

# Core competencies of emergency nurses for the armed conflict context: Experiences from the field

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## Abstract

**Background:** Armed conflicts are usually associated with high mortality and morbidity rates, with unpredictable workload, injuries and illnesses. Identifying emergency nurses' views of the core competencies required to enable them to work effectively in hospitals in areas of armed conflict is critical. It is important to inform the requisite standards of care and facilitate the translation of knowledge into safe, quality care.

**Aim:** The aim of this study was to identify emergency nurses' perceptions of core competencies necessary to work in hospitals in the context of armed conflict.

**Method:** A descriptive qualitative phase of a mixed-method study using semi-structured interviews with participants was conducted from June to July 2019. The COREQ guideline for reporting qualitative research was followed.

**Findings:** A sample of 15 participants was interviewed. The participant perceptions provided a different perspective of core competencies required for emergency nurses in the context of armed conflict, culminating in four main areas: (i) personal preparedness, (ii) leadership, (iii) communication and (iv) assessment and intervention.

**Conclusion:** This study identified emergency nurses' perceptions of their core competencies. Personal preparedness, leadership, communication, assessment and intervention were identified as contributing to calmness of character, confidence in care and cultural awareness for care in this setting and were essential for them to work effectively when managing victims of armed conflict in emergency departments.

**Implications for nursing practice and health policy:** The findings of this study are important and novel because the researchers sought the perspectives of emergency nurses who have experience in receiving patients from armed conflict firsthand. The findings will inform policymakers in those settings regarding standard of care, education and drills for hospital nurses in optimizing armed conflict care response outcomes.

## KEYWORDS

Armed conflicts, clinical competence, competencies, emergency nursing, hospital, nursing, warfare

## BACKGROUND

High mortality and morbidity rates are associated with disasters of all types, including human-made disasters caused by armed conflicts (Levy & Sidel, 2016; McClean, 2010; Sangkala & Gerdtz, 2018; Veenema, 2019). Annually, between 55 000

and 70 000 deaths were reported worldwide from the period of 2007 to 2012 as a result of armed conflicts (Geneva Declaration Secretariat, 2015). In 2021, 11,000 civilian deaths across 12 armed conflicts were reported by the United Nation (2022). Countries within the Middle East region have recently experienced waves of instability, violence and civilian unrest

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(International Committee of The Red Cross, 2019) and have turned the spotlight onto the function and skills of emergency personnel within these areas.

In areas that are close to armed conflict, the number of cases managed frequently overwhelms emergency departments (EDs) and results in extreme and fluctuating workloads with unpredictable injuries (Conlon & Wiechula, 2011; Veenema, 2019). Large-scale emergencies, such as occur in armed conflicts, are amongst the most difficult humanitarian events faced by nurses in terms of their emotional toll and the range of competencies required for adequate preparation to provide quality and safe care (Conlon & Wiechula, 2011; Mani et al., 2020).

Nurses are the largest group of frontline responders in armed conflict zones and play a major role in managing disastrous incidents, attending to the health needs of the affected populations and injured soldiers (Veenema, 2019). Several studies have highlighted the importance of the nurses' roles in disaster management (Arbon et al., 2013; Ranse et al., 2010), and disaster nursing competencies have been developed accordingly (Al Thobaity et al., 2016, 2017; Daily et al., 2010; International Council of Nurses, 2019; Loke & Fung, 2014; Marin & Witt, 2015; World Health Organization [WHO] & International Council of Nursing [ICN], 2009).

However, a detailed understanding of the necessary emergency nursing core competencies close to armed conflict is limited (Mani et al., 2020) but is essential to enhance their education and training to respond safely and competently in these unique settings. The aim of this study was to identify emergency nurses' perceptions of core competencies necessary to work in hospitals near armed conflict.

## METHOD

### Design

A qualitative descriptive phase of a mixed-method study was conducted using semi-structured interviews. The data were analysed using inductive content analysis as described by Elo and Kyngas (2008). The COREQ guideline for reporting qualitative research was followed.

### Setting of the study

The settings for this study, were Ministry of Health (MoH)-operated hospitals in the Kingdom of Saudi Arabia (KSA) in Jazan, which is on the Saudi border that is shared with Yemen. The hospitals at the borders were selected because they receive a large number of casualties, including civilians and soldiers from different countries, deployed during the armed conflict. There are 21 MoH hospitals in Jazan, with approximately 2225 beds in total (Ministry of Health, 2017). Seven of these hospitals were included in the study: All provide free-of-charge services for armed conflict cases and the public with presentations of other causes and origins. First-line hospitals were

smaller and closer to the border (within approximately 30 km), and second-line hospitals had greater bed numbers and operative capacities and were located within approximately 100 km of the border.

