

## Influence of nursing competence, leadership, team coordination, and resources on flood disaster nursing effectiveness

Johansen Hutajulu<sup>1</sup>, Ivan Elisabeth Purba<sup>2</sup>, Henny Syapitri<sup>1</sup>, Tanti Yosepha Ompusunggu<sup>1</sup>

<sup>1</sup>Department of Nursing, Faculty of Pharmacy and Health Science, Sari Mutiara Indonesia University, Indonesia

<sup>2</sup>Department of Management, Faculty of Economic Business, Sari Mutiara Indonesia University, Indonesia

*Corresponding Author:* Johansen Hutajulu, johansen@sari-muitiara.ac.id



### Article Info:

Submitted:  
14-02-2026  
Revised:  
11-03-2026  
Accepted:  
12-03-2026  
Published:  
17-03-2026


### Keywords:

disaster nursing  
management,  
flood response,  
leadership,  
nursing competence,  
team coordination

### ABSTRACT

Flood disasters represent a prevalent global hazard that imposes significant strain on healthcare systems, necessitating robust nursing management to ensure timely and effective service delivery. This study examined the influence of nursing competence, leadership, team coordination, and resource availability on disaster nursing management effectiveness during flood responses. Using a quantitative cross-sectional design, data were collected from 96 nurses with direct flood response experience using a validated, structured questionnaire. Multiple linear regression analysis was employed to assess the individual and simultaneous effects of the independent variables. Results demonstrated that nursing competence, leadership, team coordination, and resource availability all exerted a positive and significant influence on management effectiveness ( $p < 0.05$ ). Collectively, these variables accounted for 55.6% of the variance in effectiveness, with team coordination and leadership as the strongest predictors. These findings underscore that optimal disaster nursing management relies on an integrated approach combining individual competency with strong leadership structures, cohesive teamwork, and adequate logistical support. Consequently, disaster preparedness strategies should prioritize leadership development and coordinated team protocols alongside clinical training to enhance resilience in flood-prone regions.

 <https://doi.org/10.53713/nhsj.v6i1.671>

This work is licensed under  
CC BY-SA License. 

## INTRODUCTION

Flood disasters are among the most prevalent and catastrophic natural hazards globally, imposing severe strain on healthcare infrastructure and compromising the safety and well-being of affected communities (Shah et al., 2025). As climate change exacerbates the frequency and intensity of hydrological events, health systems are increasingly tasked with managing large-scale emergencies that overwhelm standard operational capacities (Chukwuma, 2025). Within this context, nurses serve as the frontline providers of care, playing a pivotal role in disaster preparedness, response, and mitigation (Rattanakanlaya et al., 2022). Their responsibilities extend beyond direct clinical intervention to include organizing relief efforts and maintaining the continuity of essential health services (Alanazi & Shaban, 2025). Consequently, the resilience of a community during a flood event is inextricably linked to the nursing workforce's capacity to conduct rapid triage, allocate scarce resources, and maintain service delivery under extreme duress (Alrowili et al., 2024).

Effective disaster nursing management relies heavily on individual nursing competence, which encompasses a synthesis of disaster-specific knowledge, clinical proficiency, critical thinking, and situational awareness (Kalanlar, 2025). Competence in this domain is not merely a function of general medical training but requires specialized preparedness to navigate the chaotic environment of a flood emergency (Khorram-Manesh & Mani, 2025). Evidence suggests that nurses with robust disaster training demonstrate superior adaptability and decision-making accuracy in mass-casualty incidents (Seyedin et al., 2025). This individual capability is fundamental to effective triage and the management of injured populations, as it enables nurses to prioritize care amid rapidly evolving conditions, thereby reducing morbidity and mortality during the critical initial phases of a disaster (Al Thobaity, 2024).

