant religion among the respondents, followed by Christian, Iglesia Ni Cristo, and other religions, respectively.

The respondents as to their years of experience, less than 2 years comprises 51.00% of the total respondents, 5 to 10 years makes up 15.00%, more than 10 years also accounts for 15.00%, 3 to 5 years constitutes 13.00%, and 2 to 3 years makes up 6.00%. This indicates that the majority of respondents have less than 2 years of experience, followed by equal proportions of those with 5 to 10 years and more than 10 years, with fewer respondents having 3 to 5 years and 2 to 3 years of experience, respectively.

2. Level of knowledge regarding Muslim religious practices in terms of dietary practices. It is shown that respondents exhibit varying levels of knowledge. They are highly knowledgeable about Muslims observing fasting from sunrise to sunset during Ramadan, with a mean score of 3.56. However, they show lower knowledge about the circumstances under which a Muslim patient's fasting can be broken using medications, with a mean score of 2.21. Overall, these findings suggest a mixed understanding among respondents regarding Muslim dietary practices, with an average mean score of 3.00.

Level of knowledge regarding Muslim religious practices in terms of treatment customs is shown in the data. Respondents demonstrate varying levels of knowledge: they understand that touching the head and hair of a

Muslim woman patient should only occur during a medical examination and with permission, scoring the highest mean of 3.05. However, they show less knowledge about the impact of blood draws during Ramadan; drawing a small amount of blood (not exceeding 10ml) does not invalidate fasting, whereas withdrawing a larger amount (exceeding 10ml) will break the fast, scoring the lowest mean of 2.24. The overall findings suggest a moderate understanding among respondents regarding these treatment customs, with an average mean score of 2.75.

Level of knowledge regarding Muslim religious practices in terms of the concept of death is shown in the data. Respondents demonstrate varying levels of knowledge: they understand that Muslim burials should be performed as soon as possible after death, scoring the highest mean of 3.20. However, they show less knowledge about the handling of the body of a deceased Muslim person, indicating that it should only be done by a person of the same sex, scoring the lowest mean of 2.59. The overall findings suggest a knowledgeable understanding among respondents regarding these aspects of Muslim concepts of death, with an average mean score of 2.88.

Level of knowledge regarding Muslim religious practices in terms of pregnancy and childbearing practices is shown in the data. Respondents demonstrate varying levels of knowledge: they understand that according to Islamic tradition, Muslim mothers should be provided with a secluded environment for breastfeeding to ensure privacy and modesty, scoring the highest mean of 2.90. However, they show less knowledge about the duration of breastfeeding according to Quranic teachings, scoring the lowest mean of 2.33. The overall findings suggest a moderate understanding among respondents regarding these aspects of Muslim pregnancy and childbearing practices, with an average mean score of 2.65.

3. Level of knowledge regarding Muslim practices, grouped according to various profiles, reveals significant findings in terms of years of experience. Specifically, there is a notable difference in knowledge related to dietary practices ($p = 0.008$) and pregnancy/childbearing practices ($p = 0.035$) based on years of experience. This indicates that the duration of professional experience among nurses may impact their understanding of these aspects of Muslim practices. However, for other profiles such as sex and religion, as well as categories like treatment customs and concept of death, the analysis shows no significant differences in knowledge levels (all p -values > 0.05). These findings suggest that while years of experience play a role in certain areas of knowledge, other demographic factors may not significantly influence the understanding of Muslim practices among nurse respondents.

The differences in knowledge among nurses regarding dietary practices based on their years of experience. Using Tukey Pairwise Comparisons, it is evident that nurses with 5-10 years of experience achieved the highest mean score of 3.153, indicating the most comprehensive understanding of Muslim religious practices related to dietary practices. Following closely are nurses with less than 2 years of experience, scoring a mean of 3.0824. In contrast, those with 2-3 years of experience recorded the lowest mean score of 2.450, indicating a lesser understanding in this domain. These findings highlight those years of experience significantly influence the knowledge levels of nurses concerning Muslim dietary practices.

