

Disaster Preparedness Competencies Of Senior Nurses In Aklan: Basis For Policy And Program Enhancement

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ABSTRACT

This quantitative, descriptive correlational study assessed the disaster preparedness competencies of senior nurses in Aklan, Philippines, to inform a proposed Policy and Program Enhancement. Evaluating foundational competencies (comprehension, skills, attitude) alongside specialized disaster leadership, the study found an overall "Competent" baseline ($M = 3.27$). While Attitude was "Proficient" ($M=3.74$), cognitive comprehension and technical skills plateaued at "Competent". Specialized leadership functions also demonstrated operational plateaus. A significant but negligible relationship ($\rho = .252$, $p = .013$) exists between foundational readiness and specialized leadership, indicating that clinical seniority does not organically catalyze disaster mastery. The study recommends implementing the Disaster Leadership and Resilience Program (DLRP) to institutionalize role-specific, simulated executive training.

Keywords: Disaster preparedness, senior nurses, nursing leadership, institutional resilience, policy enhancement.

INTRODUCTION

The increasing frequency of global disasters mandates that nursing professionals possess specialized competencies in triage, resource management, and strategic decision-making (Abebe et al., 2024). In the Philippines, high exposure to seismic and hydrometeorological hazards makes health system resilience a provincial security pillar (Alibudbud, 2023). Aklan's healthcare system faces unique surge capacity demands from both residents and tourists. Despite these roles, a gap exists where clinical seniority is erroneously equated with disaster proficiency (Onyenho et al., 2023). This study establishes an empirical baseline to help nursing leaders ensure Aklan's hospitals remain functional during critical hours.

Statement of the Problem

This study assessed the disaster preparedness competencies of senior nurses in Aklan. Specifically, it sought to answer the following questions:

1. What was the level of foundational disaster preparedness competency (Comprehension, Skills, Attitude)?
2. What was the level of specialized disaster leadership and strategic functions?
3. Was there a significant relationship between foundational competencies and specialized leadership functions?

Scope and Delimitations

This study focused on 96 senior nurses (Nurse II/III) in Aklan with at least five years of experience. The research was restricted to hospital-based disaster preparedness in Aklan and utilized a quantitative, descriptive correlational design.

Review of Related Literatures

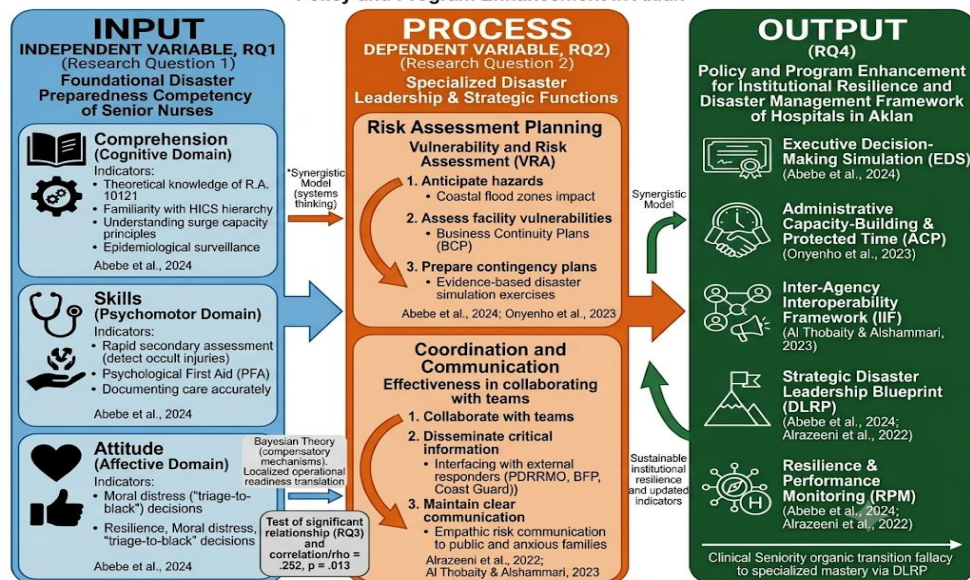
Disaster preparedness is framed by the Knowledge, Skills, and Attitudes (KSA) triad (Abebe et al., 2024). While senior nurses exhibit high willingness to respond, a "knowledge-action gap" persists regarding modern Incident Command Systems (Al Thobaity & Alshammari, 2023). Clinical seniority provides a foundation but is not a substitute for specialized disaster curricula (Onyenho et al., 2023). Effective policies must prioritize continuous professional development over one-off training and integrate high-fidelity simulations (Alrazeeni et al., 2022).