However, individual proficiency alone is insufficient to guarantee a successful disaster response; it must be supported by effective leadership and cohesive team coordination (Zhang et al., 2024). In high-stress environments, adaptive leadership is crucial for maintaining team focus, sustaining morale, and clarifying roles to prevent confusion (Sott & Bender, 2025). Furthermore, disaster response is inherently interprofessional, requiring seamless collaboration across disciplines to ensure operational smoothness (Gastaldi & Horlait, 2022). Poor coordination can lead to task redundancy, delays in critical interventions, and the inefficient depletion of assets (Abbas & Miller, 2025). Therefore, leadership that fosters collaboration and teams that function with high levels of synergy are essential components in optimizing the speed and quality of the nursing response during flood emergencies (Ali et al., 2024).

In addition to human capital, the availability and management of tangible resources are critical determinants of nursing effectiveness (Kimin et al., 2022). The operational continuity of healthcare services during a flood depends on adequate logistical support, reliable communication tools, and sufficient safety equipment (Pradhan et al., 2022). Without these structural enablers, even the most competent and well-led nursing teams may find their efforts thwarted by environmental constraints or safety risks (Farokhzadian et al., 2024). Resource availability acts as a force multiplier, enabling the safe and sustainable execution of clinical skills and leadership strategies (Tussing et al., 2022). Thus, the intersection of personnel capability and material readiness forms the backbone of a resilient disaster response system (Cvetković et al., 2023).

Despite the recognized importance of these factors, there remains a need for empirical research detailing how specific variables interact to influence outcomes in flood-specific contexts. While general disaster management frameworks exist, the unique challenges posed by flooding, such as isolation, infrastructure damage, and prolonged exposure risks, require a targeted examination of nursing effectiveness (Wang et al., 2023). This study aims to investigate the influence of nursing competence, leadership quality, team coordination, and resource availability on the effectiveness of disaster nursing management during flood events. By elucidating the relationships among these determinants, this research seeks to provide evidence-based recommendations to strengthen nursing preparedness and enhance overall disaster response capabilities (Lin et al., 2023).

## **METHOD**

### **Research Design**

This study employed a quantitative, cross-sectional research design to examine the influence of nursing competence, leadership, team coordination, and resource availability on disaster nursing management effectiveness during flood response. The research was conducted

in Kota Lintang District, Aceh Tamiang, Indonesia, an area frequently affected by seasonal flooding. Data collection was carried out between January and March 2026, following the most recent flood response activities in the region. This design enabled the assessment of relationships among variables at a single point in time within the specific context of post-flood operations.

### Participants

The study population consisted of all registered nurses working in public health centers and healthcare facilities in Kota Lintang who had direct experience in managing or participating in flood disaster response. Inclusion criteria included nurses with an active professional registration certificate, involvement in at least one flood emergency response within the last three years, and willingness to participate in the study. Nurses who were on leave or not directly involved in disaster response activities were excluded. A purposive sampling technique was used to ensure that respondents met the specific criteria for disaster response experience. The minimum sample size was determined using the formula  $n \geq 50 + 8m$  (where  $m$  represents the number of independent variables). With four independent variables, the minimum required sample was 96 respondents. To increase statistical power, all eligible nurses were invited to participate using a total sampling approach where feasible.

### Data Collection

Data were collected using a structured self-administered questionnaire developed based on disaster management and nursing leadership literature. The instrument consisted of five sections measuring nursing competence, leadership, team coordination, resource availability, and disaster nursing management effectiveness. Each construct was measured using multiple indicators, each rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Prior to the main study, the questionnaire was tested for validity and reliability; construct validity was assessed using corrected item-total correlations, and reliability was evaluated using Cronbach's alpha, with a minimum acceptable value of 0.70. Data collection was conducted after obtaining institutional permission from relevant healthcare authorities. Respondents were provided with informed consent forms explaining the purpose of the study, confidentiality assurance, voluntary participation, and the right to withdraw at any time without consequences. Completed questionnaires were collected directly by the research team to ensure data completeness.

### Data Analysis

Data analysis was performed using statistical software. Descriptive statistics were used to describe respondent characteristics and the distributions of variables. Assumption tests, including tests for normality, multicollinearity, and heteroscedasticity, were conducted prior to inferential analysis to ensure the data were suitable for parametric testing. Multiple linear regression analysis was applied to examine the partial and simultaneous effects of the four independent variables on disaster nursing management effectiveness. Statistical significance was determined at a  $p$ -value  $< 0.05$ .

