RESOURCE CONSTRAINTS AND NURSES' CARE PRIORITIZATION IN SELECTED MEDICAL-SURGICAL UNITS IN DAVAO DEL SUR

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Abstract : This study examined the relationship between resource constraints and nurses' care prioritization in selected medical-surgical units in Davao del Sur. It also determined whether the dimensions of resource constraints significantly predicted nurses' care prioritization. A quantitative descriptive-predictive design was employed involving 120 registered nurses. Data were collected using a researcher-developed, content-validated questionnaire. The instrument was pilot-tested with 25 respondents; McDonald's omega coefficients ranged from 0.713 to 0.934 for resource constraints and from 0.731 to 0.867 for nurses' care prioritization. Mean and standard deviation were used for descriptive analysis, while Spearman's rank-order correlation and kernel regression were used to examine associations and predictive effects. Resource constraints had a moderate overall mean of 2.81 (SD = 0.75). Time constraints (M = 3.92, SD = 0.87) and workload (M = 3.74, SD = 0.92) were rated high, while staffing adequacy (M = 2.15, SD = 0.63), availability of supplies and equipment (M = 2.13, SD = 0.69), and institutional support (M = 2.13, SD = 0.63) were rated low. Nurses' care prioritization had a high overall mean of 3.77 (SD = 0.87). Decision-making during patient deterioration had the highest mean (M = 4.13, SD = 0.89), whereas prioritization of nursing interventions had the lowest (M = 2.43, SD = 0.86). Spearman's rho showed negligible, non-significant relationships across all five resource-constraint dimensions ($p > .05$). Kernel regression likewise showed no statistically significant individual predictive effects. The model reported $R^2 = 0.7605$; however, this overall fit statistic should be interpreted cautiously and does not establish significant individual predictors. The findings indicate that, in this sample, the measured resource-constraint dimensions were not significantly associated with or individually predictive of nurses' reported care prioritization.

IndexTerms **-** Resource constraints, nurses' care prioritization, medical-surgical units, descriptive-predictive research, Davao del Sur.

I. INTRODUCTION

Nurses working in medical-surgical units care for patients with varied diagnoses, levels of acuity, and changing clinical conditions. Their responsibilities include assessment, monitoring, medication administration, documentation, coordination, and the timely delivery of nursing interventions. Because several patient needs may arise simultaneously, nurses must continually determine which concerns require immediate attention. Staffing limitations, heavy workloads, time pressure, and inadequate supplies or equipment may complicate these decisions and create competing demands during a shift (Ivziku et al., 2022; Labrague, 2022).

Resource constraints are multidimensional. Workload is shaped not only by the number of assigned patients but also by patient acuity, transfers, documentation, isolation requirements, and unscheduled activities (Ivziku et al., 2022; Ivziku et al., 2024). In medical-surgical units, the organization of nursing work is also related to the demands experienced by nurses throughout their shifts (Ferramosca et al., 2023). Studies of missed nursing care have further identified staffing and resource conditions as relevant to the completion of essential nursing activities (Nantsupawat et al., 2022; Imam et al., 2023).

Care prioritization is a clinical decision-making process in which nurses assess competing needs and determine the order and urgency of care. It involves recognizing patient deterioration, considering acuity, organizing interventions, allocating time, and providing care promptly. Research has described prioritization as a process influenced by patient-related, professional, and organizational factors rather than by a single consideration (Sist et al., 2024). Clinical judgment is particularly important when nurses recognize and respond to patient deterioration (Dresser et al., 2023).

In the Philippine context, nursing workforce and practice-environment concerns have been discussed in relation to missed nursing care and the capacity to deliver safe, quality services (Alibudbud, 2023; Labrague, 2022). However, local

evidence specifically examining several dimensions of resource constraints alongside nurses' care prioritization in selected medical-surgical units in Davao del Sur remains limited. This study addressed that gap by describing the levels of both variables, examining their relationships, and assessing the predictive effects of the resource-constraint dimensions.

NEED FOR THE STUDY.

Medical-surgical nurses provide care to patients with different diagnoses, levels of acuity, and changing clinical conditions. In carrying out assessment, monitoring, medication administration, documentation, and other responsibilities, nurses must make decisions about which patient needs and interventions require immediate attention. Staffing adequacy, workload, availability of supplies and equipment, time constraints, and institutional support may shape the conditions under which these decisions are made. Previous Philippine studies have associated staffing and resource adequacy and work-environment conditions with missed nursing care and nurse-assessed quality of care (Labrague, 2022; Labrague et al., 2022).