Theoretical Framework

The study is grounded in the Synergy Model for Patient Care, Jennings' Disaster Nursing Management Model, and Patricia Benner's "From Novice to Expert" theory, which underscore the evolution from clinical excellence to specialized crisis leadership (Khalil, 2022).

Conceptual Framework

Figure 1. Conceptual Framework of Senior Nurses' Disaster Preparedness Competencies for Policy and Program Enhancement in Aklan



METHODOLOGY

This study utilized a quantitative, descriptive correlational research design to systematically describe the existing characteristics of a population while simultaneously examining the nature, direction, and magnitude of relationships among specified variables (Creswell & Creswell, 2023).

Research Design

The descriptive component was utilized to systematically assess and baseline the current proficiency levels of senior nurses in Aklan in terms of foundational and specialized leadership competencies. The correlational component was applied to statistically test the null hypothesis at the 0.05 level of significance to determine whether a significant statistical relationship existed between these variables.

Research Steps

A structured, self-administered survey adapted from the ICN Framework of Disaster Nursing Competencies was utilized. It underwent content validation by experts and local reliability testing (Cronbach's $\alpha = 0.90-0.94$).

Data Collection and Sample Selection

A total enumeration of 96 senior nurses across public and private hospitals in Aklan was conducted. Ethical clearance was secured, and informed consent was obtained from all participants.

Data Analysis Methods

Data were analyzed using Weighted Mean and Standard Deviation to determine competency levels. Spearman's Rank-Order Correlation (Spearman's ρ) tested the relationship between foundational and specialized competencies ($\alpha = 0.05$).

Research Hypotheses and Validation

The null hypothesis stated that there was no significant relationship between foundational competencies and specialized strategic functions. Analysis resulted in the rejection of this hypothesis ($p < 0.05$).

Study Limitations and Ethical Considerations

The study used self-reported data, which are subject to social desirability bias. Ethical protocols strictly complied with the Philippine Data Privacy Act of 2012, ensuring anonymity and voluntary participation.

RESULTS AND DISCUSSION

SOP 1. Foundational Domains: The overall foundational competency was "Competent" ($M = 3.27$). Attitude was "Proficient" ($M=3.74$), whereas Comprehension ($M=3.05$) and Skills ($M=3.00$) were "Competent". This gap confirms that while staff are morally and psychologically ready, technical disaster training is lacking (Hechanova et al., 2024).

SOP 2. Specialized Disaster Leadership Risk Assessment Planning ($M=3.23$) and Coordination and Communication ($M=3.25$) were both "Competent". Senior nurses have

adequate baseline capability but lack executive mastery, suggesting an operational plateau (Onyenho et al., 2023).

SOP 3. Relationship Between Variables: The null hypothesis was rejected. While a significant low positive correlation exists between Comprehension and Coordination ($\rho = .318$, $p = .002$), overall foundational readiness shows only a negligible positive relationship with strategic leadership ($\rho = .252$, $p = .013$). This confirms that bedside tenure does not independently catalyze disaster management mastery (Abebe et al., 2024).

SUMMARY

Senior nurses in Aklan demonstrate strong ethical commitments but need technical elevation in disaster leadership. The study reveals a significant "operational plateau" in which clinical experience fails to translate into strategic risk management, underscoring the need for specialized intervention.

CONCLUSIONS

The fallacy of "organic leadership transition" is confirmed; clinical seniority is insufficient for crisis governance. Cognitive frameworks regarding incident command are the primary drivers of effective communication, while basic clinical skills do not correlate with high-level risk assessment.

RECOMMENDATIONS

1. Implement the Disaster Leadership and Resilience Program (DLRP) to formalize training.
2. Grant "Protected Time" for senior nurses to conduct unit-level Vulnerability and Risk Assessments.
3. Conduct bi-annual joint tabletop exercises with local disaster agencies to improve interoperability.

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AI DECLARATION STATEMENT

AI-supported tools were utilized to assist with grammar, formatting, and manuscript structure. No AI tools were used in the collection, analysis, or interpretation of research data; all authors are credited for their original academic contributions. Additionally, AI-supported tools were used to generate the conceptual framework diagrams. The foundational concepts, variable relationships, and structural logic depicted in these illustrations were originally conceptualized and provided by the author through detailed, manual prompting.

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