### Ethical Clearance

This research obtained ethical approval from the Health Research Ethics Committee of USM-Indonesia, with Ethics Approval Number No. 961/F/KEP/USM/XII/2025. The study adhered

to ethical principles, including respect for persons, beneficence, and justice. All respondents provided written informed consent prior to participation, and data confidentiality was strictly maintained throughout the research process.

**RESULT**

All participants were registered nurses with direct experience in flood disaster response in Kota Lintang District, Aceh Tamiang, Indonesia.

Table 1. Demographic characteristics of respondents (n = 96)

| Characteristic      | Category  | Frequency (n) | Percentage (%) |
|---------------------|-----------|---------------|----------------|
| Gender              | Female    | 66            | 68.7           |
|                     | Male      | 30            | 31.3           |
| Clinical Experience | ≤ 5 years | 37            | 38.5           |
|                     | > 5 years | 59            | 61.5           |

A total of 96 nurses who had direct experience in flood disaster response in Kota Lintang, Aceh Tamiang, participated in this study. Most respondents were female (68.7%) and had more than five years of clinical experience (61.5%).

Table 2. Descriptive statistics of study variables (n = 96)

| Variable                                  | Mean (M) | Standard Deviation (SD) | Interpretation |
|---|----------|-------------------------|----------------|
| Nursing Competence                        | 3.98     | 0.54                    | High           |
| Leadership                                | 4.05     | 0.51                    | High           |
| Team Coordination                         | 4.12     | 0.48                    | High           |
| Resource Availability                     | 3.76     | 0.60                    | High           |
| Disaster Nursing Management Effectiveness | 4.08     | 0.49                    | High           |

Descriptive analysis showed that the mean scores for nursing competence (M = 3.98, SD = 0.54), leadership (M = 4.05, SD = 0.51), team coordination (M = 4.12, SD = 0.48), and resource availability (M = 3.76, SD = 0.60) were within the high category. The mean score of disaster nursing management effectiveness was also high (M = 4.08, SD = 0.49), indicating a generally positive perception of management performance during flood response.

Table 3. Results of classical assumption tests

| Assumption         | Test Method                    | Result                                       | Decision             |
|--------------------|--------------------------------|--|----------------------|
| Normality          | Residual distribution analysis | Residuals normally distributed               | Assumption met       |
| Multicollinearity  | Tolerance / VIF                | Tolerance > 0.10; VIF < 10 for all variables | No multicollinearity |
| Heteroscedasticity | Scatterplot of residuals       | No significant pattern observed              | Assumption met       |

Prior to hypothesis testing, classical assumption tests were conducted. The normality test indicated that residuals were normally distributed. Multicollinearity diagnostics showed tolerance values above 0.10 and variance inflation factor (VIF) values below 10 for all independent variables, indicating no multicollinearity issues. The heteroscedasticity test showed no significant patterns, confirming that regression assumptions were met.

Table 4. Multiple linear regression analysis: Predictors of disaster nursing management effectiveness

| Independent Variable  | Unstandardized $\beta$ | Standardized $\beta$ | t-value | p-value | Decision    |
|-----------------------|------------------------|----------------------|---------|---------|-------------|
| Nursing Competence    | 0.231                  | 0.231                | 2.403   | 0.018   | Significant |
| Leadership            | 0.289                  | 0.289                | 2.815   | 0.006   | Significant |
| Team Coordination     | 0.315                  | 0.315                | 3.184   | 0.002   | Significant |
| Resource Availability | 0.204                  | 0.204                | 2.187   | 0.031   | Significant |

Multiple linear regression analysis revealed that nursing competence had a positive and significant effect on disaster nursing management effectiveness ( $\beta = 0.231$ ,  $p = 0.018$ ), supporting H1. Leadership demonstrated a positive and significant influence ( $\beta = 0.289$ ,  $p = 0.006$ ), supporting H2. Team coordination also had a positive and significant effect ( $\beta = 0.315$ ,  $p = 0.002$ ), supporting H3. Resource availability showed a positive and significant contribution ( $\beta = 0.204$ ,  $p = 0.031$ ), supporting H4. Simultaneously, the four independent variables significantly influenced disaster nursing management effectiveness ( $F = 28.742$ ,  $p < 0.001$ ), thus supporting H5.