### Participants

The emergency nurses included those employed permanently in the seven EDs and nurses belonging to the Regional Backup Nurses for Disaster (RBND) group who were deployed to hospitals identified as having the highest need during disasters. There were approximately 220 emergency nurses from the targeted hospitals and 35 emergency nurses from the RBND-specialized group who were trained in disaster management to support the first-line hospitals. The RBND group was supervised by the Regional Nursing Administration, and they responded immediately when notified during armed conflict incidents to provide additional emergency nursing care to the hospitals receiving patients from the conflict zones. Hence, both RBND and embedded emergency nurse staff had the requisite experience to answer the interview questions.

### Inclusion criteria

Nurses from RBND and EDs within the seven hospitals were eligible for inclusion in the study if they had provided care for patients whose injuries arose from armed conflict. They required a minimum of a two-year Diploma of Nursing qualification and the ability to read and write in English to be included in the study.

### Interview questions' development

The interview questions about the core competencies needed in armed conflict were developed for emergency nurses who were either permanently employed in hospital EDs or were part of the RBND group. The key components of competence were identified in the literature as knowledge, attitude and skills. The components of the ICN disaster nursing competencies framework—such as sub-competencies or knowledge, skills and attitudes of what nurses should be able to do; what they need to know; and what skills and knowledge support them to perform their work—were considered in the development of the questions (International Council of Nurses, 2019).

### Participant recruitment

The recruitment of participants was undertaken between 20th June and 20th July 2019 in KSA. The first author contacted the Regional Nursing Administration, the Head of the RBND and Nursing Director and Emergency Department Director of the invited hospitals to seek access to advertise the study. A convenience method was used first to recruit the participants,



and then further participation was sought via the snowball method. Several information sessions were provided by the first author, and for those who could not attend, a contact number was on the advertising flyers for them to obtain information about participation. Advertising flyers were posted in the ED staff tearooms, nursing supervisors' offices and in nursing administration areas. The safety and security measures outlined by the first author's university and the health services were considered and implemented to safely undertake data collection.

## Data collection

Study packs were prepared with interview questions, consent forms and accompanying explanatory statements and were left in the staff tearooms, together with a sealed post box for posting the consent after it was signed by the participants. Interviews were conducted in a quiet private space at the workplace of both RBND and emergency nurses, during each participant's free time in the second-line hospitals or by phone. Notes were also made during and after the interviews, including for the audiotaped sessions. Interviewees were offered to have a support person accompany them if they wished, but none felt this was necessary. Nurses from the selected hospitals were interviewed, with data saturation reached at the 14th interview. A further interview was undertaken with no new data forthcoming. The longest interview lasted 38 minutes, while the shortest was 16 minutes.

## Data analysis

The data were analysed using the qualitative inductive content analysis approach suggested by Elo and Kyngas (2008), which included three phases: preparation, organizing and reporting (Elo & Kyngas, 2008). In the first phase, the first and second authors read and re-read the transcriptions several times, and when the data were sufficiently familiarized, the transcriptions were exported into NVivo. In the next phase, codes related to the study questions were identified and organized (NVIVO, 2019). Then, the codes were grouped based on the similarities and differences before being exported to a matrix. The final phase was reporting, and this involved grouping codes into subcategories, and then categories and lastly refined into main categories inductively (Elo & Kyngas, 2008). The abstraction process continued rationally where possible. An example of the abstraction process is presented in Figure 1.

## Trustworthiness

Several measures were applied in this study to enhance its trustworthiness, including a pilot test of the interview that was conducted with two trial participants to ensure the appropriateness and understanding of the questions, the test interview data were discarded securely. The transcription was under-

taken by a certified expert in this context (Misstranscription, 2019) and then reviewed several times by the first author to prevent errors in analysis. The codes, subcategories, categories and main categories were thoroughly reviewed and revised by team researchers, resulting in consolidated findings. Furthermore, the manuscript was reviewed by a Middle East language linguistic expert to improve the appropriateness and clarity of the transcript.

## Ethical considerations

Ethical approval to conduct this study was obtained from both the Directorate of Health Affairs of Jazan Research Ethics Committee (Registry no. 119/2019; approval no. 010/2019) and Monash University Human Research Ethics Committee (Project Number: 20330). A signed informed consent form for each participant was obtained. Because some interviews were not conducted in person, photographs of signed documents were sent to the first author by each participant prior to returning the signed hardcopy via the boxes placed in the tearooms. Pseudonyms were used for interviewees to maintain their confidentiality, with hard copies of the consent stored in a locked office at the university.

## FINDINGS

The interviews commenced with an exploration of the perceptions of emergency nurses' competencies in hospitals in the context of armed conflict. Fifteen participants were interviewed; nine of them were male, while six were female. Eleven of the nurses were Saudi nationals, and the remaining four nurses were non-Saudi: two from the Philippines and the other two from India. Their ages ranged between 26 and 40 years, and their experience in EDs ranged from 5 to 15 years. Six of the participants held a Diploma of Nursing, while nine held a Bachelor of Nursing degree. The participants' profiles are shown in Table 1.

The perceptions expressed by participants provided a different perspective of core competencies required for emergency nurses in the context of armed conflict, culminating in four main categories (see Figure 1).

