LETTER TO EDITOR OPEN ACCESS

All Nurses Shall Be Trained As 'Disaster Nurses'

Nurul'Ain Ahayalimudin
Department of Critical Care Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia.
E-mail: ainyanun@iium.edu.my

Dear Editor,

The increasing number of statistics on disasters, including the most recent COVID-19 epidemic, highlights how essential nurses are in emergencies and disasters (1). During COVID-19, it was identified that the gaps in the healthcare system and disaster preparedness were glaringly revealed, highlighting the nursing's vulnerability (2). The epidemic exposed many nurses' lack readiness for managing patient surges, personal protective equipment (PPE) shortages, and the psychological effects of protracted crises (3).

As pandemics, natural catastrophes, and other emergencies occur more often, nurses in all specialisations should be ready for disasters promptly and substantially. All speciality nurses were forced into new responsibilities and frequently lacked the training to handle severe medical emergencies (4). This emphasised the critical necessity for thorough disaster preparedness training for all nurses, regardless of speciality, to guarantee a more robust and efficient healthcare response in future calamities. It also underscores the necessity for nurses in all disciplines to be prepared to respond to emergencies.

As frontline responders during disasters, nurses' diverse roles highlight that regardless of their speciality—paediatric, critical care, or surgical nurses, to name a few—all nurses may be sought to handle disasters (4,5). Nurses must take over certain situations, such as mass casualty incidents, natural disasters (earthquakes and hurricanes), and worldwide pandemics. However, many nurses have little exposure to disaster response training, particularly in specialisations that are not emergency focused (6). For example, a study by Lichter et al. mentioned the effects of wildfire on California Radiation Oncology Clinics and Patients (7). Of these, 18% reported a clinic closure, and 29% reported staffing shortages. The nurses reported effects on patients, including having to evacuate (55%), cancel/reschedule treatments (53%), and experiencing physical, mental, or financial hardship due to wildfires (45%). Meanwhile, during COVID-19, despite having little prior training in pandemic response, nurses in specialities such as mental health and outpatient services were abruptly expected to manage COVID-19 patients and execute infection control measures. This resulted in early misunderstandings and poor planning, mainly regarding handling patient surges and adjusting to quickly evolving protocols (8).

The gap has several justifications, and the results could be substantial given the growing variety and frequency of disasters. Several studies discussed the lack of disaster preparedness training among nurses (1,9). Using the modified Disaster Preparedness Evaluation Tool, a cross-sectional study of seven Asia-Pacific nations revealed that their overall levels of preparedness, knowledge, and abilities for disasters ranged from poor to moderate, with significant gaps discovered (10).

Disasters are becoming increasingly prevalent due to disease outbreaks, climate changes, and technological threats. Nursing's capacity and capabilities in disaster response are defined by the numerous elements associated with nurse education and training, including the scope of practice, mobilisation and deployment, safety and protection, crisis leadership, licensure and certification, and support from the public health and health care systems (1). Thus, it draws attention to the broader spectrum of competencies needed and the significance of abilities beyond clinical care, such as leadership, communication, logistics, and psychological first aid, which are critical during catastrophe responses. The existing

state of circumstances has revealed challenges to these nurses' preparedness.

Across nursing specialities and institutions, disaster preparedness training remains inconsistent and varies in quality (11). The needs of their patient group are the main emphasis of the highly specialist training nurses in specialities including paediatrics, geriatrics, oncology, obstetrics, and mental health often receive. Considering this, their training and career advancement frequently emphasise condition-specific protocols more than broader emergency or disaster preparedness. While these specialities are crucial in routine care, they may incorporate a different urgency or broad-spectrum crisis management training than nurses in emergency departments or critical care units undergo.

In addition, nurses are often overburdened with patient care, making it hard to focus on disaster preparedness, mainly when resources are scarce, which leads to time constraints and burnout (5). There is also limited funding for disaster training, which brings attention to how budget constraints in healthcare can impact training programs aimed at disaster readiness (12). To eliminate the obstacles, authorities ought to act. For instance, they should advance the implementation of disaster response training in nursing education and continuing professional development, as well as standardise the disaster management curriculum (13). For comprehensive disaster planning, collaboration between disciplines can also promote partnerships between public health organisations, emergency services, and healthcare providers (14,15).

Furthermore, periodical drills, simulations, and online modules should be implemented as part of simulation-based training to assist nurses in improving their disaster response skills (16,17). Authorities and healthcare organisations are urged by a standardised policy and financial assistance to prioritise training for all healthcare personnel and to invest in disaster preparedness infrastructure (18). Nursing educators, legislators, and healthcare leaders must acknowledge the critical need for all nurses to be prepared for disasters and urge action. Given the increasing complexity and unpredictability of disasters, nurses from all specialities should have the knowledge and skills to respond appropriately. Preparedness is no longer optional—it is a necessity, and the authorities should emphasise the importance of equipping nurses with the skills to handle disasters, regardless of their speciality.

