

Perspectives on Ethical Nursing Practice In Disaster During The Hajj 2015

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Abstract: Nursing care that observes ethical practice would be critical during a disaster. Disaster nursing is a branch of nursing practice that specializes in dealing with all kinds of catastrophes. Disaster nurses need to be prepared for dealing with ethical issues that arise during disasters. This research aimed to explore the ethical perspectives among emergency nurses who responded to disaster events in Saudi Arabia. Qualitative, descriptive, exploratory method was developed using semi-structured, face-to-face interviews. Five open-ended questions were used in the interview to discuss the nurses' competency and commitment in terms of the ethical challenges associated with providing care to survivors during disaster. The interviews were held in two hospitals located in Mecca city with eight nurses from June to July 2016 who have been involved in the collapse of the crane and stampede disasters that occurred in Mecca city, 2015. All the collected data were transcribed and translated appropriately. Themes and subthemes were used in order to explore their ethical challenges in disasters. The three themes are nurses' ability and experiences, disaster intensity and the realities of practice. The nurses' ethical competency level and commitment in this study may serve as a guide to design disaster courses based on ethical preparation as well as providing a basis for further research.

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I. Introduction

Ethical practice is the urge to understand the right and wrong in human practice. However, in reality, they may not have been adequately prepared, and they may not be able to apply this to the actual disaster setting. In addition, disaster nurses should be involved in both most effective clinical skills and ethically appropriate practice for the disaster occurrences¹. Considering the ICN Code of Ethics, it is important for nurses to have an utmost respect for human rights, and human dignity. The same code presents the guidelines suitable for nurses to ensure that they respect the rights of affected people and making the appropriate decisions that does not contravene with their standard practices². This study aimed to explore the ethical perspectives and ethical challenges among emergency nurses who responded to the two disasters in Saudi Arabia, Mecca city, 2015. During their day to day encounters, nurses face a variety of ethical challenges regardless of their station of work. Ethics is generally the urge to understand that which is right and wrong in human experiences¹. An ethical dilemma is a problem which does not have any satisfactory resolutions. This means that various ethical choices are required in the same ethical dilemma and the choices do not need to be right or wrong. The position of a nurse regarding the ethical dilemma he or she is facing should end up in a common good of the victims and the affected population. In the preparation phase, nurses could face the dilemma of resource distribution and patients prioritisation³. Hence, a nurse has to determine the basic best of his or her empirical knowledge in order to know who should be got the limited resources. For example, during providing the care for victims, there are those who need urgent care and hence should be given priority and those who have the limited lifespan and does need to be given the costly attention such as life support⁴. Some studies identify the ethical issues that can arise during a disaster which includes the treatment priorities, lack of privacy, consent prior treatment, cultural or religious beliefs^{3,5,6}. Significantly, the level of nursing awareness of ethics during a disaster plays a big role in the saving of lives legally and in an acceptable manner. Virtues such as fairness, respect, solidarity and limiting harm are key to considered during ethical dilemma⁷.

Nevertheless, in most instances of a disaster, the nurses face diverse challenges as they work in applying the codes of ethics which are similar to their usual processes. One of the factors that could be affected by nursing practice during a disaster is the scope and the disaster situation scale⁸. It is evident that the disaster occurred is predominantly different as opposed to the typical situation which often contributes to ethical challenges that during the nursing care⁹. The disasters are diverse in regard to their area of occurrence, time-span and extent. In most instances, there may not be one-size-fits-all process suitable for answering the ethical questions which are evident in the delivery of nursing care in entirety¹⁰. On 11th September 2015, Saudi Arabia suffered from the crane collapse disaster which resulted in many casualties among the attendants in the Holy

Great Mosque at Mecca city¹¹. In another report in Saudi Arabia by the Ministry of Interior (2015) confirmed that more than 450 pilgrims succumbed to the disaster with more than 700 people heavily injured due to overcrowding and stampede at the time of the Hajj seasons that occurred annually¹². Saudi Arabia has a unique position in the Islamic world, as it embraces the two holiest cities of Islam, Mecca and Medina. About two million pilgrims from all over the world perform the Hajj annually and this considered as strong point leading to effective preparedness not only medically but also by increasing other resources such as manpower³. Accordingly, this research aimed to explore the ethical perspectives and ethical challenges among emergency nurses who responded to two disasters in Saudi Arabia, Mecca city, 2015.

