

## Fasting and Bedside Care: Experiences of Student Nurses During Ramadhan in the Clinical Setting

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### ABSTRACT

**Background:** Fasting during Ramadhan is a significant religious practice for Muslim healthcare professionals, including nursing students, who must balance their spiritual commitments with the demands of clinical practice.

**Objectives:** This study explores the experiences of third-year nursing students providing bedside care while fasting during Ramadhan, focusing on the challenges they faced and the coping mechanisms they employed.

**Methods:** A descriptive phenomenological approach was used to capture the lived experiences of nine third-year nursing students assigned to the medical-surgical ward of a tertiary hospital in Lanao del Sur, Philippines. Data were collected through in-depth interviews and analyzed using thematic analysis to identify key themes related to the physical, cognitive, and environmental challenges, as well as the strategies used to cope with these challenges.

**Results:** The study identified three major themes: Physical and Cognitive Challenges, Impact on Patient Care, and Coping Mechanisms. Fasting exacerbated physical exhaustion and cognitive strain, significantly affecting the students' ability to maintain energy, focus, and provide high-quality care. Environmental factors, such as inadequate ventilation and overcrowding, further compounded these challenges. Despite these difficulties, the students utilized coping strategies including mental conditioning, teamwork, and spiritual resilience to fulfill their clinical duties.

**Conclusion:** Fasting during Ramadhan presents considerable challenges for nursing students in clinical settings, impacting their physical and cognitive capacities and the quality of care they provide. However, through effective coping mechanisms, these students are able to manage these challenges and continue to deliver patient care. This study highlights the need for supportive strategies in clinical education to help fasting students maintain their performance and ensure patient safety.

**Keywords:** Fasting; Ramadhan; Bedside Care; Clinical Setting; Student Nurses.

## INTRODUCTION

Globally, the observance of Ramadhan is a profound spiritual practice for millions of Muslims, marked by fasting from dawn until sunset for an entire lunar month. This period of fasting is not only a time for spiritual reflection and growth but also a significant physical challenge, particularly for individuals engaged in demanding professions (1). Among these, healthcare professionals, who are tasked with maintaining high levels of vigilance, precision, and care, face unique difficulties during this time. The intersection of religious practice and professional responsibility becomes especially complex in healthcare settings, where the stakes of patient care are high, and the physical demands are relentless (2).

Healthcare systems worldwide are increasingly diverse, with a significant number of Muslim healthcare professionals contributing to patient care across various settings. For example, in countries like Saudi Arabia, Indonesia, Pakistan, and the United Arab Emirates, where the healthcare workforce has a high proportion of Muslim professionals, the impact of Ramadhan on healthcare delivery is a pertinent issue (3, 4). Even in a non-Muslim majority countries such as Philippines, Muslim healthcare professionals play crucial roles, and their experiences during Ramadhan can influence both their well-being and the quality of care they provide (4). A 2019 survey estimated that over 2 million Muslim healthcare professionals are working globally, reflecting the significance of understanding their unique needs and challenges during the fasting month of Ramadhan.

Fasting during Ramadhan presents numerous challenges for healthcare professionals, including physical fatigue, dehydration, reduced concentration, and cognitive strain (1, 5, 6). These challenges are particularly acute for those in high-stress environments, such as hospitals, where the ability to provide continuous, high-quality care is essential (2, 6, 7). The physical demands of bedside care, coupled with the mental rigor required to make precise clinical decisions, can be significantly impacted by the physiological effects of fasting. Previous research has highlighted that fasting can lead to decreased work performance, increased fatigue, and a higher likelihood of errors, which is particularly concerning in healthcare settings where the margin for error is minimal (3-6).

Despite the critical role of Muslim healthcare professionals and the challenges they face during Ramadhan, there is a noticeable gap in the literature regarding the specific experiences of student nurses in clinical settings during this period. While some studies have explored the general impact of fasting on healthcare workers, there is limited research focusing on how fasting affects the clinical practice of student nurses, who are still in the process of developing their professional skills and competencies (8-10). This gap in research necessitates a deeper exploration into the unique challenges faced by student nurses during Ramadhan, particularly in how fasting influences their ability to perform bedside care.

