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# The Correlates of Understaffing to Patient Safety and Well-Being of Medical Surgical Nurses

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**ABSTRACT:** This investigates the correlation between understaffing, patient safety, and the well-being of medical-surgical nurses in healthcare settings in Dasmariñas City, Cavite, and Balanga City, Bataan. Utilizing a quantitative descriptive correlational research design, data were collected from a diverse sample of 153 medical-surgical nurses through structured surveys. Findings revealed a predominance of young, predominantly female nurses, with a significant perception of understaffing impacting both patient safety and nurse well-being. The results indicate that nurses working in understaffed units reported higher stress levels and lower job satisfaction, correlating with perceived declines in patient safety. Notably, while shift length did not significantly affect well-being, significant differences in well-being perceptions were observed between male and female nurses. Implications suggest that optimizing staffing ratios and providing tailored support could enhance nurse satisfaction and patient care. Recommendations for future research include exploring targeted interventions to address the complex interplay between staffing levels, nurse well-being, and patient outcomes.

KEYWORDS: Understaffing, Patient Safety, Nurses' Well-Being, Correlational, Medical Surgical Nursing

# I. INTRODUCTION

In the field of healthcare delivery, medical-surgical nursing is at the forefront, balancing clinical skills with compassionate care to fulfill patients' various demands. As a seasoned medical-surgical nurse, it is indeed firsthand to experience how nurse understaffing affects both patient safety and nursing workers' well-being. This introduction examines the crucial relationship between nurse understaffing, patient outcomes, and the problems that medical-surgical nurses encounter in providing optimal care. Nurse understaffing is a worldwide problem, affecting healthcare systems in both industrialized and developing countries. Despite nursing being one of the largest healthcare professions, ongoing shortages result in greater workload pressures and lower patient care quality. The World Health Organization (WHO) forecasts a significant global nursing shortage, with implications for patient safety and healthcare delivery efficiency (WHO, 2023). Thus, understaffing not only strains resources but also tries nursing teams' resilience, frequently resulting in burnout and moral discomfort.

Nurse understaffing has an impact on the entire care ecosystem, not just numerical ratios. Patients endure lengthier wait times, less attention from overworked nurses, and a higher risk of adverse outcomes (Needleman et al., 2021). As a medical-surgical nurse, these problems are highly observed, juggling different patient requirements while working to maintain excellent standards of care. The ethical quandaries generated by understaffing are palpable: the responsibility to provide safe, excellent care clashes with the reality of limited resources and time.

In the Philippines, where nursing is a major export sector, domestic healthcare facilities face significant nurse shortages. Despite having roughly 700,000 registered nurses in the country (PRC, 2023), reaching the required nurse-to-patient ratio of 1:12 remains elusive, with ratios frequently surpassing safe levels (PNA, 2018). This disparity highlights systemic challenges such as poor wages, insufficient staffing levels, and the attraction of greater possibilities abroad, all of which contribute to a vicious cycle of understaffing that jeopardizes both nursing retention and patient outcomes.

According to research, there is a strong association between nurse staffing numbers and patient safety outcomes. Lower nurse-topatient ratios have repeatedly been linked to lower death rates, fewer hospital-acquired infections, and overall improved patient outcomes (Aiken et al., 2020; Kane et al., 2017). These own experience supports these findings since proper staffing improves not only clinical outcomes but also the working environment for nurses, boosting job happiness and professional fulfillment.

This study aims to improve the understanding on how nurses' understaffing affect patient safety and the well-being of medicalsurgical nurses in various healthcare settings. By investigating these associations using qualitative and quantitative research methodologies, we hope to provide empirical information to support policy decisions and organizational strategies for addressing nurse staffing shortages.

## **RESEARCH QUESTION**

- 1. What is the profile of the respondents in terms of:
  - 1.1. Age
  - 1.2. Sex
  - 1.3. Highest educational attainment
  - 1.4. Clinical area of assignment
  - 1.5. Number of years in the area of assignment
  - 1.6. Number of years as a staff nurse
  - 1.7. Perceived nurse-patient ratio in the ward
  - 1.8. Shifting hours
- 2. What is the status of understaffing among nurses at the identified medical-surgical units?
- 3. What is the perceived level of patient safety at the identified medical-surgical nursing units as perceived by nurses?
- 4. What is the perceived level of well-being of nurses at the medical-surgical units?
- 5. Is there a significant relationship between the status of understaffing, patient safety, and the well-being of nurses at the medical-surgical units?
- 6. Is there a significant difference in the level of perceived well-being of nurses at the identified medical-surgical units when grouped accordingly?
- 7. Based on the results of the study, what action plan can be proposed?

#### **II. METHODOLOGY**

The research design selected for the thesis, "The Correlates of Understaffing to Patient Safety and Well-being of Medical-Surgical Nurses," is a quantitative descriptive correlational research design. This approach is appropriate as it allows the researcher to investigate the relationships between variables without manipulating them, focusing on describing and understanding these relationships in the context of nurse understaffing, patient safety, and nurses' well-being. According to Creswell (2005), correlational research designs are ideal when exploring how variables influence each other. In this study, the independent variable was the profile of the respondents, encompassing demographic factors such as age, sex, highest educational attainment, clinical area of assignment, number of years in the area of assignment, number of years as a staff nurse, perceived nurse-patient ratio in the ward, and shifting hour. These variables are crucial as they provide a comprehensive snapshot of the nursing workforce in Dasmariñas City, Cavite and Balanga City, Bataan, Philippines, and how these characteristics may relate to their experiences of nurses understaffing as its influence on patient safety and their well-being.