## Personal preparedness for the role

When emergency nurses and RBND participants were asked about the required competencies of nurses receiving patients from armed conflict settings, various views about personal preparedness competencies were provided. These included being confident, having high levels of commitment to their role and patients and remaining calm under pressure when dealing with patients who have experienced armed conflict. These characteristics were also identified as key personal attributes of emergency nurses that were valued when working in these areas.

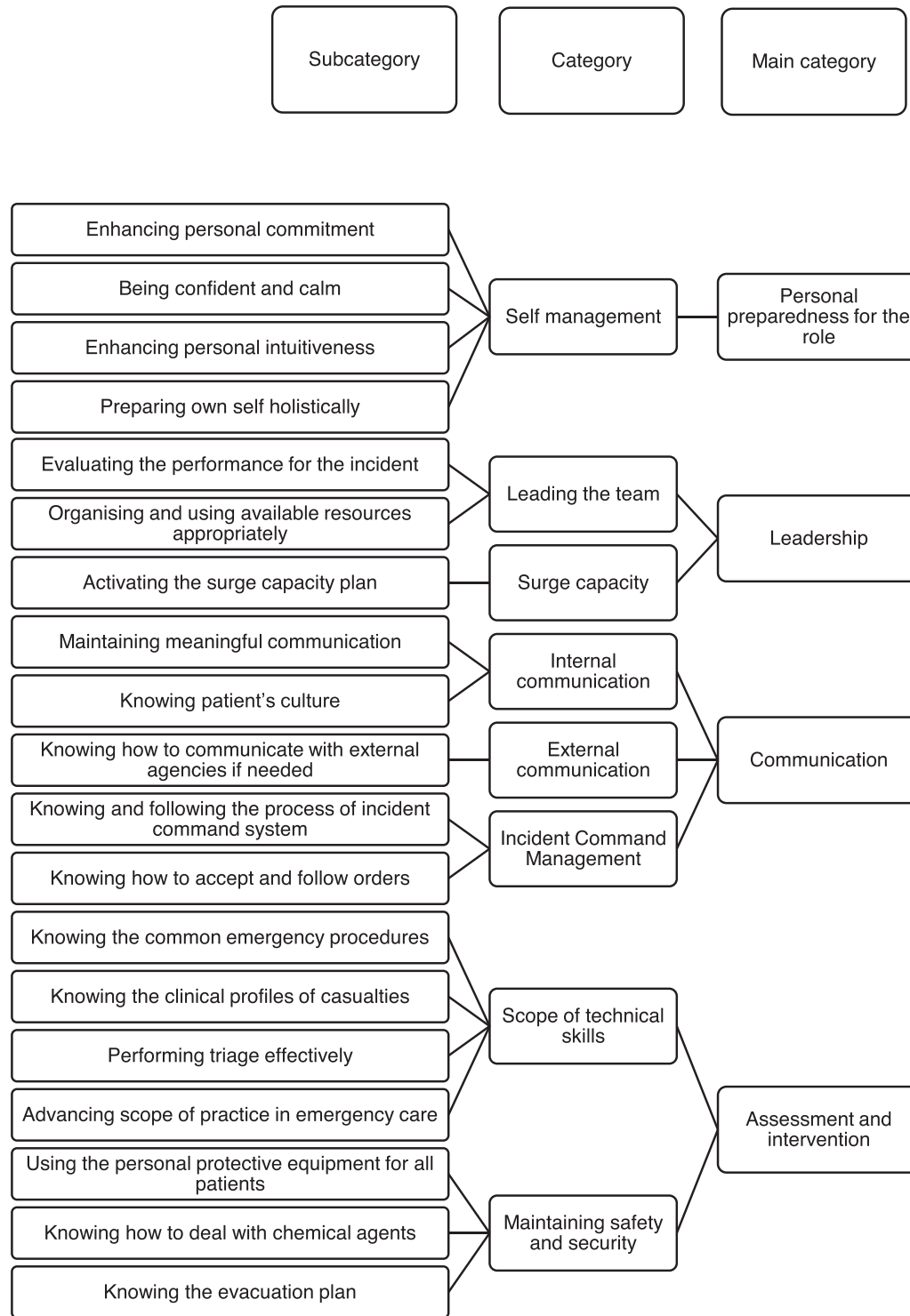


FIGURE 1 Abstraction of the findings using Elo and Kyngas' (2008) approach.

Confidence and calmness during the care of those arriving from armed conflict. (Fahad, RN)

We should be calm and quiet during the care following armed conflict. (Noor, RN)

Commitment and respect for the work and consider the responsibilities. (Thamer, RN)

To be successful in these specialized areas, participants believed new nurses should be able to readily adapt to working with victims of armed conflict. They needed to learn to understand their roles when receiving victims of



TABLE 1 Participant profiles.

