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Nurses' Staffing Ratios, Patient Care Outcomes: A Basis for Policy Guideline Recommendations in A Provincial Hospital in Cavite

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ABSTRACT

Quality care and patient safety are dependent on nurses but many provincial hospitals are faced with staffing shortages, increased workloads and increasing demands for services. These problems can influence nurses' work and care of patients. The study concentrated on the nurse staffing ratios, patient care outcomes, and policy guidelines in a provincial hospital in Cavite. It described the demographic and professional profile of the nurse-participants, evaluated their perceptions regarding staffing ratios, identified patient care outcomes, determined differences in profile variables and examined the relationship between staffing ratios and patient care outcomes. Quantitative descriptive-correlational research was used. A structured validated questionnaire was used to collect data from 103 staff nurses. Statistical treatment used frequency count, percentage, weighted mean, independent t-test, one-way ANOVA, and Pearson product-moment correlation. Nurses reported inadequate staffing ratios, especially in relation to the number of nurses on duty, timeliness of nursing tasks and patient monitoring. The most common patient care outcomes were missed nursing care, falls and skin breakdown. The unit assignment influenced the staffing perceptions. Demographic and professional variables were associated with selected patient care outcome measures. Adequate staffing significantly decreased medication errors, patient falls, skin breakdown, missed nursing care, and prolonged hospital stays. The study found that having enough nurses is a guarantee of patient safety and quality care. It recommends improving patient outcomes and health care in provincial hospitals through strengthened staffing policies, equitable workforce distribution, and institutional support systems.

Keywords: *nurse staffing ratios, staffing adequacy, patient care outcomes, missed nursing care, provincial hospital*

INTRODUCTION

Adequate nurse staffing is essential for patient safety and quality nursing care. Guided by Donabedian's Structure–Process–Outcome Model, this quantitative descriptive-correlational study examined nurses' staffing ratios, patient care outcomes, and policy guideline recommendations in a provincial hospital in Cavite. It examined staffing adequacy, its relationship to patient care outcomes, and developed evidence-based policy recommendations to improve patient safety and quality of care.

Statement of the Problem

This study aimed to determine the nurse-to-patient staffing ratios, patient care outcomes, and their relationship in a provincial hospital in Cavite. It described the profile of nurse participants, assessed staffing adequacy and patient care outcomes, determined differences based on selected characteristics, explored the relationship between staffing ratios and patient care outcomes, and developed policy and guideline recommendations to enhance staffing practices and quality of care.

Specifically, this study sought to answer the following questions:

1. What is the demographic and professional profile of the nurse-participants in a selected provincial hospital in Cavite in terms of:
   1.1 age;
   1.2 sex;
   1.3 marital status;
   1.4 educational attainment;
   1.5 area or unit assignment;
   1.6 position in the hospital;
   1.7 years of experience in the current hospital; and
   1.8 majority of shift assigned in the last two months?
2. How do nurses perceive the current staffing ratios in the hospital in terms of staffing adequacy and workload?
3. Is there a significant difference in nurses' perceptions of staffing ratios when grouped according to their demographic and professional profile?
4. What are the patient care outcomes as assessed by nurses in terms of:
   4.1 medication errors;
   4.2 patient falls;
   4.3 skin breakdown;
   4.4 missed nursing care;
   4.5 prolonged hospitalization; and
   4.6 patient and family satisfaction?
5. Is there a significant difference in patient care outcomes when nurses are grouped according to their demographic and professional profile?
6. Is there a significant relationship between nurses' perceptions of staffing ratios and patient care outcomes?
7. What policy guideline recommendations may be proposed to improve staffing ratios and patient care outcomes in the hospital?

Scope and Delimitations

This quantitative descriptive-correlational study investigated nurse-to-patient staffing ratios and patient care outcomes in a provincial hospital in Cavite. It utilized a structured questionnaire to measure adequacy of staff and patient care outcomes. The study was conducted at a single hospital and relied on self-reported data; however, the results provide significant information for workforce planning and policy development.

Review of Related Literature

Recent local and international literature demonstrates that inadequate nurse staffing poses threats to patient safety and quality of care. Evidence suggests that adequate staffing reduces medication errors, patient falls, missed nursing care, and prolonged hospitalization, showing the importance of maintaining appropriate staffing levels to enhance patient outcomes.