This study aims to fill this gap by examining the experiences of student nurses during Ramadhan in a clinical setting, focusing on the physical, cognitive, and emotional challenges they encounter, as well as the coping strategies they employ. By addressing this under-researched area, the study seeks to provide insights that can inform educational practices, clinical supervision, and policy development to better support Muslim healthcare students and professionals during Ramadhan.

## METHODS

### *Study Design*

This study utilized a descriptive phenomenology design to explore the lived experiences of student nurses who provided bedside care during Ramadhan. Descriptive phenomenology was chosen to deeply understand the essence of these experiences, capturing the subjective meanings and perceptions of the participants as they navigated the challenges of fasting while fulfilling their clinical duties. This approach allowed for an in-depth examination of the phenomena as they were experienced by the participants in their natural context, providing rich insights into the unique challenges and coping mechanisms employed by Muslim nursing students during this significant religious period. The use of descriptive phenomenology also facilitated the exploration of the fundamental structures of these experiences, aiming to reveal the universal aspects of fasting and bedside care in the clinical setting.

### *Participants and Study Setting*

The study was conducted at a tertiary hospital in Lanao del Sur, Philippines, where nursing students were assigned to various wards, primarily in the medical-surgical units. The participants included nine third-year nursing students, representing three different clinical groups, each consisting of ten members. They were selected through purposive sampling based on specific criteria: being a third-year nursing student, having clinical duties during Ramadhan, fasting during clinical exposure for a continuous five-day rotation with shifts from 7:00 am to 3:00 pm, and willingness to participate in the study.

### *Instruments or Tool*

Data was collected through semi-structured interviews, which were developed to explore the participants' experiences of providing bedside care while fasting. The interview guide included open-ended questions that

encouraged participants to reflect on their physical, cognitive, and emotional challenges, as well as the coping mechanisms they employed. The guide was designed to be flexible, allowing for the exploration of emerging themes during the interview process. The interviews were audio-recorded with the consent of the participants and later transcribed verbatim for analysis.

### Data Collection

The data collection process took place over two weeks, coinciding with the participants' clinical rotations during Ramadhan. Interviews were conducted in a private setting within the hospital premises, immediately following the participants' shifts. Each interview lasted between 30 to 45 minutes, ensuring that participants had sufficient time to share their experiences without feeling rushed. To ensure the accuracy and depth of the data, the interviewer followed up on key points raised by the participants, probing further to clarify or expand on their responses.

### Data Analysis

Thematic analysis was employed to analyze the data, following the six-step process outlined by Braun and Clarke (2006) (11). The analysis began with familiarization with the data, where the researcher repeatedly read through the transcripts to gain an overall understanding of the content. This was followed by generating initial codes, which involved identifying significant phrases or sentences that captured important aspects of the participants' experiences. The codes were then organized into themes, reflecting broader patterns within the data. The themes were reviewed and refined through a process of constant comparison, ensuring that they accurately represented the data. Finally, the themes were defined and named, providing a coherent narrative that captured the essence of the participants' experiences.

### Ethical Consideration

Ethical approval for the study was obtained from the ethics committee of the College of Health Sciences, Mindanao State University. Informed consent was obtained from all participants before data collection, ensuring that they were fully aware of the study's purpose, procedures, and their right to withdraw at any time without penalty. Participants were assured of the confidentiality of their responses, with all data being anonymized and securely stored. The study adhered to the ethical principles outlined in the Declaration of Helsinki, ensuring respect for the participants' rights, dignity, and well-being throughout the research process.

## RESULTS

Nine third-year nursing students participated in the study, representing three different clinical groups, each consisting of ten members. The final participants included three males (33.3%) and six females (66.6%), all aged between 19 and 21 years old. These Muslim nursing students who had been fasting for 12 days since the start of Ramadhan. They were all rotated through the medical-surgical ward of a tertiary hospital, providing bedside care during a continuous 5-day period on a 7:00 am to 3:00 pm shift. This schedule exposed them to the full impact of fasting while performing their duties. The results revealed three major themes: Physical and Cognitive Challenges, Impact on Patient Care, and Coping Mechanisms. The first theme, Physical and Cognitive Challenges, highlighted the difficulties such as physical exhaustion, cognitive strain, and environmental factors that made it harder for the students to maintain their energy and focus. The second theme, Impact on Patient Care, examined how fasting influenced the quality of care the students could provide, as well as the emotional and spiritual fulfillment they experienced despite these challenges. The third theme, Coping Mechanisms, described the strategies the students employed to manage these challenges, including mental conditioning, physical endurance, and reliance on support systems such as peers, family, and clinical instructors.