Name (pseudonym)	Gender	Age group	Experience (years)	Qualification	Nationality
Wajdy	M	36–40	15	Diploma of Nursing	Saudi Arabia
Saleh	M	36–40	14	Diploma of Nursing	Saudi Arabia
Amnah	F	36–40	11	Bachelor of Nursing	Saudi Arabia
Sharifa	F	36–40	15	Diploma of Nursing	Saudi Arabia
Jill	F	36–40	12	Bachelor of Nursing	Philippines
Rashad	M	31–35	7	Bachelor of Nursing	Saudi Arabia
Noor	F	26–30	5	Bachelor of Nursing	India
Omar	M	36–40	17	Diploma of Nursing	Saudi Arabia
Natasha	F	36–40	10	Bachelor of Nursing	India
Sami	M	36–40	14	Bachelor of Nursing	Saudi Arabia
Lisa	F	31–35	7	Bachelor of Nursing	Philippines
Fahmy	M	36–40	13	Diploma of Nursing	Saudi Arabia
Thamer	M	31–35	10	Diploma of Nursing	Saudi Arabia
Rayan	M	31–35	12	Bachelor of Nursing	Saudi Arabia
Fahad	M	36–40	15	Bachelor of Nursing	Saudi Arabia

TABLE 2 Reported essential emergency procedures.

Procedures	Participants
Primary survey including airway, breathing, circulation, disability and exposure (ABCDE)	Rashad, RN; Fahmy, RN
Endotracheal intubation (ETT)	Noor, RN and Jill, RN
Tracheostomy insertion	Jill, RN
Intercostal drain (ICD) insertion	Noor, RN; Omar, RN

armed conflict, but it was recognized that they needed time to gain the experience and develop the confidence required to manage such patients and undertake their roles competently. Several participants explained:

I will tell nurses, they should be attentive. (Jill, RN)

New nurses need to adapt to the incident and know how to deal with it. (Thamer, RN)

Now we are receiving these armed conflict patients, and now we are confident and able to manage okay, no problem. (Natasha, RN)

One of the international nurses reported that emergency nurses needed to prepare themselves holistically by using various approaches to maintain their well-being while working in these unique settings. For instance, they needed to focus on their physical health, particularly because they often worked long hours and did not always have an opportunity to take a break to even have a meal. It was often more than just these

physical aspects of the nurses' own health that were issues of concern, however, especially for foreign nurses stationed far away from their families. The fear of being injured by the bombs detonating near them was expressed. Some also described that having faith in God and praying for help was crucial for them to work in this setting. One nurse spoke about this intensively:

I think that they should prepare nurses physically, mentally, emotionally and spiritually. (Sara, RN)

I can say that because physically sometimes we are working for longer hours, especially following the armed conflict we are extending our duties. Even sometimes we could not eat some food that you need to sustain your body. (Sara, RN)

Also, emotionally because basically, we are far away from our family and this kind of war, this war is not stopping. I fear that maybe some bomb will be thrown near here. I just have faith in God that everything will turn out fine. (Sara, RN)

## Leadership

Leadership skills were described as crucial for nurses to overcome the challenges they might face and to lead staff who they



were working with as needed, as explained by the following participant:

Leadership courses are great, and it helps me to overcome the stressors and lead the team. (Thamer, RN)

Nurses also felt that key parts of their leadership roles in EDs close to armed conflict zones included their ability to organize staff and other resources. They recognized that they needed to understand how to develop the assignment plan and allocate the staff and resources appropriately, as indicated in the following comments:

We will just make the staff arrangement, and all the trolleys like stretchers will be located outside to receive new patients. (Noor, RN)

Developing an assignment plan for nurses, arranging files beside each bed, including various [radiology and pathology] requests. (Thamer, RN)

Assigning experienced staff in the red zone. (Fahmy, RN)

Nurses explained that they should know how to evaluate the management of an incident thoroughly, as illustrated in the following quotes:

Evaluate the performance in accordance with the outcome and how long the incidents were handled, and the patients that were admitted and transferred. (Thamer, RN)

Check the incidents and number of patients and then distribute the patients in located areas such as red, yellow, green, and black...Evaluating the performance and outcome of dealing with incidents. (Fahad, RN)

Nurses reported that they should be able to activate the surge capacity plan when the hospitals became full or if they were informed that additional patients were coming. Some examples of surge capacity processes were given in the following quotes:

If the whole hospitals become full of patients, we transfer stable or yellow patients to another hospital. (Rashad, RN)

Prepare the ER and backup by seeing empty beds from female and paediatric ER. Put two kids in one bed. (Fahad, RN)

Discharge cold [less critical] patients and use all the hospital's capacity. (Fahmy, RN)

## Communication

The management of patients arriving following armed conflict is a collaborative effort between hospital staff and other governmental or non-governmental agencies. Cognisant of this need to collaborate, nurses felt they should know how to communicate with the relevant external agencies when needed, for instance, requesting transportation services, extra staff and supplies. The most frequent agencies that nurses communicated with for support were the Disaster and Emergency Administration and Red Crescent (ambulance service), and also other external groups involved in the care of casualties, as described by nurses:

Communicate and coordinate other agencies like Disaster and Emergency Administration, transportation, and Red Crescent. (Fahad, RN)

Communication with an external agency. (Omar, RN)