The differences in nurses' knowledge regarding pregnancy and childbearing practices based on their years of experience. Using Fisher pairwise comparisons, the findings reveal that nurses with less than 2 years of experience exhibit the highest mean score of 2.9216, indicating a stronger understanding of Muslim practices related to pregnancy and childbearing. Nurses with more than 10 years of experience follow with a mean score of 2.533, showing a slightly lower level of knowledge. In contrast, nurses with 2 to 3 years of experience have the lowest mean score of 1.833, highlighting a significant gap in understanding compared to their peers. These results underscore the influence of professional experience on nurses' knowledge of Muslim practices concerning pregnancy and childbearing.

CONCLUSIONS

1. Majority of the 100 nurse respondents from selected government hospital in Metro Manila are female, Roman Catholic, and have at least less than 2 years of experience in the clinical setting which is classified as “novice” according to Patricia Benner’s theory.

2. The nurse respondents' level of knowledge regarding Muslim religious practices in terms of dietary practices has a general weighted mean of 3.00, indicating they are knowledgeable. However, gaps were noted, particularly in understanding that ear drops, nose drops, suppositories, and inhaled medications can break a Muslim's fast. The combined mean score for treatment customs is 2.75, and 2.88 for the concept of death, both falling within the "Knowledgeable" category. The level of knowledge regarding pregnancy and childbearing practices is 2.65, also categorized as knowledgeable, though areas such as prayer calls at birth and breastfeeding duration need improvement. These findings indicate that while nurses have a good overall understanding, certain aspects require further education. Therefore, a program such as a seminar is recommended to enhance their knowledge and strengthen their cultural competence in providing care for Muslim patients.
3. The analysis of the research study revealed a significant difference in the level of knowledge regarding Muslim religious practices, specifically in dietary practices and in pregnancy and childbearing practices, when grouped according to years of experience. This finding indicates that years of experience is a crucial factor in determining the level of knowledge among nurse respondents. Nurses with more experience tend to possess a deeper understanding of these practices, which enhances their ability to provide culturally sensitive care. The results underscore the importance of continuous education in promoting cultural competence among nurses at all stages of their careers.
4. Workshops and cultural competency training are essential to address the identified knowledge gaps. Nurses need a deeper understanding of Muslim religious practices, especially those related to fasting, childbirth, and death. Novice nurses face more challenges, and while experience helps, it is not enough. Structured training improves care by turning knowledge into practice. Hospitals must take action, educators must provide proper instruction, and leaders must guide these efforts to ensure culturally sensitive and patient-centered care.

RECOMMENDATIONS

This study is to improve Islamic cultural intelligence in nursing at a government hospital in Metro Manila, it is crucial for the nurses to acknowledge and respect one's belief in accordance with their religion. This includes understanding prayer times, dietary requirements like halal food, and modesty in patient interactions and in child bearing. Collaborating with local Muslim community leaders can help bridge knowledge gaps and ensure culturally sensitive care. Additionally, implementing policies that accommodate religious needs, such as prayer spaces and gender-specific care options, can greatly enhance patient satisfaction and healthcare outcomes for Muslim patients.

Nurses and allied health professionals should undergo targeted training programs that focus on Islamic practices relevant to healthcare, including halal dietary needs, modesty in care, prayer observance, and medical treatments during Ramadan. Using practical strategies like case studies and scenario-based workshops may help deepen understanding and promote culturally sensitive care.

Nursing students must be exposed early to cultural competence training through simulation exercises, workshops, and clinical exposure involving culturally diverse populations. Participation in expert-led discussions on Muslim healthcare practices can improve preparedness for real-world application.

Faculty and professors should embed Islamic cultural care topics into the nursing curriculum. This includes both theoretical knowledge and practical applications. Engaging with Muslim professionals and community leaders can ensure that the content is accurate and relevant.