**Table 1. Summary of Themes, Subthemes, and Categories**

Theme	Subtheme	Categories
I. Physical and Cognitive Challenges	a. Physical Exhaustion	Decreased energy, fatigue, body pain, dehydration, dizziness, limited mobility
	b. Cognitive Strain	Decreased focus, forgetfulness, mental fatigue, limited ability to perform nursing tasks
	c. Environmental Strain	Unhygienic environment, crowded areas, lack of fresh air, temperature issues

II.	Impact on Patient Care	a. Quality of Care	Limited ability to provide effective bedside care, difficulty in communication
		b. Emotional and Spiritual Fulfillment	Sense of duty and satisfaction from helping patients, spiritual rewards from fasting
III.	Coping Mechanisms	a. Mental Conditioning	Positive thinking, setting intentions, mental preparation
		b. Physical Endurance	Strategic rest, taking vitamins, managing energy levels
		c. Support Systems	Relying on peers, family, clinical instructors, and teamwork

### **Theme 1: Physical and Cognitive Challenges**

The physical and cognitive challenges experienced by student nurses during Ramadhan were profound, impacting both their energy levels and mental clarity as they carried out bedside care. These challenges were particularly pronounced due to the demands of fasting, which restricted their ability to replenish energy and maintain hydration throughout their clinical duties. The dual burden of physical exhaustion and cognitive strain significantly affected their performance, with many participants expressing difficulty in sustaining the required focus and physical stamina to provide optimal patient care.

#### **Subtheme 1: Physical Exhaustion**

Physical exhaustion was a dominant challenge faced by the participants, who frequently described feeling drained and fatigued due to fasting. The lack of food and water led to a noticeable decrease in energy, making it difficult to carry out their nursing duties. One participant described the experience as "really challenging... I feel like my body wants to have rest and wants to give up because you want to eat since you are moving and doing tasks without eating at all" (Participant 3). Another participant echoed this sentiment, noting that "standing for 5 hours or more at the bedside of your patient is indeed challenging... it is draining as we are not allowed to sit down" (Participant 4). The physical toll of fasting, combined with the demands of nursing tasks, made it difficult for them to maintain their usual standards of care, as they struggled with "decreased energy to perform tasks, easily feeling burned out and exhausted" (Participant 1).

#### **Subtheme 2: Cognitive Strain**

The cognitive challenges experienced during fasting were just as significant as the physical ones. Many participants reported difficulties with focus and memory, which hindered their ability to perform complex tasks such as medication preparation and patient assessment. One participant mentioned, "I tend to forget things when being asked, even the simplest question... my attention span and focus to a certain thing are also tested and challenged" (Participant 1). The cognitive strain was exacerbated by the physical exhaustion, leading to a state where even routine tasks became mentally taxing. Another participant shared that "rendering nursing interventions while having an empty stomach altered my focus, especially on important and detail-oriented nursing procedures like medication preparation and administration" (Participant 2). These challenges highlighted the significant impact of fasting on their cognitive abilities, which in turn affected the quality of care they could provide.

#### **Subtheme 3: Environmental Strain**

In addition to the physical and cognitive challenges, the environmental conditions within the clinical settings further strained the participants. The combination of inadequate ventilation, crowded wards, and high temperatures made the working conditions even more taxing. As one participant explained, "The environment is not in a good state... it's hot knowing that there is no enough source of air, only a few electric fans" (Participant 7). These environmental factors compounded the physical exhaustion and cognitive strain, making it even more difficult for the participants to perform their duties effectively. Another participant noted, "We were drenched in sweat, the foul smell, the unhygienic environment, and the crowded area were also part of the challenges that we have to endure" (Participant 1). The harsh environmental conditions, combined with the challenges of fasting, created a particularly demanding work environment that tested the participants' endurance and resilience.

### **Theme 2: Impact on Patient Care**

The physical and cognitive challenges faced by student nurses during fasting in Ramadhan significantly impacted their ability to provide effective patient care. The exhaustion and mental strain led to a decrease in the quality of care, with participants expressing concern about their ability to meet patient needs while fasting. Despite their

best efforts, the limitations imposed by fasting affected their performance, leading to concerns about patient safety and the overall effectiveness of their care.