Situational staff, everybody has tasks and communication will be a channel between the administration and us, between us, and there is also outside communication. (Rayan, RN)

The emergency nurse participants stated that nurses should be able to communicate with coordinators from different agencies to receive more details about their patients. They also pointed out that being able to speak the same language as the patients was useful:

Communication in Arabic, we are speaking only Arabic here. Some patients cannot provide details, for example, an unconscious patient... We ask their coordinators from different nationalities, including those from Yemen and Sudan who can speak Arabic. (Natasha, RN)

We speak Arabic more and some English. During the armed conflict, I think it is not easy to speak only English because the majority working there, speak Arabic. (Saleh, RN)

Communicating with the public who have experienced armed conflict is also a very important skill for emergency nurses working with injured patients. One nurse succinctly described the importance of dealing with the public:

Knowing how to deal with the public and overcome the stressors is important. (Thamer, RN)



Another participant said that their expert level of competence enabled them to communicate effectively without even talking. This was an example of a meaningful sense of teamwork and collaboration during armed conflict, which was supported by the following quotes:

In terms of emergency, we already know what to do. Just by looking at each other, we already know you do this; you do that. (Sara, RN)

Well, I can see that proper communication between my workmates is essential. (Sara, RN)

Some nurses reported that it was important for them to know and follow the ICS sequence during armed conflicts, as indicated in the following:

Follow up the sequence of ICS [Incident Command System] and execute it. (Thamer, RN)

Know the incident command system process. (Sami, RN)

One of the nurses explained that they needed to know the process of receiving orders, who gives them, and how to respond to them:

As staff nurses, we know, there are some rules for following orders during armed conflict... We need to be aware of the way of order and where it is coming from, and how we would follow and accept. (Wajdy, RN)

## Assessment and interventions

When respondents were asked about the required technical competencies for nurses in the context of armed conflict, various essential emergency procedures were reported as being essential and are outlined and summarized in Table 2.

Nurse participants explained that key competencies they were required to have included assessment and intervention skills, clinical patient care and preparation of the settings they were working in. They discussed how they performed first aid, immobilized patients appropriately and arranged for their transfer to other hospitals for ongoing care, as necessary. Then they re-prepared the departments by re-stocking and re-checking throughout the shift as necessary and always at the beginning of each shift. Participants described these activities as follows:

We are doing just primary stabilisation as like first aid... Then we are transferring the patient

to the other hospitals... The remaining things are usually, we are doing the recheck again to confirm that everything is available. (Noor, RN)

How to immobilise and transfer patients. (Omar, RN)

Participants pointed out that it was critical that nurses knew how to deal with various complex injuries secondary to the armed conflict, including blasts, landmines, burns and gunshot injuries, as discussed in the following quotes:

It is mostly gunshot and mine bomb. (Fahad, RN)

We received emergency patients, some type of burn and ortho patients with different fractures. (Sharifa, RN)

More orthopaedic patients are presenting with amputation of legs... Some patients will be having internal bleeding and abdominal injuries. (Noor, RN)

Several participants reinforced that effective triage was a fundamental skill that nurses must master before they could work in the context of armed conflict.

Nurses needed to be able to assess and classify the patients into red, yellow or green categories. The participants talked about the importance of nursing expertise in applying the triage process that was necessary when receiving patients affected by armed conflict, as illustrated in the following quote:

We do need to accurately classify them as red case, yellow case, or green case and so in terms of how severe the case is. (Fahmy, RN)

Other nurses provided examples of interventions. An example of the advanced scope of practice identified as a necessary part of these nurses' competencies in the armed conflict was their ability to safely provide conscious sedation as needed. Nurses were educated and prepared for this procedure, which expanded the scope of their critical care service delivery during armed conflicts, as stated in the following quote:

We attended lectures and improved our knowledge about conscious sedation, and now we are allowed to give the conscious sedation. (Natasha, RN)

Identifying the patients' presenting conditions and past health histories was often difficult during armed conflicts because of the sheer volume of patients arriving at an ED concurrently, with some exhibiting reduced conscious states. The importance of obtaining accurate patient histories rapidly was highlighted because newly arriving patients might be



susceptible to infections or have been exposed to chemical, biological or radiological weapons requiring urgent attention and vigilant protection of the receiving staff. Therefore, participants explained, nurses should always prepare themselves by being ready to evacuate facilities at short notice and donning PPE for all patients, as described in the following:

I guess it is difficult if you do not have any idea about the history of the patient... So, I am preparing myself; usually, we are preparing gloves and protective equipment because we do not know the history of the patient. (Sara, RN)

We deal with chemical agents and that needs specific protection. (Thamer, RN)

Evacuation plan. (Thamer, RN)

## DISCUSSION

Each competency identified in this study represents a key skill for education, training and the required standard of care for emergency nurses in the context of armed conflict. Participants had firsthand experience in the areas that dealt with armed conflict patients, and they provided valuable insights about the topic. The identified qualitative findings, combined with results from a related quantitative study about core competencies in the context of armed conflict (Mani et al., 2023), could inform other nurses in similar context around the globe.