Although earlier studies have examined staffing, workload, resource adequacy, and missed nursing care, the thesis identifies limited local evidence specifically examining multiple dimensions of resource constraints in relation to nurses' care prioritization in selected medical-surgical units in Davao del Sur. This local gap makes it important to describe the resource-related conditions experienced by nurses and determine whether these conditions are associated with, or predict, how nurses prioritize care. The present study therefore examined staffing adequacy, workload, availability of supplies and equipment, time constraints, and institutional support in relation to prioritization according to patient acuity, decision-making during patient deterioration, prioritization of nursing interventions, time allocation, and timeliness of care.

Population and Sample

The population of the study consisted of registered nurses assigned to selected medical-surgical units in hospitals in Davao del Sur. The study involved 120 registered nurses who met the established inclusion criteria and participated as respondents. Stratified purposive sampling was employed to select the respondents from the participating hospitals, ensuring representation from the identified hospital groups. The sample size was determined using G*Power, with a two-tailed test, a significance level of 0.05, a desired statistical power of 0.969, and an expected effect size of 0.15, resulting in a target sample of 120 respondents.

Data and Sources of Data

The primary data for this study were obtained directly from 120 registered nurses assigned to medical-surgical units in selected hospitals in Davao del Sur. Data were gathered through a researcher-developed structured questionnaire designed to measure resource constraints and nurses' care prioritization. The questionnaire covered staffing adequacy, workload, availability of supplies and equipment, time constraints, and institutional support, as well as prioritization according to patient acuity, decision-making during patient deterioration, prioritization of nursing interventions, time allocation, and timeliness of care. The instrument used a five-point Likert scale and underwent content validation by qualified experts before its administration. Relevant literature and published studies were also consulted during the development of the questionnaire and interpretation of the findings.

Theoretical Framework

Study was guided by Moral Distress Theory and Jean Watson's Theory of Human Caring, which provide the foundation for understanding nurses' care prioritization under resource constraints. Moral Distress Theory explains the psychological and ethical discomfort experienced by nurses when they are unable to provide the level of care they believe patients deserve because of institutional limitations, inadequate resources, or competing patient needs. In situations where nurses must prioritize care, they may experience ethical conflicts when certain interventions are delayed or omitted, potentially affecting their well-being, job satisfaction, and quality of patient care (Alibudbud, 2023; Boston-Leary et al., 2024). Meanwhile, Jean Watson's Theory of Human Caring emphasizes the importance of compassionate, holistic, and patient-centered nursing care despite environmental and institutional challenges. It highlights the value of caring relationships, human dignity, and meaningful interactions between nurses and patients. Together, these theories support the understanding that nurses' prioritization decisions are influenced not only by clinical demands and available resources but also by their ethical responsibilities and commitment to providing quality, compassionate care (Gunawan et al., 2022; World Health Organization, 2025; International Council of Nurses, 2023).

II. RESEARCH METHODOLOGY

Research Design and Participants

The study employed a quantitative descriptive-predictive research design to describe resource constraints and nurses' care prioritization and to examine their relationship and predictive associations. The study involved 120 registered nurses assigned to medical-surgical units in selected hospitals in Davao del Sur. Eligible participants were currently employed registered nurses assigned to a medical-surgical unit with at least two years of clinical experience in the unit. Nurses on leave or unavailable during data collection were excluded. Stratified purposive sampling was used, with selected hospitals serving as strata. The sample size was determined using G*Power based on a two-tailed test, $\alpha = 0.05$, desired power = 0.969, and an expected effect size of 0.15.

Research Instrument and Reliability

Data were gathered using a researcher-developed questionnaire with two sections. Resource constraints were measured in terms of staffing adequacy, workload, availability of supplies and equipment, time constraints, and institutional support. Nurses' care prioritization was measured in terms of prioritization according to patient acuity, decision-making during patient deterioration, prioritization of nursing interventions, time allocation, and timeliness of care. Responses used a five-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher scores indicated greater perceived resource constraints and a higher level of reported care prioritization, respectively.

The questionnaire underwent content validation by qualified experts and pilot testing with 25 respondents. Reliability was assessed using McDonald's omega in SPSS Version 31. Coefficients for resource constraints ranged from 0.713 to 0.934, and those for nurses' care prioritization ranged from 0.731 to 0.867. All coefficients exceeded 0.70, indicating acceptable internal consistency for the measured domains.