### ***Subtheme 1: Decreased Quality of Care***

Participants reported that their physical and cognitive limitations during fasting directly impacted the quality of care they were able to provide. The exhaustion and dehydration made it difficult to maintain the high standards required for patient care, with one participant stating, "My assessment to my patients is limited and the care that I wanted to give to my patient is limited only since I feel tired, even in talking to them or giving them emotional support" (Participant 3). This sentiment was echoed by another participant who noted, "I have limited energy to provide effective bedside care... it really affects how I interact and deal with my patients" (Participant 5). The inability to perform at their best due to the challenges of fasting led to concerns about their effectiveness as caregivers and the potential impact on patient outcomes.

### ***Subtheme 2: Challenges in Communication and Emotional Support***

The cognitive strain and physical fatigue also affected the participants' ability to communicate effectively with patients and provide emotional support, which are crucial aspects of patient care. One participant mentioned, "Conversing with patients and doing some of their requests, such as delivering their queries to the nurse station, were another challenges I have to endure while fasting" (Participant 1). The need to conserve energy led to reduced interactions with patients, as one participant explained, "Even in talking to them or giving them emotional support one-on-one along with the SO's is also limited" (Participant 3). The reduction in communication and emotional support was a significant concern, as these elements are vital for building trust and ensuring patient comfort and cooperation.

### ***Theme 3: Coping Mechanisms***

Despite the significant challenges faced while fasting during Ramadhan, the student nurses employed various coping mechanisms to manage their duties and maintain a level of care for their patients. These strategies included mental conditioning, teamwork, and spiritual resilience, which helped them navigate the demanding circumstances of their clinical practice during fasting.

#### ***Subtheme 1: Mental Conditioning and Focus***

One of the primary coping strategies reported by participants was mental conditioning. Participants tried to maintain a positive outlook and focus on the purpose of their work, which helped them push through the physical and cognitive challenges. One participant shared, "I trained my mind to think of the positive effects and impacts that I will obtain in this hospital duty, like rendering quality patient care... I also conditioned my mind to not be easily swayed by the physical factors that test my function as a student nurse" (Participant 1). Another participant emphasized the importance of mental focus, stating, "I utilized teamwork to lessen the challenges, and save energy and utilize it little by little or gradually to conserve my energy" (Participant 8). This mental focus allowed them to maintain their commitment to patient care despite the hardships.

#### ***Subtheme 2: Teamwork and Peer Support***

The support of fellow student nurses and clinical instructors played a crucial role in helping participants cope with the challenges of fasting. Many participants highlighted the importance of teamwork in managing their workload and ensuring patient care was not compromised. One participant noted, "I cope with these challenges with the help of my duty mates, staff nurse, prayers, and also the guidance of our clinical instructor" (Participant 7). The sense of camaraderie and mutual support among the students helped to mitigate the impact of fasting, as they shared the burden and assisted each other with tasks.

#### ***Subtheme 3: Spiritual Resilience***

Spirituality and faith were significant sources of strength for the participants during this challenging period. Many participants drew on their religious beliefs to cope with the physical and emotional demands of fasting while providing patient care. One participant described this resilience, stating, "This month of Ramadhan will surely test our patience and challenge our intentions as well as our faith. As a student nurse, what I do to cope with these challenging experiences is hold onto my dedication and be devoted to my future profession" (Participant 5). Another participant reflected on the spiritual rewards of their efforts, noting, "I believe that after all these sacrifices, Allah (SWT) will give you the same or more blessings in return for the ease that you have given to those in pain and in need" (Participant 5). This spiritual resilience provided participants with the motivation and strength to continue their duties despite the challenges they faced.

## **DISCUSSION**

The findings from this study offer a comprehensive understanding of the complex challenges that third-year nursing students face while providing bedside care during Ramadhan, as well as the coping strategies they employ to navigate these difficulties. The physical, cognitive, and environmental strains experienced by these students



underscore the demanding nature of clinical practice, particularly when it is compounded by the requirements of fasting. These results are in alignment with existing literature, which similarly emphasizes the impact of fasting on healthcare workers' performance and highlights the necessity of effective coping mechanisms to ensure that the quality of care is maintained (1).