The study has highlighted several personal preparedness competencies about self-management that were identified when working in EDs close to armed conflict. In this study, personal preparedness was key to enabling nurses to be more confident and proficient when providing care in the context of armed conflict. Results from a US-based, three-round Delphi study supported the requirement that nurses have competencies in personal preparedness (Polivka et al., 2008). The North American authors described a range of personal nursing competencies including nurses focusing on knowing concepts, key terms and roles of nurses in disaster preparedness, being familiar with each facility's own disaster plan, communication tools and with their role in case of a surge event (Polivka et al., 2008). Hence, findings from Polivka et al. (2008) and ours complement each other in reinforcing that personal preparedness is a core competency requirement of nurses working in areas close to armed conflict.

A core competency recommended by participants related to leadership: as it was essential for emergency nurses to overcome stressors and lead the emergency responses during armed conflicts. This idea was consistent with other studies, which stated that during a disaster, strong leadership could improve the outcomes of patient care and the experiences of the team (Filmer & Ranse, 2013; Veenema et al., 2016). Therefore, it was suggested that specific education in leadership competencies could support nurses' preparedness for a future disaster incident and lead pull-out nurses as needed (Filmer & Ranse, 2013).

The attributes of nursing leaders for disasters were discussed in a study that included 10 categories such as ICS, teamwork, performing a role, cognitive abilities, communication, flexibility, problem-solving, calmness, character and being knowledgeable (King et al., 2016). These categories involve innate personal attributes not easily established by training. However, the identified attributes could be beneficial in the recruitment of emergency nurses for working in emergency care in armed conflict. By identifying competencies and characteristics, further development of leadership that is required to enable the successful performance of nurses in these settings may be further informed (King et al., 2016) and augmented.

The International Council of Nurses (2019) outlined the domain of communication competency for disaster management. It was described as a way of conveying basic information through one's area of work to others and documenting decisions established. This study has also highlighted several competencies of communication, such as how to deal with the public, communicate with external agencies and understand patients' cultures. Another study also highlighted various communication competencies in the context of armed conflict. This included using specific communication tools; providing up-to-date information regarding health care issues and resource needs; and communicating with appropriate individuals, agencies, authorities and ambulance services immediately as needed (Mani et al., 2023). Other studies supported the idea of communication competencies as vital for effective disaster management, in particular how to communicate with people from different cultures during disaster management (Starrs, 2017). Those competencies can facilitate communication in an interdisciplinary team and work within the incident management system to optimize patient outcomes from armed conflict.

The International Council of Nurses (2019) also highlighted the importance of assessment and intervention competencies for all nurses. The assessment of patients who have experienced trauma in armed conflict mainly relates to gathering data about assigned patients, relatives or communities, while the intervention is the actions undertaken by nurses based on the previous assessment (International Council of Nurses, 2019). This also was confirmed in another study as the following competencies were ranked as extremely important: first-aid principles; implementing appropriate nursing interventions following emergency and trauma care resources; and maintaining an ongoing assessment of patients to determine the need for a change of care (Mani et al., 2023). Regular practice of the required competencies reduces the risk associated with nurses' responses during disaster. At the time of the disaster, the possibility of identifying the gaps in competence and providing the required training is important to improve nursing care (World Health Organization [WHO] & International Council of Nursing [ICN], 2009). It is unsurprising that in the present study, various perspectives of assessment and intervention competencies were expressed as desirable by participants, and they included maintaining expertise in common emergency procedures and knowing the range of possible





clinical profiles of patients who have experienced armed conflict, and proficiently performing the triage of such patients.

The security and safety of nurses are essential in the context of armed conflict. Healthcare providers are being threatened, detained and killed. For instance, in Syria, healthcare providers have been killed (Bou-Karroum et al., 2020). In Afghanistan, approximately 92 attacks in hospitals have occurred (Bou-Karroum et al., 2020). In Syria and Iraq, several healthcare providers left their countries, which caused a scarcity of both staff and resources, which complicated the healthcare services (Bou-Karroum et al., 2020). The findings highlighted strategies for emergency nurses to maintain their security and safety in those situations. This included the need for nurses to prepare themselves holistically using a range of appropriate approaches in the context of armed conflict. In addition, another study also provided useful competencies, including maintaining personal safety and the safety of others, maintaining a personal and family preparedness plan, identifying human behaviours that put individuals at risk and identifying common human stress reactions during a disaster (Mani et al., 2023).

In the context of armed conflicts, the hospital may be overwhelmed suddenly by waves of patients with various injuries including bullets or fragments of weapons injuries that can damage the internal organs with blast shock waves and burns (Atiyeh et al., 2007). This situation is different from routine nursing care, and patients' conditions could deteriorate rapidly. Unsurprisingly, findings highlighted that emergency nurses should know the common procedures and clinical profile of patients in the context of armed conflict. In addition, another study emphasizes the importance of understanding the burns, blast and crush injuries in the context of armed conflict (Mani et al., 2023).