II. Material And Methods

To explore ethical perspectives among emergency nurses who responded to two disasters events in Saudi Arabia.

Study Design: Qualitative, descriptive, exploratory research approach was employed. Practically, semi-structured and face-to-face interviews were carried out among all the participants with the questions enumerated in [Table1]. Five open-ended questions were used in the interview to discuss the nurses' ethical challenges in relation to providing care to victims during disasters event¹⁴.

Table1. Interview questions.

1-Tell me about your nursing experience in disaster events?
2-Tell me about your sources of knowledge on preparation for ethics in disaster?
3- What are ethical issues you have experienced in any of the following areas during disaster events and how have you managed them?
• Respect and privacy
• Justice and equity
• Decision making
• Prioritization and triage
• Level of standards care
• Ethical responsibilities of nurses (e.g. documentation, data management, resource management).
4-Can you give me any other example of ethical challenges and issues arising during patient care in disaster which you didn't anticipate and how you managed it?
5-How prepared or how competent would you describe yourself for ethical decision making?

Data quality: In order to examine the extent of the trustworthiness of the qualitative research, four criteria were adopted. The criteria consisted of credibility, transferability, dependability and conformability¹⁵. Firstly, credibility was elicited by building trusting relationships with the respondents before the start of the interview and ensuring the accuracy of the data collected through interviews. The thematic transcription was brought together by the respondents and their findings established. Secondly, transferability was ascertained through adopting open-ended questions in the facilitation of participant's free articulation, delivery of opportunities to the participants and clarification of their responses upon their request. To ensure that the themes do not relate the ones named, the researcher ensured that they returned initial text in specific themes. Thirdly, the dependability was established through maintenance of accuracy of the distinct verbatim transcriptions where data was analysed and later evaluated on the peer debriefing. Lastly, the conformability was carried out through reduction of biases through maintaining non-judgmental attitudes in the period of research process and clarification of aspects with the respondents as required. To ensure that future data verification was possible, interview data, field notes and similar information were maintained.

Research ethics: This study was approved by the ethics committee of Monash University, Australia (CF16/1504-2016000795) and Ministry of Health in Saudi Arabia under the project number (252-4817). An assurance detailing to all of the participants was provided that their individual information and recorded materials would be treated with the highest level of confidentiality through maintaining their anonymity of the study publications. Accordingly, written consent was obtained from all participants prior each interview.

Setting and sample: Two hospitals located in Mecca city were invited to participate, A snowball sampling strategy was employed to enhance the recruitments in the basis of convenience of the sample of the respondents in the hospitals with a specific number of four nurses in each hospital¹⁶. Total of eight nurses with experience of Mecca disasters was selected. All the selected were registered nurses had approximately no less than one-year experience in the emergency department and handling disasters in-hospital or out-of-hospital environment. Additionally, it was a requirement that the respondents were involved in either of the two Mecca disasters. The disasters were either the crane collapse or the stampede disaster of 2015. There does not exist any limitation concerning age or qualifications levels to the emergency department nurses.

Data collection: The data of this study was collected in one month from June to July 2016 in the concerned two hospitals. The interviews were conducted in a silent room housed in the emergency department for approximately (25-40) minutes. To ensure that the nurses explicitly presented their ideas and views, diversity in language was used (English and Arabic). Three of the interviews were done in Arabic while the other part was done in English. A smartphone was used for the purpose of recording the interviews. However, this was done after receiving the consent form signed by all the respondents. The data saturation was progressive to the point where the occurrences of the repetitive themes without any new data.

Data analysis: An official office was adopted to ensure that all the Arabic and English collected data were efficiently transcribed and translated appropriately. The participants coding was anonymous with the authors working together in coding the collected data. Additionally, through the application of qualitative methods, the resulting themes were equally discussed by the researchers. Finally, the transcripts and a summation of primary results from codes and categories were evaluated by the researchers for developing validity. There were three themes established in this study and subthemes are discussed in more detail below and are summarized in [Table 2]. The main themes include 1) Nurses ability and experiences, 2) Disaster intensity, 3) Realities of practice.

Table 2. Themes and subthemes.