The International Council of Nurses (ICN) has stated that nurses should be prepared for disasters on a personal and professional level. The critical responsibilities that nurses play in the mitigation, preparedness, response, and recovery phases of the disaster management cycle are acknowledged by the organisation. As a result, ICN contends that disaster education should begin from nursing programs with curriculum-integrated content. This guarantees that when students become professional nurses, they will have a fundamental grasp of disasters (19).

From the point of view of Islamic history and revelation, the story of Prophet Nuh, as narrated in the Al-Qur'an (20), can be a good reference for preparing for disasters.

فَأَوْحَيْنَآ إِلَيْهِ أَنِ ٱصْنَعِ ٱلْفُلْكَ بِأَعْيُنِنَا وَوَحْيِنَا فَإِذَا جَآءَ أَمْرُنَا وَفَارَ ٱلتَّنُّورُ فَٱسْلُكْ فِيهَا مِن كُلٍّ زَوْجَيْنِ ٱثْنَيْنِ وَأَهْلَكَ إِلَّا مَن سَبَقَ عَلَيْهِ ٱلْقَوْلُ مِنْهُمْ ۖ وَلَا تُخَٰطِبْنِى فِى ٱلَّذِينَ ظَلَمُوٓا۟ ۖ إِنَّهُم مُّغْرَقُونَ

"So, We inspired him, "Construct the ship under Our observation, and Our inspiration, and when Our command comes and the oven overflows, put into the ship from each [creature] two mates and your family, except those for whom the decree [of destruction] has proceeded."

The story of Prophet Nuh in the Qur'an is served as one of the most powerful examples of disaster preparedness and divine intervention. The Prophet Nuh's story revolves around Allah's warning of an impending flood and the subsequent building of the Ark to save the believers and pairs of animals from the disaster.

Several other Quranic verses highlight themes of warning, preparation, faith, and survival in the face of a calamity. In Surah Yusuf, Allah has mentioned about planning for famine (21).

قَالَ تَزْرَعُونَ سَبْعَ سِنِينَ دَأَبًا فَمَا حَصَدتُّمْ فَذَرُوهُ فِي سُنۢبُلِهِۦٓ إِلَّا قَلِيلًا مِّمَّا تَأْكُلُونَ

"[Yusuf] said, 'You will plant for seven years consecutively; and what you harvest leave in its spikes, except a little from which you will eat. Then

will come after those seven difficult years which will consume what you saved for them, except a little from which you will store.'"

Preparing ahead of time for challenging times, like a seven-year drought, is exemplified in the tale of Prophet Yusuf. This verse illustrates the ageless wisdom of crisis leadership, strategic resource management, and disaster preparedness. It promotes being proactive, practicing restraint, and making plans for the future—all of which are necessary for both surviving and prospering in trying times.

A profound verse that emphasises the value of faith and dependence on Allah in times of calamity and hardship is Surah At-Tawbah (22)

قُل لَّن يُصِيبَنَآ إِلَّا مَا كَتَبَ ٱللَّهُ لَنَا هُوَ مَوْلَىٰنَا ۚ وَعَلَى ٱللَّهِ فَلْيَتَوَكَّلِ ٱلْمُؤْمِنُونَ

"Say, "Never will we be struck except by what Allah has decreed for us; He is our protector." And upon Allah let the believers rely."

This verse reflects the need for faith during difficult times. Even when disasters strike, believers are reminded that everything happens according to Allah's will and that He is their ultimate protector. Hence, the nurses especially from the speciality of mental health is required to be able to assist and facilitate the needs of people affected during disasters.

Therefore, it can be concluded that there is a necessity for all nurses to be trained as a '*disaster nurse*', not solely depending to some specialities such as emergency and critical care. The need for nursing institutions to offer elective disaster nursing courses is something that the relevant authorities, including the Nursing Board Malaysia and the IPTA Nursing Council, shall be concerned about. This is exactly what has been offered by the Kulliyyah of Nursing, International Islamic University Malaysia, since 2012.

Article History:
Submitted: 16 September 2024
Accepted: 25 October 2024
Revised: 27 October 2024
Published: 30 November 2024