The coefficient of determination ( $R^2$ ) was 0.556, indicating that 55.6% of the variance in disaster nursing management effectiveness could be explained by nursing competence, leadership, team coordination, and resource availability. Among the predictors, team coordination emerged as the strongest contributor, followed by leadership, nursing competence, and resource availability. These findings confirm that both individual capacity and organizational factors play significant roles in strengthening disaster nursing management during flood emergencies.

**DISCUSSION**

The findings of this study substantiate the multifaceted nature of disaster nursing management, demonstrating that effectiveness during flood response depends on the interplay between individual competencies and organizational systems. The model explained 55.6% of the variance in management effectiveness, indicating a robust structural relationship between professional capacity, managerial dynamics, and logistical readiness. Specifically, the significant positive effect of nursing competence aligns with disaster preparedness frameworks that prioritize adaptive expertise over routine clinical skills. In the context of flood emergencies, competence encompasses rapid triage, ethical prioritization, and crisis communication under uncertainty (Topal et al., 2024). This aligns with the existing literature, which suggests that specialized disaster training reduces operational errors and enhances decision-making accuracy. However, while foundational, competence alone operates within a broader system; its impact is amplified when supported by structured management and collaborative environments, suggesting that individual capability must be viewed as a component of a larger operational ecosystem rather than an isolated determinant (Olsén et al., 2023).

Leadership emerged as a critical predictor, reinforcing the notion that crisis management relies heavily on directive clarity and emotional regulation. In high-stress environments like flood disasters, where infrastructure may be compromised and resources scarce, effective leadership serves as a stabilizing force, maintaining role clarity and fostering trust among healthcare teams. The results align with transformational and adaptive leadership theories, which posit that leaders who can navigate ambiguity and motivate teams contribute significantly to resilience (Alibašić,

2025). This study extends those findings to the rural nursing context, indicating that leadership is not merely administrative but operationally decisive. The ability of nurse leaders to streamline processes and mitigate stress directly correlates with perceived management effectiveness, highlighting the need for leadership development programs that focus specifically on crisis adaptation rather than general management skills (Akkaya et al., 2025).

Notably, team coordination exerted the greatest influence among the independent variables, underscoring the systemic nature of disaster response. This finding suggests that in complex emergency environments, outcomes depend less on isolated individual performance and more on synchronized collective action. Effective coordination facilitates seamless information exchange, minimizes task redundancy, and optimizes personnel deployment, consistent with systems theory and interprofessional collaboration models (Khirfan et al., 2025). The prominence of this variable suggests that communication fragmentation or role confusion can severely hinder response efforts, regardless of individual skill levels. Therefore, establishing structured communication channels and clearly defined protocols prior to disaster events is paramount. This emphasizes that disaster nursing management is inherently a collaborative endeavor where the synergy of the team outweighs the sum of individual contributions (Almughamisi et al., 2025).

Resource availability also contributed significantly to management effectiveness, though its relative weight was lower than that of leadership and coordination. This nuance suggests that while material support is essential, the managerial capacity to allocate and utilize existing resources may be equally critical, particularly in resource-constrained settings (Mukuve & Nuuyoma, 2023). In rural areas like Kota Lintang, where infrastructure limitations are common, strong leadership and coordination can partially mitigate the challenges posed by limited logistics. This finding challenges the assumption that abundant resources are the primary prerequisite for effective response; instead, it posits that efficient management of available assets drives effectiveness. Consequently, disaster planning should focus not only on stockpiling supplies but also on developing strategies for resource optimization and rapid logistical deployment under constraints (Petanidis et al., 2024).