Themes	Nurses' ability and experiences	Disaster intensity	Realities of practice
Subthemes		Respect and privacy	Shortage of staff
Subthemes		Justice and equity	Relatives
Subthemes		Prioritization and triage	Communication
Subthemes		Decision making	
Subthemes		Level of standard care	
Subthemes		Documentation	

III. Results

Demographics data: According to the [Table3], there were two males and six females selected as participants who have had an intermediate degree and bachelor's degree in nursing. The rationale for this was oriented on the fact that those are the basic qualifications for a nursing technician and a specialist nurse. The participants were aged between twenty-five to forty years with an experience of approximately one to fourteen years that include emergency department experience. Five of them were non-Saudi nurses while the others were Saudi citizens. All the non-Saudi nurses have had experiences from their individual countries while one of the participants had a disaster experience in the original country. While five of the participants were involved in the crane collapse and stampede disasters but the other three participants were just involved in the crane collapse disaster. However, the female participants have involved as a staff nurse in the emergency departments during the various type of disasters while the males had worked as the emergency manager in both disasters.

Table 3. Demographic data.

Character	Age	Sex	Origin country	Experiences	Qualifications	Involved in	Position in disaster
A1/R	28	F	Philippine	3 years overseas as a general nurse. 1 year in Saudi Arabia as ER nurse.	Specialist nurse.	Crane collapse.	ER nurse.
A2/A	39	M	Saudi	14 years in Saudi Arabia including ER manager.	Nursing technician.	Crane collapse.	ER manager.
A3	29	F	India	2 years overseas as ER nurse, 4 years year in Saudi Arabia as ER and ICU nurse.	Specialist nurse.	Crane collapse.	ER nurse.
KF1/E	30	F	Philippine	3 years overseas as a general nurse. 1 year in Saudi Arabia as ER nurse.	Specialist nurse.	Crane collapse and stampede.	ER nurse.
KF2/K	36	M	Saudi	1 year and 10 months in Saudi Arabia as ER manager.	Specialist nurse.	Crane collapse and stampede.	ER manager.
KF3/L	33	F	India	2 years overseas as a ER nurse. 4 years in Saudi Arabia as ER nurse.	Specialist nurse.	Crane collapse and stampede, and fire disaster in the origin country.	ER nurse.
KF4/S	26	F	Philippine	4 years overseas as a general and ER nurse. 2 years in Saudi Arabia as ER nurse.	Specialist nurse.	Crane collapse and stampede.	ER nurse.

KF5/A	35	F	Saudi	5 years in Saudi Arabia including ER nurse.	Nursing technician.	Crane collapse and stampede.	ER nurse.
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Thematic analysis: Three themes would be used to discuss the nurses' ethical challenges in relation to providing care to the victims during disaster. First, the nurses' ability and experiences were different and this typically relating to their competency level and their response to such situation. Secondly, the intensity of how a disaster would affect ethical principles shall also be explored. The third theme will explain the realities of nursing practice and how the existence of barriers associated with the application of ethical principles.

Theme 1: Nurses ability and experiences:The application of ethical care can be involved in the whole nursing interaction process such as triage skills, treatment skills, ongoing assessment and interventions, documentation, psychological and physical care during the whole disaster phases. Based on the findings of the study, the nurses' ability and experiences were varied on the basic understanding of ethical concepts in catastrophes which have been depended on their knowledge and education filed, experiences and their own beliefs.

"I am not sure everything I had done was ethically correct, as I am a new staff and I was not confident enough. But, I tried to apply what I had learned during my college days to my best level. " A1.

"Ethical challenge for me is to respect the belief, culture, custom and religion of others. Umm, of course, providing care and building trust also added to that." A4.

"The most difficult situation I faced in my 13 years of experience as a male is that to handle a female patient and keeping the ethical value. But I respect them, and I prioritize female nurses to provide the care for female patients." A2.

It can be seen that a nurses experience would play a significant role in providing efficient ethical care during disaster situations. Most of the participants thought observing ethical behaviour as well as possessing moral commitment would be important in the field. Although, there were also some nurses who thought that dealing with patients ethically through their beliefs, understanding and attitude would be a kind of standard care instead of an exceptional competency.

"As we all know, in the six international safety goals of the patient, that we need to provide privacy on any procedure, even in checking blood pressure, we need to, at least, make our patients feel secure that they will trust us as care givers" KF1_E.