The findings also showed that the scope of practice was advanced as emergency nurses were able to provide conscious sedation safely and independently as needed to save lives in those settings. This procedure required further education and preparation. Expanding the scope of critical care service in disastrous and limited-resource settings is helpful in meeting the needs of care and reducing morbidity and mortality.

## LIMITATIONS

The setting for data collection was near armed conflict areas, and this may have affected the study in several ways, including the duration of the interviews the participants were able to commit to and whether they could be conducted in person or via telephone. However, the safety and security measures of Monash University and the health services were considered and implemented to undertake data collection safely and appropriately. The sample size was identified following the rule of data saturation approach, with data saturation reached after 14 interviews. A further interview was undertaken with no new data forthcoming. The English language data collection was mitigated by the assistance of an experienced linguist with Middle East language expertise.

## CONCLUSION

This study identified emergency nurses' perceptions of their core competencies for hospital-based emergency care when receiving patients from armed conflict situations. Personal preparedness, leadership, communication, assessment and intervention were identified as contributing to calmness of character, confidence in care and cultural awareness for care in this setting. Future research on the implementation of these core competencies in the standard of care, in education and training or realistic simulations for hospital nurses and multidisciplinary studies are recommended to enhance armed conflict response and patient outcomes.

## IMPLICATIONS FOR NURSING PRACTICE AND HEALTH POLICY

The findings of this study are important and novel because they were developed from the perspectives of emergency nurses who have experience in receiving patients from armed conflict firsthand. Therefore, these findings can inform policymakers and other leaders in these settings to develop the standard of care, education and drills for hospital nurses to optimize armed conflict care response outcomes.

The core competency of personal preparedness was key to enabling ED nurses to be more confident and proficient when providing care in armed conflict areas. This could lead to calmness of character and enhanced problem-solving abilities, which then would likely lead to improved quality and safety in patient care.

Leadership competency was significant for emergency nurses to overcome stressors and lead the emergency responses during armed conflicts; therefore, strong leadership could improve the outcomes of care and experiences of the team. The right attributes and educational preparation of leaders are vital to the comprehensive support of nurses in disasters in the future.

## AUTHOR CONTRIBUTIONS

Study design: ZM, LK, VP. Data collection: ZM. Data analysis: ZM, LK, VP. Study supervision: LK, VP. Manuscript writing: ZM. Critical revisions for important intellectual content: ZM, LK, VP.

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The authors declare there is no conflict of interest for this study.