Collectively, these results highlight that strengthening disaster response capacity requires an integrated approach that balances technical training with organizational development. The interplay between competence, leadership, coordination, and resources suggests that interventions targeting only one domain may yield limited improvements. For instance, enhancing nursing competence without improving team coordination may lead to skilled but fragmented efforts. Similarly, providing resources without effective leadership may result in waste (Spencer & Howard, 2025). In the context of flood-prone rural regions, this integrated perspective is vital for policy formulation. Health authorities should prioritize building resilient systems where skilled nurses are empowered by adaptive leaders, supported by cohesive teams, and equipped with managed resources, thereby creating a sustainable framework for disaster nursing management (Kruger et al., 2025).

## CONCLUSION

This study provides empirical evidence that nursing competence, leadership, team coordination, and resource availability collectively and significantly enhance disaster nursing management effectiveness during flood response, with team coordination and leadership emerging as the most influential determinants. These findings underscore that effective disaster management is not solely dependent on individual clinical expertise but is fundamentally shaped

by synergistic organizational factors, adaptive leadership, cohesive teamwork, and strategic resource allocation that enable nurses to operate efficiently under pressure. Consequently, strengthening disaster resilience in flood-prone regions necessitates an integrated, systems-oriented approach in which healthcare institutions prioritize continuous, disaster-specific competency development, invest in leadership capacity-building for nurse managers, institutionalize structured interprofessional coordination protocols, and ensure proactive logistical planning. By aligning human capital development with robust organizational support mechanisms, health systems can foster a more agile and responsive nursing workforce capable of mitigating the health impacts of flood emergencies. Future research should further explore contextual moderators such as organizational culture, psychological resilience, and policy frameworks to refine these insights across diverse geographic and institutional settings.

### ACKNOWLEDGEMENT

The authors would like to express sincere gratitude to all nurses in Kota Lintang District, Aceh Tamiang, who generously shared their time and experience in participating in this study. Their commitment and firsthand insights into flood disaster response were invaluable to the completion of this research. Appreciation is also extended to the management of the local health centers and healthcare institutions for granting permission and facilitating data collection.

The authors are grateful to the Health Research Ethics Committee for reviewing and approving this study, ensuring that the research was conducted in accordance with ethical standards. Special thanks are given to colleagues and research assistants who contributed to instrument development, data collection, and data processing. Finally, the authors acknowledge the support of all parties who provided constructive feedback and academic guidance throughout the research process.

### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this research.

### REFERENCES

- Abbas, R., & Miller, T. (2025). Exploring communication inefficiencies in disaster response: Perspectives of emergency managers and health professionals. *International Journal of Disaster Risk Reduction*, 120, 105393. <https://doi.org/10.1016/j.ijdr.2025.105393>
- Akkaya, G., Akkuş, Y., Parlak, A. G., & Karacan, Y. (2025). Determination of the relationship between competencies in disaster nursing management and perceived stress: The intermediary role of resilience. *International Emergency Nursing*, 78, 101530. <https://doi.org/10.1016/j.ienj.2024.101530>
- Al Thobaity, A. (2024). Overcoming challenges in nursing disaster preparedness and response: an umbrella review. *BMC Nursing*, 23(1), 562. <https://doi.org/10.1186/s12912-024-02226-y>
- Alanazi, M. A., & Shaban, M. (2025). Challenges and Strategies in Maintaining Continuity of Care for Chronic Disease Patients by Emergency Nurses During Disasters. *International Nursing Review*, 72(2), e70029. <https://doi.org/10.1111/inr.70029>
- Ali, H. M., Ranse, J., Roiko, A., & Desha, C. (2024). Developing a healthcare transformational leadership competency framework for disaster resilience and risk management. *International Journal of Disaster Risk Reduction*, 113, 104898. <https://doi.org/10.1016/j.ijdr.2024.104898>