Theoretical Framework

The study is grounded in the theories of Lydia Hall, Imogene King, and Patricia Benner that stress that adequate nurse staffing leads to quality care, effective nurse-patient interactions, and better patient outcomes.

Conceptual Framework

The study employed Donabedian's Structure-Process-Outcome model, where nurse staffing (structure) affects the care delivery (process) and the patient care outcomes (outcome). It provides the foundation for evidence-based policy recommendations.

METHODOLOGY

This study utilized a quantitative, descriptive-correlational research design to assess nurses' perceptions regarding staffing ratios and their relationship with patient care outcomes in a selected provincial hospital in Cavite

Research Design

This study used a quantitative descriptive-correlational design to examine nurses' staffing ratios and patient care outcomes. It assessed nurses' profiles, staffing perceptions, and patient care outcomes, and examined the relationship between staffing ratios and patient care outcomes. The findings provide evidence to support staffing policies and improve patient safety.

Research Steps

The research process involved systematic validation of the questionnaire, ethical approval, purposive sampling of 103 staff nurses, data analysis, and thematic analysis. The findings formed the basis of the study's conclusions and recommendations for policy guidelines.

Data Collection and Sample Selection

A total of 103 staff nurses were selected by purposive sampling. After obtaining ethical and administrative approvals, participants provided informed consent and completed a validated self-administered questionnaire. The collected data were checked, coded, and prepared for statistical analysis.

Data Analysis Methods

The data were analyzed using IBM SPSS Statistics. Descriptive statistics summarized respondents' profiles, staffing perceptions, and patient care outcomes, while t-tests, ANOVAs, and Pearson correlations assessed significant differences and relationships. Thematic analysis was used to develop policy guideline recommendations from the open-ended responses.

Research Hypotheses and Validation

The study tested the null hypotheses on differences in staffing perceptions and patient care outcomes and their relationship. The research instrument underwent expert validation and pilot testing, demonstrating acceptable validity and reliability**.**

Study Limitations and Ethical Considerations

The study was limited to 103 staff nurses from one provincial hospital in Cavite, which may limit the generalizability of the findings. Data were based on self-reported responses and may be subject to response bias. Ethical standards were observed through ethics approval, informed consent, voluntary participation, and strict confidentiality of participants' information.

RESULTS AND DISCUSSION

The study found that nurses perceived staffing ratios as inadequate, with missed nursing care as the most common concern. Better staffing adequacy was associated with fewer adverse patient outcomes. The findings support hiring more nurses, maintaining safe nurse–patient ratios, improving staff allocation, and strengthening hospital support systems to enhance patient safety and quality of care

SUMMARY

The study found that nurses perceived staffing ratios as inadequate, with missed nursing care as the most common concern. Staffing adequacy was significantly associated with patient care outcomes, supporting evidence-based policy recommendations to improve staffing and healthcare delivery.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. Most respondents were frontline nurses assigned to direct patient care and rotating shifts.
2. Nurses perceived the current staffing ratios as inadequate.
3. Perceptions of staffing ratios differed significantly only by unit assignment.
4. The most common patient care outcomes were missed nursing care, patient falls, and skin breakdown.
5. Patient care outcomes varied according to selected demographic and professional variables.

6. Better staffing adequacy was associated with fewer adverse patient care outcomes.
7. The proposed policy guidelines support increasing nursing staff, maintaining safe nurse-to-patient ratios, improving staff allocation, and strengthening support systems.

RECOMMENDATIONS

The hospital should enhance nurse staffing through appropriate workforce planning, safe nurse-patient ratios, and equitable staff allocation. Nursing administrators should implement the proposed policy guidelines to improve patient safety and quality of care. Future studies should include multiple hospitals and objective clinical indicators to further validate the findings.

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. Review staffing needs across units based on workload, patient acuity, experience, and shift assignment.
2. Reassess current staffing patterns, particularly in high-workload units, using patient census and acuity as guides.
3. Implement unit-based staffing plans and provide additional personnel to areas with heavier workloads.
4. Strengthen measures to reduce missed nursing care, patient falls, and skin breakdown through effective patient monitoring and timely nursing interventions.
5. Conduct regular staffing reviews and quality improvement activities in units with higher rates of adverse patient outcomes.
6. Improve staffing adequacy by increasing shift coverage during high patient census and monitoring staffing-sensitive patient outcomes.
7. Strengthen recruitment, maintain safe nurse-to-patient ratios, improve staff allocation, reduce non-nursing workload, and enhance staff development and support systems.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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