"My idea is, I believe that ethical knowledge can be gained from our home itself. No matter how much educated you are, we are ethical attitudes lies within us and can be practised in every aspect of life.KF4_S.

Some foreign nurses also thought that the subject of ethics is important in terms of education, with some citing that they were able to develop their ethical competency through their nursing study. *"We've this subject "ethics" in nursing, ethics which teach you how to deal with the patient effectively, how to make conversation with patient and how to respect patients. Even under pressure you need to work according to what is right. Nurses say this is a profession full of conscience, so if patient will come weather the patient is male or female, poor or rich, you need to render care to the patient regardless of anything, and you need to give care because we are in a profession to save lives." KF3_L.*

"For me I will grade myself 9\10 because, I think, I have studied well in ethics" KF5_A.

The level of ethical knowledge for some of the participants had also increased due to the practical experience gained during disasters. Improvements in commitment and competency due to saving the lives of patients was seen as a great experience by nurses.

"Yes, during the disaster I had learned a lot about applying ethics in such situation" A1_R.

"As a human, I felt very sad due to that disaster, but thanks God, I am proud of myself, because this disaster led me to be stronger than any situation in life could I face" A3_A.

"I got a chance to intubate the patient, usually, ER specialist is authorized to do such invasive procedures but during that day the patient-doctor ratio was high, and the flow of critical patient was uncontrolled, and I cannot wait for the doctor to intubate since my patient was in respiratory arrest." Thanks God" .KF5_A.

At the same time, some nurses also felt confident in teaching other nurses about their ethical experiences during these disasters.

"In case it happened, I want to teach them my experience because they do not know how to manage in code red time, but before Hajj this year, I will teach them my experience, to prepare for Hajj, and I will inform my manager about that" KF3_L.

There were also nurses who showed sympathy towards their patients during the disaster, which can be a very horrific situation particularly for nurses who have less experience in dealing with catastrophes. Sympathy can help reassure patients that you understand what they are going through. At the same time, nurses working in disasters should avoid excessive demonstrations of sympathy because it could increase a patient's fear. The purpose of sympathy should be to show the patient that the healthcare providers will address his/her problem in a short period and that everything will eventually improve.

"Yes, I did. I think I dealt with all of my patients with sympathy way and I was not sure what to do when I had seen blood on the floor." A1_R.

Expert nurses were also seen as dealing with patients with empathy due to their greater experience in disaster situations. Through empathy, nurses in the disaster prioritised the patients based on their individual injuries.

"Sure, my experience gives me this knowledge to treat the patient who has a high chance to live rather than others who have less chance to survive" A2_A.

On other hand, nursing managers in disaster situations provide the directions for facilitating the work of other members particularly nurses. According to the findings, multiple roles would be performed by emergency managers during disasters which would depend on the availability of resources. Accordingly, effective communication between emergency managers in hospitals and the managers engaged in the actual disaster situation can help enhance the preparedness of hospital staff, beds and the medical resources which would address the right of patients to be treated.

"In the first steps, I had informed all staffs including doctors, pharmacologists and radiologist, in order to prepare them according to the cases that will come to the hospital, besides, I had even requested from the pharmacists to prepare more crash cart." KF2_K.

Besides the role performed by emergency managers, the management of nurses coming from different hospital departments or the volunteer nurses from various hospitals would be very important in order to ensure smooth operations. Together with the provision of medical equipment, these nurses can provide critical assistance during disasters.

"Organizing, requesting the medical resources and leading emergency staff are important in that time" A2_A.

A significant observation was that the nurse's levels of competency and commitment during a disaster would vary, depending on their ability to provide care in such situations. Based on most of the remarks made by participants, self-management would be one of the most critical personal attributes during instances of disaster. There are two subcategories for this category. The first is acclimatising to conditions or being flexible, while the second would be the ability to exert emotional "self-control".

"I received 10 patients in one hours at that time, it was really difficult for me" A3_A.

"I think the nursing job is really tough because dealing with life is not easy. The things that I had learned during college days along with the daily learning is to be applied in the practical settings is really incredible. I am thankful that I have got an opportunity to come and practice this in the holy city and I will try my level best to provide holistic care to promote patients health." KF4_S.