Deans and program heads are encouraged to support the integration of cultural intelligence into the academic framework. Professional development sessions, expert collaborations, and phased implementation strategies may help address concerns about additional workload.

School administrators should prioritize the development of inclusive learning environments by allocating resources for cultural competence training. Aligning these initiatives with the institution's values of diversity and respect can foster long-term improvement in nursing education.

Hospitals and administrators must review and adapt policies to accommodate the religious needs of Muslim patients. These may include providing prayer spaces, halal food options, and gender-sensitive care. Staff should be equipped with accessible learning materials and receive regular training to strengthen cultural responsiveness.

The Muslim community may engage in partnerships with healthcare institutions by offering insights, feedback, and cultural orientation. Collaboration can ensure that care aligns with religious expectations and improve mutual understanding between patients and providers.

The Philippine Nurses Association (PNA) is advised to initiate educational programs focused on Islamic cultural intelligence. Developing accessible training resources, such as online modules and printed guides, and establishing a dedicated platform for discussion and information-sharing can promote continuous learning among nurses.

The Department of Health (DOH) should incorporate ICI into national training programs and healthcare protocols. Workshops led by Islamic scholars and community leaders, paired with policy reviews and community engagement, can improve culturally competent care within public health settings.

Policymakers are encouraged to create supportive policies that recognize cultural intelligence as a nursing standard. Citing data that show improved patient outcomes when religious practices are respected can strengthen the case for such reforms.

Researchers and future researchers should build upon this study by exploring cultural competence in specific healthcare contexts, such as maternal care and nutrition among Muslim patients. Studies should address barriers to integration and test new approaches for enhancing ICI training. Collaboration with local Muslim organizations and field observations can enrich the research and increase its applicability.

To provide culturally sensitive and competent care to Muslim patients, it is vital for nurses to possess accurate knowledge of Islamic religious practices, particularly in areas that directly affect patient care such as dietary practices, treatment customs, and pregnancy-related beliefs. The following recommendations aim to strengthen the understanding of nurse respondents through structured education and training:

1. In light of the findings, it is recommended to implement a structured educational intervention to enhance the knowledge of nurse respondents regarding Muslim religious practices, particularly in dietary practices, treatment customs, and pregnancy and childbearing practices. This initiative should begin with an assessment of their current understanding to identify specific knowledge gaps. Based on the results, targeted materials such as pamphlets, instructional guides, and digital resources should be developed. Comprehensive training sessions and workshops led by healthcare professionals and experts in Muslim religious practices should include demonstrations, case studies, and role-playing to reinforce cultural understanding. Integrating cultural competency training into the nursing curriculum, with input from Muslim community leaders and scholars, ensures relevance and accuracy. Additionally, accessible reference tools and scheduled refresher courses should be provided, alongside continuous evaluation and feedback to refine the intervention and ensure preparedness in delivering culturally appropriate care.
2. To strengthen nurses' knowledge regarding Muslim dietary practices, it is important to understand that using ear drops, nose drops, suppositories, and inhaled medications may break the fast. The first step involves conducting a pre-assessment to evaluate their familiarity with these implications. Based on the results, educational resources such as pamphlets, guides, and digital content should be developed to explain these practices. Training sessions and workshops led by experts should include practical demonstrations and case scenarios to illustrate the proper handling of medications during fasting. These efforts will help bridge knowledge gaps and support the delivery of respectful, informed care.
3. To enhance the knowledge of nurses regarding treatment customs during Ramadan, it is essential to clarify that drawing a small amount of blood does not break a Muslim patient's fast, whereas withdrawing a large amount does. An initial study should assess nurses' current understanding of this

distinction. The results should inform the development of educational resources that clearly explain the religious implications of blood withdrawal. Training workshops led by healthcare professionals and Muslim scholars should provide clinical demonstrations and relevant scenarios. Integrating this content into nursing education, supported by supplementary tools such as mobile applications and pocket guides, along with concise summary materials and ongoing refresher sessions, will ensure nurses are equipped to provide culturally sensitive care during Ramadan.

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