Data Analysis and Ethical Considerations

Mean and standard deviation were used to describe the levels of the study variables. Spearman's rank-order correlation was used to examine the strength and direction of relationships between each resource-constraint dimension and nurses' care prioritization. Kernel regression was used to examine the predictive effects of the five resource-constraint dimensions. Statistical significance was evaluated at the 0.05 level. Participation was voluntary and based on written informed consent. Confidentiality and anonymity were maintained, and the study observed Republic Act No. 10173, or the Data Privacy Act of 2012.

III. RESULTS AND DISCUSSION

Level of Resource Constraints

Table 1. Level of Resource Constraints

Dimension	Mean	SD	Interpretation
Staffing adequacy	2.15	0.63	Low
Workload	3.74	0.92	High
Availability of supplies and equipment	2.13	0.69	Low
Time constraints	3.92	0.87	High
Institutional support	2.13	0.63	Low
Overall	2.81	0.75	Moderate

Table 1 shows a moderate overall level of resource constraints (M = 2.81, SD = 0.75). Time constraints had the highest mean (M = 3.92, SD = 0.87), followed by workload (M = 3.74, SD = 0.92); both were interpreted as high. Staffing adequacy, availability of supplies and equipment, and institutional support were rated low. The pattern indicates that reported constraints were not uniform across dimensions: time pressure and workload were the most prominent concerns in the present sample.

This result is consistent with the view that nursing workload reflects a combination of patient-related and workflow demands, including acuity, transfers, documentation, and unscheduled activities (Ivziku et al., 2022; Ferramosca et al., 2023). At the same time, the comparatively low ratings for supplies and equipment and institutional support should not be interpreted as evidence that these resources are unimportant. Philippine research has linked the nursing practice environment and resource adequacy with missed nursing care (Labrague, 2022).

Level of Nurses' Care Prioritization

Table 2. Level of Nurses' Care Prioritization

Dimension	Mean	SD	Interpretation
Prioritization according to patient acuity	4.10	0.84	High
Decision-making during patient deterioration	4.13	0.89	High
Prioritization of nursing interventions	2.43	0.86	Low
Time allocation	4.12	0.86	High
Timeliness of care	4.09	0.88	High
Overall	3.77	0.87	High

As shown in Table 2, nurses' care prioritization was high overall (M = 3.77, SD = 0.87). Decision-making during patient deterioration had the highest mean (M = 4.13, SD = 0.89), followed closely by time allocation (M = 4.12, SD = 0.86), prioritization according to patient acuity (M = 4.10, SD = 0.84), and timeliness of care (M = 4.09, SD = 0.88). Prioritization of nursing interventions had the lowest mean (M = 2.43, SD = 0.86), interpreted as low.

The high ratings for decision-making during deterioration and prioritization according to acuity are relevant to the clinical judgment required in medical-surgical settings. Dresser et al. (2023) described the importance of recognizing changes, interpreting clinical information, and responding appropriately to patient deterioration. Sist et al. (2024) likewise characterized prioritization as a dynamic process shaped by patient, professional, and organizational factors. The lower rating for prioritization of nursing interventions identifies a dimension that may warrant additional attention in clinical support, mentoring, and professional development.

Relationship Between Resource Constraints and Nurses' Care Prioritization

Table 3. Spearman's Rank-Order Correlation Between Resource Constraints and Nurses' Care Prioritization

Resource-constraint dimension	Spearman's ρ	p-value	Decision
Staffing adequacy	−0.006	.949	Not significant
Workload	0.013	.892	Not significant
Availability of supplies and equipment	0.024	.799	Not significant
Time constraints	−0.038	.683	Not significant
Institutional support	−0.030	.748	Not significant

Table 3 indicates that none of the five resource-constraint dimensions had a statistically significant relationship with nurses' care prioritization. The coefficients were negligible, ranging from −0.038 to 0.024, and all p-values exceeded .05. Therefore, the null hypothesis was not rejected for any dimension. These results mean that the present sample did not provide sufficient statistical evidence of an association between the measured resource-constraint dimensions and reported care prioritization.

The non-significant findings differ from studies that have reported relationships between staffing or resource adequacy and missed nursing care (Nantsupawat et al., 2022; Labrague, 2022). However, the outcomes examined are not identical: the present study measured nurses' reported care prioritization, whereas several earlier studies focused on missed or omitted care. Prioritization may also reflect several interacting patient, professional, and organizational considerations rather than a single resource indicator (Sist et al., 2024; Peng et al., 2024). Thus, the absence of statistically significant correlations in this sample should not be interpreted as proof that resource conditions have no practical importance.