DOI: 10.31436/ijcs.v7i3.406
ISSN: 2600-898X

REFERENCES

1. National Academies of Sciences, Engineering, and Medicine; National Academy of Medicine; Committee on the Future of Nursing 2020–2030; Flaubert JL, Le Menestrel S, Williams DR, et al., editors. *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. Washington (DC): National Academies Press (US); 2021 May 11. 8, Nurses in Disaster Preparedness and Public Health Emergency Response. Available from: https://www.ncbi.nlm.nih.gov/books/NBK573904/
2. Goniewicz M, Khorram-Manesh A, Włoszczak-Szubzda A, Lasota D, Al-Wathinani AM, Goniewicz K. Influence of experience, tenure, and organisational preparedness on nurses' readiness in responding to disasters: An exploration during the COVID-19 pandemic. *J Glob Health.* 2023 Aug 14;13:06034. Doi: 10.7189/jogh.13.06034.
3. Galanis P, Vraka I, Fragkou D, Bilali A, Kaitelidou D. Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. *J Adv Nurs.* 2021 Aug;77(8):3286-3302. Doi: 10.1111/jan.14839. Epub 2021 Mar 25.
4. Farokhzadian J, Mangolian SP, Farahmandnia H, Taskiran EG, Soltani GF. Nurses' challenges for disaster response: a qualitative study. *BMC Emerg Med*. 2024 Jan 3;24(1):1. Doi: 10.1186/s12873-023-00921-8.
5. Fithriyyah YN, Syahirul Alim, Sri Warsini, Dr. Sri Setiyarini, Ariani AP Pertiwi. Indicators of Nurse Leadership in Disaster Management: A Qualitative study. *Malaysian Journal of Medicine and Health Sciences*, 19(6): 62-68, Nov 2023 (eISSN 2636-9346).
6. Ahmed SK. The Impact of COVID-19 on Nursing Practice: Lessons Learned and Future Trends. *Cureus*. 2023 Dec 7;15(12):e50098. Doi: 10.7759/cureus.50098.
7. Lichter KE, Baniel CC, Do I, Medhat Y, Avula V, Nogueira LM, et al. Effects of Wildfire Events on California Radiation Oncology Clinics and Patients. *Adv Radiat Oncol*. 2023 Oct 22;9(3):101395. Doi: 10.1016/j.adro.2023.101395.
8. Filip R, Puscaselu RG, Anchidin-Norocel L, Dimian M, Savage WK. Global

Challenges to Public Health Care Systems during the COVID-19 Pandemic: A Review of Pandemic Measures and Problems. *J Pers Med*. 2022 Aug 7;12(8):1295. Doi: 10.3390/jpm12081295.

9. Alotaibi SS, Almutairi HA, Alotaibi MK, Alharbi K, Bahari G. Enhancing Nurses' Disaster Management and Preparedness: Evaluating the Effectiveness of an Online Educational Program Through a Quasi-Experimental Study. *Risk Manag Healthc Policy*. 2024 Jan 10;17:101-111. Doi: 10.2147/RMHP.S446704.
10. Usher K. Mills J, West C, Casella E, Dorji, P, Guo A et al. Cross-sectional survey of the disaster preparedness of nurses across the Asia–Pacific region. *Nursing & Health Sciences***.** December 2015, Volume 17: Issue 4:434-443. Doi: https://doi.org/10.1111/nhs.12211
11. Al Harthi M, Al Thobaity A, Al Ahmari W, Almalki M. Challenges for Nurses in Disaster Management: A Scoping Review. *Risk Manag Healthc Policy*. 2020 Nov 16;13:2627-2634. Doi: 10.2147/RMHP.S279513.
12. Balut MD, Der-Martirosian C, Dobalian A. Disaster Preparedness Training Needs of Healthcare Workers at the US Department of Veterans Affairs. *South Med J*. 2022 Feb;115(2):158–163. Doi: 10.14423/SMJ.0000000000001358.
13. Loke AY, Guo C, Molassiotis A. Development of disaster nursing education and training programs in the past 20 years (2000–2019): A systematic review. *Nurse Education Today*, 2021: 99, 104809. ISSN 0260-6917. Doi: https://doi.org/10.1016/j.nedt.2021.104809.
14. Gooding, K., Bertone, M.P., Loffreda, G. et al. How can we strengthen partnership and coordination for health system emergency preparedness and response? Findings from a synthesis of experience across countries facing shocks. *BMC Health Serv Res* (2022): 22, 144. Doi: https://doi.org/10.1186/s12913-022-08859-6
15. Sultan MAS, Khorram-Manesh A, Sørensen JL, Berlin J, Carlström E. Disaster Collaborative Exercises for Healthcare Teamwork in a Saudi Context. *Int J Disaster Risk Sci.* 2023;14(2):183–93. Doi: 10.1007/s13753-023-00484-z.
16. Wiese LK, Love T, Goodman R. Responding to a simulated disaster in the virtual or live classroom: Is there a difference in BSN student learning? *Nurse Educ Pract*. 2021 Aug; 55:103170. Doi: 10.1016/j.nepr.2021.103170.
17. Shrestha R, Kanchan T, Krishan K. *Simulation Training and Skill Assessment in Disaster Medicine*. [Updated 2023 Jul 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK551719/
18. Lal A, Abdalla SM, Chattu VK, Erondu NA, Lee TL, Singh S, et al. Pandemic preparedness and response: exploring the role of universal health coverage within the global health security architecture. *Lancet Glob Health*. 2022 Nov;10(11): e1675-e1683. Doi: 10.1016/S2214-109X(22)00341-2.
19. Eid-Heberle K, Burt S. Disaster Education in the Nursing Curriculum: Embracing the Past, Learning from the Present, Preparing for the Future. *Journal of Radiology Nursing*, Volume 42, Issue 2, June 2023; 155-161.
20. Al-Qur'an; Surah Al-Mu'minun (23: 27)
21. Al-Qur'an; Surah Yusuf (12:47)
22. Al-Qur'an; Surah At-Tawbah (9:51)