- Alibašić, H. (2025). Advancing Disaster Resilience: The Ethical Dimensions of Adaptability and Adaptive Leadership in Public Service Organizations. *Public Integrity*, 27(3), 209–221. <https://doi.org/10.1080/10999922.2024.2388285>
- Almughamisi, A., Alshehri, A., Alandijani, M., Alqarni, S., Alshehri, F., Alshehri, K., ... & Alshammary, F. (2025). Multidisciplinary Team Group Effort in Healthcare; The Role of Emergency, Clinical, and Administrative Professionals in Improving Outcomes and Hospital Performance. *Saudi Journal of Medical and Pharmaceutical Sciences*. <https://doi.org/10.36348/sjmps.2025.v11i10.002>
- Alrowili, M. R., Almoajel, A. M., Alneam, F. M., & Alhazmi, R. A. (2024). Disaster Preparedness in Saudi Arabia's Primary Healthcare Workers for Human Well-Being and Sustainability. *Sustainability*, 17(14), 6562. <https://doi.org/10.3390/su17146562>
- Chukwuma, S.C. (2025). Invariance of extreme hydrologic events and climate change in the risk reduction on environment and health. *Greenfort International Journal of Applied Medical Science*, 3(2), 92–102. <https://doi.org/10.62046/gijams.2025.v03i02.011>
- Cvetković, V. M., Tanasić, J., Renner, R., Rokvić, V., & Beriša, H. (2023). Comprehensive Risk Analysis of Emergency Medical Response Systems in Serbian Healthcare: Assessing Systemic Vulnerabilities in Disaster Preparedness and Response. *Healthcare*, 12(19), 1962. <https://doi.org/10.3390/healthcare12191962>
- Farokhzadian, J., Mangolian Shahrabaki, P., Farahmandnia, H., Taskiran Eskici, G., & Soltani Goki, F. (2024). Nurses' challenges for disaster response: a qualitative study. *BMC Emergency Medicine*, 24(1), 1. <https://doi.org/10.1186/s12873-023-00921-8>
- Gastaldi, S., & Horlait, M. (2022). Health care organizations' interoperability during multi-organizational disaster management: a scoping review. *Prehospital and Disaster Medicine*, 37(3), 401–408. <https://doi.org/10.1017/S1049023X22000516>
- Kalanlar, B. (2025). The Roles of Nursing Schools in Disaster Management Within the Scope of Advanced Disaster Nursing: A Scoping Review. *International Journal of Nursing Practice*, 31(6), e70072. <https://doi.org/10.1111/ijn.70072>
- Khirfan, R., AlHasan, N., Atiyeh, H., Khalifeh, A. H., Holmes, S., & Kotb, H. (2025). Optimizing Resources Management in Crises: Strategies, Challenges, Benefits and Conceptual Framework Development. *Research Journal of Pharmacy and Technology*, 18(5), 2249–2255. <https://doi.org/10.52711/0974-360X.2025.00322>
- Khorram-Manesh, A., & Mani, Z. (2025). Navigating the chaos: a scoping review of gaps in disaster nursing and a roadmap for the future. *BMC Nursing*, 24(1), 1396. <https://doi.org/10.1186/s12912-025-04088-4>
- Kimin, A., Nurachmah, E., Lestari, F., & Gayatri, D. (2022). Factors Affecting Nurses' Ability to Provide Effective Care in a Disaster Response: A Review. *Journal of Public Health Research*. <https://doi.org/10.4081/jphr.2021.2732>
- Kruger, K., Brysiewicz, P., Lori, J., & Bell, S. A. (2025). The role of the nursing workforce in health system resilience during disasters: A scoping review of empirical studies. *International Journal of Nursing Studies Advances*, 9, 100361. <https://doi.org/10.1016/j.ijnsa.2025.100361>
- Lin, C. H., Tzeng, W. C., Chiang, L. C., Lu, M. C., Lee, M. S., & Chiang, S. L. (2023). Effectiveness of a Structured Disaster Management Training Program on Nurses' Disaster Readiness for Response to Emergencies and Disasters: A Randomized Controlled Trial. *Journal of Nursing Management*, 2024(1), 5551894. <https://doi.org/10.1155/2024/5551894>
- Mukuve, P., & Nuuyoma, V. (2023). Critical Care Nursing in a Resource-Constrained Setting: A Qualitative Study of Critical Care Nurses' Experiences Caring for Patients on Mechanical Ventilation. *SAGE Open Nursing*. <https://doi.org/10.1177/23779608231205691>
- Olsén, M., Oskarsson, P., Hallberg, N., Granåsen, M., & Nordström, J. (2023). Exploring collaborative crisis management: A model of essential capabilities. *Safety Science*, 162, 106092. <https://doi.org/10.1016/j.ssci.2023.106092>
- Petanidis, S., Chandramouli, K., Floros, G., Nifakos, S., Kolomvatsos, K., Tsekeridou, S., Magalini, S., Gui, D., & Kosmidis, C. (2024). Optimizing Emergency Response in Hospitals: A Systematic Review of