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## REFERENCES

- Al Thobaity, A., Plummer, V. & Williams, B. (2017) What are the most common domains of the core competencies of disaster nursing? A scoping review. *International emergency nursing*, 31, 64–71. <https://doi.org/10.1016/j.ienj.2016.10.003>
- Al Thobaity, A., Williams, B. & Plummer, V. (2016) A new scale for disaster nursing core competencies: development and psychometric testing. *Australasian Emergency Nursing Journal*, 19(1), 11–19. <https://doi.org/10.1016/j.aenj.2015.12.001>
- Arbon, P., Cusack, L., Ranse, J., Shaban, R.Z., Considine, J., Kako, M., Woodman, R.J., Mitchell, B., Bahnisch, L. & Hammad, K. (2013) Exploring staff willingness to attend work during a disaster: a study of nurses employed in four Australian emergency departments. *Australasian Emergency Nursing Journal*, 16(3), 103–109. <https://doi.org/10.1016/j.aenj.2013.05.004>
- Atiyeh, B.S., Gunn, S.W.A. & Hayek, S. N. (2007) Military and civilian burn injuries during armed conflicts. *Annals of Burns and Fire Disasters*, 20(4), 203–215. <https://pubmed.ncbi.nlm.nih.gov/21991098> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3188083/>
- Bou-Karroum, L., El-Harakeh, A., Kassamany, I., Ismail, H., El Arnaout, N., Charide, R., Madi, F., Jamali, S., Martineau, T., El-Jardali, F. & Akl, E.A. (2020) Health care workers in conflict and post-conflict settings: systematic mapping of the evidence. *PLoS ONE*, 15(5), e0233757. <https://doi.org/10.1371/journal.pone.0233757>
- Conlon, L. & Wiechula, R. (2011) Preparing nurses for future disasters: the Sichuan experience. *Australasian Emergency Nursing Journal*, 14(4), 246–250. <https://doi.org/10.1016/j.aenj.2011.08.001>
- Daily, E., Padjen, P. & Birnbaum, M. (2010) A review of competencies developed for disaster healthcare providers: limitations of current processes and applicability. *Prehospital and Disaster Medicine*, 25(5), 387. <https://doi.org/10.1017/S1049023X00008438>
- Elo, S. & Kyngas, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Filmer, L.B. & Ranse, J. (2013) Who is my leader? A case study from a hospital disaster scenario in a less developed country. *Australasian Emergency Nursing Journal*, 16(4), 170–174. <https://doi.org/10.1016/j.aenj.2013.08.004>
- Geneva Declaration Secretariat. (2015) *Global burden of armed violence: every body counts*. <http://www.genevadeclaration.org/measurability/global-burden-of-armed-violence/global-burden-of-armed-violence-2015.html>
- International Committee of The Red Cross. (2019) *Briefing on humanitarian situation in Middle East* <https://www.icrc.org/en/document/colombia-five-armed-conflicts-whats-happening>
- International Council of Nurses. (2019) *Core competencies in disaster nursing: version 2.0*. [https://www.icn.ch/sites/default/files/inline-files/ICN\\_Disaster-Comp-Report\\_WEB\\_final.pdf](https://www.icn.ch/sites/default/files/inline-files/ICN_Disaster-Comp-Report_WEB_final.pdf)
- King, R.V., Larkin, G.L., Fowler, R.L., Downs, D.L. & North, C.S. (2016) Characteristics of effective disaster responders and leaders: a survey of disaster medical practitioners. *Disaster Medicine and Public Health Preparedness*, 10(5), 720–723. <https://doi.org/10.1017/dmp.2016.24>
- Levy, B.S. & Sidel, V.W. (2016) Documenting the effects of armed conflict on population health. *Annual Review of Public Health*, 37(1), 205–218. <https://doi.org/10.1146/annurev-publhealth-032315-021913>
- Loke, A. & Fung, O. (2014) Nurses' competencies in disaster nursing: implications for curriculum development and public health. *International Journal of Environmental Research and Public Health*, 11(3), 3289–3303. <https://doi.org/10.3390/ijerph110303289>
- Mani, Z.A., Kuhn, L. & Plummer, V. (2020) Common domains of core competencies for hospital health care providers in armed conflict zones: a systematic scoping review. *Prehospital and Disaster Medicine*, 35(4), 1–446. <https://doi.org/10.1017/S1049023X20000503>
- Mani, Z.A., Kuhn, L. & Plummer, V. (2023) Emergency care in the context of armed conflict: nurses' perspectives of the essential core competencies. *International nursing review*, <https://doi.org/10.1111/inr.12870>
- Marin, S. M. & Witt, R. R. (2015) Hospital nurses' competencies in disaster situations: a qualitative study in the south of Brazil. *Prehospital and disaster medicine*, 30(6), 548. <https://doi.org/10.1017/S1049023%2D7;1500521X>
- McClean, D. (2010) *World disasters report 2010: focus on urban risk..* Geneva: International Federation of Red Cross and Red Crescent Societies.
- Ministry of Health. (2017) *Ministry of Health reports*. <https://www.moh.gov.sa/Ministry/MediaCenter/Publications/saudi/MOH-Annual-Report-1437-1438H.pdf>
- Misstranscription. (2019) *Certified organization for the transcription*. <http://misstranscription.com.au>
- NVIVO. (2019) *Qualitative data analysis software*. | NVivo—QSR International. <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>
- Polivka, B.J., Stanley, S.A.R., Gordon, D., Taulbee, K., Kieffer, G. & McCorkle, S.M. (2008) Public health nursing competencies for public health surge events. *Public Health Nursing*, 25(2), 159–165. <https://doi.org/10.1111/j.1525-1446.2008.00692.x>
- Ranse, J., Lenson, S. & Aimers, B. (2010) Black Saturday and the Victorian bushfires of February 2009: a descriptive survey of nurses who assisted in the pre-hospital setting. *Collegian*, 17(4), 153–159. <https://doi.org/10.1016/j.colegn.2010.08.002>
- Sangkala, M.S. & Gerdtz, M.F. (2018) Disaster preparedness and learning needs among community health nurse coordinators in South Sulawesi Indonesia. *Australasian Emergency Care*, 21(1), 23–30. <https://doi.org/10.1016/j.auec.2017.11.002>
- Starrs, R. Mullins, M.R. & Nakano, K. (Eds.) (2017) Disasters and social crisis in contemporary Japan: political, religious, and sociocultural responses. *Japanese Studies*, 37(2), 276–278. <https://doi.org/10.1080/10371397.2017.1328965>
- United Nations. (2022) *Ninety per cent of war-time casualties are civilians, speakers stress, pressing Security Council to fulfil responsibility, protect innocent people in conflicts*. <https://press.un.org/en/2022/sc14904.doc.htm>
- Veenema, T.G. (2019) *Disaster nursing and emergency preparedness for chemical, biological, and radiological terrorism, and other hazards. 4th edn*. New York: Springer Publishing Company, LLC.
- Veenema, T.G., Griffin, A., Gable, A.R., MacIntyre, L., Simons, R.N., Couig, M.P., Walsh, J.J. Jr., Lavin, R.P., Dobalian, A. & Larson, E. (2016) Nurses as leaders in disaster preparedness and response: a call to action. *Journal of Nursing Scholarship*, 48(2), 187–200. <https://doi.org/10.1111/jnu.12198>
- World Health Organization [WHO] & International Council of Nursing [ICN]. (2009) *ICN framework of disaster nursing competencies*. Geneva: ICN.

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