Predictive Effects of Resource-Constraint Dimensions

Table 4. Kernel Regression Results for Resource-Constraint Dimensions

Dimension	Observed effect	p-value	Interpretation
Staffing adequacy	−0.008	.904	Not significant
Workload	−0.012	.853	Not significant
Availability of supplies and equipment	−0.007	.886	Not significant
Time constraints	0.000	.995	Not significant
Institutional support	−0.026	.624	Not significant

The kernel regression results showed that none of the five resource-constraint dimensions had a statistically significant individual predictive effect on nurses' care prioritization. The observed effects were small, and all p-values were greater than .05. The model reported an R^2 of 0.7605. This value describes the model's reported in-sample explanatory fit; it does not establish that any individual dimension is a statistically significant predictor. The overall model specification,

goodness-of-fit, and interpretation of R^2 should be confirmed with the statistician before the value is presented as a substantive explanatory result.

The findings may be considered alongside research describing care prioritization and missed nursing care as multifactorial processes. Sist et al. (2024) identified patient-related, professional, and organizational influences on prioritization, while Peng et al. (2024) described missed care as arising from interacting nursing, system, and social factors. These studies provide context for why no single resource-constraint dimension may emerge as an individually significant predictor in the present analysis. The results should nevertheless be interpreted within the limits of the cross-sectional design, self-reported questionnaire, selected hospitals, and variables included in the model.

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REFERENCES

1) Alibudbud, R. (2023). Addressing the burnout and shortage of nurses in the Philippines. SAGE Open Nursing, 9, 1–9. https://doi.org/10.1177/23779608231195737
2) Dresser, S., Teel, C., & Peltzer, J. (2023). Frontline nurses' clinical judgment in recognizing, understanding, and responding to patient deterioration: A qualitative study. International Journal of Nursing Studies, 139, 104436. https://doi.org/10.1016/j.ijnurstu.2023.104436
3) Ferramosca, F. M. P., De Maria, M., Ivziku, D., Raffaele, B., Lommi, M., Tolentino Diaz, M. Y., Montini, G., Porcelli, B., De Benedictis, A., Tartaglini, D., & Gualandi, R. (2023). Nurses' organization of work and its relation to workload in medical-surgical units: A cross-sectional observational multi-center study. Healthcare, 11(2), 156. https://doi.org/10.3390/healthcare11020156
4) Imam, A., Obiesie, S., Gathara, D., Aluvaala, J., Maina, M., & English, M. (2023). Missed nursing care in acute care hospital settings in low-income and middle-income countries: A systematic review. Human Resources for Health, 21, 19. https://doi.org/10.1186/s12960-023-00807-7
5) Ivziku, D., Ferramosca, F. M. P., Filomeno, L., Gualandi, R., De Maria, M., & Tartaglini, D. (2022). Defining nursing workload predictors: A pilot study. Journal of Nursing Management, 30(2), 473–481. https://doi.org/10.1111/jonm.13523
6) Kang, Y.-J., & Uhm, J.-Y. (2024). Sequential mediation effects of organizational support and collaboration on missed nursing care. Western Journal of Nursing Research, 46(6), 456–467. https://doi.org/10.1177/01939459241248221
7) Labrague, L. J. (2022). Linking nurse practice environment, safety climate, and job dimensions to missed nursing care. International Nursing Review, 69(3), 350–358. https://doi.org/10.1111/inr.12736
8) Nantsupawat, A., Poghosyan, L., Wichaikhum, O.-A., Kunaviktikul, W., Fang, Y., Kueakomoldej, S., Thienthong, H., & Turale, S. (2022). Nurse staffing, missed care, quality of care and adverse events: A cross-sectional study. Journal of Nursing Management, 30(2), 447–454. https://doi.org/10.1111/jonm.13501
9) Papathanasiou, I., Tzenetidis, V., Tsaras, K., Zyga, S., & Malliarou, M. (2024). Missed nursing care; prioritizing the patient's needs: An umbrella review. Healthcare, 12(2), 224. https://doi.org/10.3390/healthcare12020224
10)Peng, M., Saito, S., Mo, W., & Guan, H. (2024). Why do nurses miss nursing care? A qualitative meta-synthesis. Japan Journal of Nursing Science, 21(2), e12578. https://doi.org/10.1111/jjns.12578
11)Sist, L., Ugenti, N. V., Chiappinotto, S., Messina, R., Rucci, P., & Palese, A. (2024). Reasons influencing the nurses' prioritization process while preventing and managing delirium: Findings from a qualitative study. Aging Clinical and Experimental Research, 36, 178. https://doi.org/10.1007/s40520-024-02818-3

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