- Surge Capacity Planning and Crisis Resource Management. *Healthcare*, 13(21), 2819. <https://doi.org/10.3390/healthcare13212819>
- Pradhan, N. A., Najmi, R., & Fatmi, Z. (2022). District health systems capacity to maintain healthcare service delivery in Pakistan during floods: A qualitative study. *International Journal of Disaster Risk Reduction*, 78, 103092. <https://doi.org/10.1016/j.ijdr.2022.103092>
- Rattanakanlaya, K., Sukonthasarn, A., Wangsrikhun, S., & Chanprasit, C. (2022). Improving flood disaster preparedness of hospitals in Central Thailand: Hospital personnel perspectives. *Journal of Clinical Nursing*, 31(7-8), 1073-1081. <https://doi.org/10.1111/jocn.15971>
- Seyedin, H., Moslehi, S., & Narimani, S. (2025). Empowering emergency nurses in crisis response – A quality improvement framework for enhanced preparedness and decision-making. *International Emergency Nursing*, 83, 101711. <https://doi.org/10.1016/j.ienj.2025.101711>
- Shah, A. A., Ullah, W., Khan, N. A., Khan, A., Alotaibi, B. A., Alam, E., & Ullah, A. (2025). Health and livelihood impacts of flood hazards on internally displaced persons in Pakistan. *International Journal of Disaster Risk Reduction*, 119, 105295. <https://doi.org/10.1016/j.ijdr.2025.105295>
- Sott, M. K., & Bender, M. S. (2025). The Role of Adaptive Leadership in Times of Crisis: A Systematic Review and Conceptual Framework. *Merits*, 5(1), 2. <https://doi.org/10.3390/merits5010002>
- Spencer, M., & Howard, P. K. (2025). Addressing the Environmental Impact of Emergency Department Waste: Challenges and Strategies for Sustainable Nursing Leadership Practices. *Journal of Emergency Nursing*, 51(4), 548-552. <https://doi.org/10.1016/j.jen.2025.03.006>
- Topal, S., Özhanlı, Y., Çaka, S. Y., & Gürbüz, Y. (2024). Professional competences of emergency department nurses working in the earthquake region on triage management in children and the difficulties experienced by nurses in the decision-making process: A qualitative study. *International Journal of Disaster Risk Reduction*, 113, 104844. <https://doi.org/10.1016/j.ijdr.2024.104844>
- Tussing, T. E., Chesnick, H., & Jackson, A. (2022). Disaster Preparedness: Keeping Nursing Staff and Students at the Ready. *Nursing Clinics of North America*, 57(4), 599-611. <https://doi.org/10.1016/j.cnur.2022.06.008>
- Wang, W., Li, H., & Huang, M. (2023). A literature review on the impact of disasters on healthcare systems, the role of nursing in disaster management, and strategies for cancer care delivery in disaster-affected populations. *Frontiers in Oncology*, 13, 1178092. <https://doi.org/10.3389/fonc.2023.1178092>
- Zhang, D., Zhang, L. Y., Zhang, K., Zhang, H., Zhang, H. F., & Zhao, K. (2024). Disaster literacy in disaster emergency response: a national qualitative study among nurses. *BMC Nursing*, 23(1), 267. <https://doi.org/10.1186/s12912-024-01911-2>