The study identified significant physical and cognitive challenges that fasting nursing students encountered, which were notably exacerbated by the demanding environment of clinical practice. Physical exhaustion was a predominant issue, as the participants frequently reported feelings of fatigue, decreased energy levels, and physical discomfort such as body pain and dizziness. These findings are consistent with studies that fasting can lead to a reduction in physical endurance and overall energy levels, especially in healthcare settings where the physical demands are high (2, 6). The combination of fasting and the physical demands of nursing—such as prolonged standing, frequent movement, and the manual handling of patients—creates a scenario where students are pushed to their physical limits.

Cognitive challenges were also profoundly felt, with participants experiencing difficulties in maintaining focus, memory retention, and mental clarity—all of which are crucial for executing complex tasks such as medication preparation and patient assessments (12, 13). These cognitive difficulties can be linked to the effects of fasting which found to impair cognitive function, particularly in tasks requiring sustained attention and precision (12). The cognitive strain was further exacerbated by the physical exhaustion that participants were experiencing, leading to a vicious cycle where physical and mental fatigue fed into each other, ultimately reducing the students' ability to perform their duties effectively.

Environmental factors further compounded these physical and cognitive challenges. The study participants reported that the clinical settings where they were assigned—characterized by inadequate ventilation, overcrowding, and high temperatures—worsened their experience of physical and cognitive strain. These environmental strains made it even more difficult for the students to maintain their energy and focus. This is in line with the findings of other studies, which have shown that poor working conditions, such as inadequate air circulation and overcrowding, can significantly contribute to stress and fatigue among healthcare workers (14, 15).

The physical and cognitive challenges faced by the participants had a direct impact on the quality of patient care they were able to provide. Participants expressed concerns that their physical limitations and cognitive strain hindered their ability to meet the high standards of care typically expected in clinical settings. This decline in care quality, particularly in terms of effective bedside care and communication, is consistent with studies that healthcare workers fasting during Ramadhan might struggle to maintain their usual standards of care, potentially compromising patient safety (6, 9, 12).

The study also highlighted significant challenges in communication and the provision of emotional support, both of which are critical components of effective patient care. Participants noted that the cognitive and physical strains they were under made it difficult to engage fully with patients and their families, reducing their ability to communicate effectively and provide the necessary emotional support. This is particularly concerning, as communication and emotional engagement are essential for building trust with patients and ensuring their comfort and cooperation during treatment. Amjad et al. (2024) similarly found that fasting could lead to decreased interpersonal interactions and a reduction in the emotional engagement of healthcare workers, further highlighting the potential risks to patient care during Ramadhan.

Despite the significant challenges they faced, the nursing students employed various coping mechanisms to manage their responsibilities effectively and ensure that they could continue to provide care to their patients. One of the primary coping strategies was mental conditioning, where participants focused on maintaining a positive mindset and reinforced their commitment to their work and their future profession. This approach to coping is supported by other researchers that cognitive-behavioral strategies can be effective in mitigating the negative effects of fasting on performance (1, 12).

Teamwork and peer support also emerged as crucial coping strategies. The participants highlighted the importance of relying on their fellow students, clinical instructors, and other healthcare staff to share the workload and provide mutual support. The significance of teamwork in managing stress and ensuring the continuity of care in healthcare settings is well documented as emphasized that strong support networks can significantly alleviate the burden of demanding clinical environments (1, 5, 9).

Finally, spiritual resilience was identified as a key factor in helping participants cope with the challenges of fasting while providing bedside care. The students drew on their religious beliefs and the spiritual significance of fasting to motivate themselves and find meaning in their work, despite the physical and cognitive hardships they faced. This aligns with the research which found that spirituality and religious commitment can offer significant psychological support during fasting, enhancing one's ability to cope with stress and adversity (5, 16).

## CONCLUSION

This study reveals that fasting during Ramadhan presents significant physical, cognitive, and environmental challenges for nursing students, impacting their ability to deliver high-quality patient care. Despite these challenges, students employed coping mechanisms such as mental conditioning, teamwork, and spiritual resilience to manage their duties effectively. These findings highlight the need for supportive measures to help fasting healthcare workers maintain their performance and ensure patient safety during Ramadhan.

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#### Conflict of Interest

The authors declared to have no competing interests.

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