The dependent variable in this study was the understaffing, the level of patient safety, and the nurses' well-being. By examining these ethical implications through a quantitative lens, the researcher aims to establish correlations between the profile of the respondents and the nurse's views on understaffing, patient safety level, and nurses' well-being. This approach involved collecting structured data through surveys or questionnaires administered to medical-surgical nurses across selected hospitals in Dasmarinas and Balanga City. Moreover, this research design is well-suited to provide empirical insights into how specific characteristics of medical-surgical nurses may influence their perceptions and experiences regarding understaffing, patient safety and their well-being.

# **III. RESULTS AND DISCUSSION**

# **1. Profile of Respondents**

The study revealed a diverse demographic among the medical-surgical nurses, including variations in age, sex, educational background, and clinical experience. The majority of respondents were aged 21-30, indicating a relatively young nursing workforce. This younger demographic may reflect recent trends in the nursing profession where newer generations are increasingly entering the field. The sex distribution, with a predominance of female nurses, aligns with broader trends in nursing, where females have traditionally represented the majority. (Buerhaus, 2017). The educational profile shows that most nurses hold a bachelor's degree, with a smaller proportion having advanced degrees. This educational distribution highlights the potential need for ongoing education and professional development to address evolving healthcare challenges (Ben Natan, 2020).

# 2. Clinical Areas and Experience

The respondents were primarily assigned to both medical and surgical units, indicating a versatile workforce capable of handling diverse patient needs. The majority had 0-1 years of experience in their current area of assignment, suggesting that many nurses are relatively new to their specific roles. This inexperience might impact their ability to manage complex patient care situations effectively, which could be exacerbated by understaffing and high patient loads (Labrague et al., 2017). The data on years of experience as a nurse aligns with the profile of a relatively young and possibly less experienced nursing workforce, potentially affecting overall job satisfaction and patient outcomes.

### 3. Perceived Nurse-Patient Ratio

A significant majority of nurses perceived their units as understaffed, which aligns with broader concerns about staffing levels in healthcare settings (Twigg et al., 2015). This perception of understaffing correlates with higher stress levels and decreased job satisfaction, as evidenced by the significant negative impacts on both nurse well-being and patient safety (Aiken et al., 2018). The findings suggest that improving the nurse-patient ratio could alleviate some of the stress and burnout experienced by nurses, potentially leading to better job satisfaction and improved patient care.

## 4. Shifting Hours

The study found that a majority of nurses worked 8-hour shifts compared to 12-hour shifts. While the impact of shift length on nurse well-being and patient safety remains debated, the findings suggest that shift length might not be a significant factor in perceived well-being or job satisfaction (Ruggiero, 2005). However, the fact that 12-hour shifts are still prevalent might contribute to issues of fatigue and reduced job satisfaction, reinforcing the need for flexible scheduling options that better align with nurses' preferences and well-being (Stone et al., 2007).

#### 5. Relationship Between Understaffing and Patient Safety

The strong correlation between perceived understaffing and decreased patient safety outcomes underscores the critical impact that staffing levels have on patient care quality (Needleman et al., 2011). Nurses' perceptions that inadequate staffing leads to more medical errors and poorer patient outcomes are supported by existing literature, which consistently links higher nurse-patient ratios to increased patient safety risks (Sasso et al., 2021). Addressing staffing inadequacies is thus essential for enhancing patient safety and minimizing the risk of adverse events in medical-surgical units.

#### 6. Relationship Between Understaffing and Nurse Well-Being

The correlation between understaffing and reduced nurse well-being highlights the detrimental effects of inadequate staffing on nurse job satisfaction and mental health (Cimiotti et al., 2012). Nurses who perceive their units as understaffed report higher stress levels, burnout, and lower job satisfaction. This finding reinforces the need for organizations to focus on staffing levels as a key factor in improving nurse well-being and reducing turnover rates (Vahey et al., 2004).

# 7. Differences by Age and Experience

The analysis showed no significant differences in perceived well-being based on age or years in the area of assignment. This suggests that factors such as experience level and age might not significantly impact how nurses perceive their well-being in relation to staffing and patient safety (Haller et al., 2020). However, this finding should be interpreted with caution, as younger or less experienced nurses might still face challenges that impact their job satisfaction and stress levels differently from their more experienced counterparts.

#### 8. Differences by Sex

The study revealed significant differences in the perception of understaffing between male and female nurses, with males reporting higher levels of well-being in relation to staffing levels. This discrepancy might reflect differences in job stress and satisfaction levels between genders, which could be influenced by various factors, including workload, work environment, and personal coping strategies (Williams et al., 2015). Addressing these gender differences through tailored support and intervention strategies could help improve overall nurse well-being.

#### 9. Differences by Educational Attainment

No significant differences were found in perceived well-being based on the level of educational attainment. This suggests that while advanced education might contribute to improved clinical skills and knowledge, it does not necessarily translate into significant differences in perceived well-being in the context of understaffing and patient safety (Clark et al., 2020). The lack of variation across educational levels might highlight the need for more targeted interventions that address well-being irrespective of educational background.

#### **IV. CONCLUSIONS**

The findings underscore the importance of addressing staffing levels to improve both nurse well-being and patient safety. Organizations should consider implementing strategies to optimize staffing ratios, provide ongoing support and professional development for nurses, and evaluate the effectiveness of shift lengths on job satisfaction and patient care. By focusing on these areas, healthcare institutions can enhance nurse satisfaction, reduce burnout, and improve patient outcomes. Future research should explore the specific factors contributing to these perceptions and develop targeted interventions to address the complex interplay between staffing, nurse well-being, and patient safety (Kane et al., 2007).

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