The participants stressed that disaster nurses should have specific information about the disaster so that they can prepare themselves and be more efficient as health care providers. It would be critical for a disaster nurse to be familiar with threats to life for triage victims because this helps the nurses in prioritising the patients. In addition, a competent nurse in a disaster would need to have the capability to act fast, be patient, autonomous as well as possess a holistic view when caring for victims. Skilled nurses also should be able to self-manage themselves, be critical thinkers and have high self-esteem.

"Yes, of course, because you see in regular times, you are relaxed, but During a disaster situation due to the adrenalin rush, we will be highly stressed and encounter difficult to think appropriately. To me, being a nurse its essential to train ourselves to be relaxed and proactive." KF1_E.

"I motivate myself before my duty; being an emergency nurse I should anticipate emergency situation always. So, I am talking to myself that be prepared all the times to render maximum care to the patients." KF4_S.

Generally, teamwork would be essential during all the phases of a disaster situation. Cooperation would not only be important among healthcare providers, but also with patients as well as relatives. The most important thing with teamwork is how it would help to rescue the lives of patients by saving time particularly in CPR rooms during disasters. At the same time, respect among team members would also be an important aspect that could help ensure that work would be continuous.

"If I am busy I will call other staff to help me, thanks God my colleagues were helping a lot, so I don't feel a trouble" KF5_A.

"Respect and to be respected is the most important factor for the smooth working environment. With the help of ethical knowledge, this can be practised well especially in the disaster situations. Keep always in mind that I am a nurse and I should have a professional relationship towards all health workers." KF3_L.

Additionally, based on the participants experiences, they had shown high levels of commitment and competency in attending to the patients in the hospital during moments of disaster even if they were not scheduled to work at that time. Nurses who were also retired or had been working in other hospitals, also gave their help in attending to patients.

"I still remember that I was assigned in night shift and I had received a message in the ER WhatsApp group that there was a disaster happened and the hospital is receiving so many victims. I immediately came for the duty even though I was at night shift." KF4_S.

Theme 2: Disaster intensity: The intensity of the disaster had varied effects on both health institutions. The crane collapse disaster affected the A Hospital more than King Faisal Hospital, while the stampede disaster affected the King Faisal Hospital more than the A Hospital. The causes of the variable disaster intensity can be attributed to the distance of disaster from the hospitals location as well as the status of the patients. In the crane collapse, A Hospital received more than (300) cases within five hours, and almost all of them were trauma cases. On the other hand, the B Hospital received more than (360) cases within six hours in the stampede disaster. Details from the B hospital revealed that (180) cases required CPR. Furthermore, (120) cases required intubation within four hours and the other cases were cold. Some nurses received anywhere from (20) to (30) patients within four hours. In the following section, the participants shared their thoughts on the intensity of the disaster and how that affected six subthemes which includes respect and privacy, justice and equity, prioritisation and triage, decision-making, level of standard care and documentation.

"During disaster, some patients are neglected. Some patients are already arrived hospital but still at the floor without bed. For me, I think this need to be improved especially during disasters." KF1_E.

"We don't care about privacy we care about patient life not because we are bad nurse but because the situation leads you to be like this, for me I could not document anything during disaster because of the intensity of disaster" KF2_K.

"It's very hard, because actually if you're in this situation you'll not ask, you'll just render care. But if the patient is conscious" KF4_S.

Sub theme 2.1: Respect and privacy: Respect is a broad concept when it comes to healthcare delivery. This can refer to how disaster would be able to acknowledge the rights of patients under local and international laws. Participants in this study agreed that it is important to bestow respect on patients. There was a debate however on the topic when disaster intensity was considered. Some of them believed that privacy and respect would be important during the provision care but there may be no time or place available during a disaster situation. Others also explained the privacy concept as simply giving the patient the right to be treated.

"No, I think no. It is impossible to respect as the casualties are more and equal attention to be paid for all will be difficult as there were only three nurses during that time. Moreover, the priority care should be rendered to the most critical patients." A1_R.

"There were more than a hundred victims and some even lay down on the floor and the privacy with curtains was difficult during this situation." KF1_E.

"No, we cannot give privacy totally, especially in the disaster situation because the causalities are more than the staff ratio. If the patient was covered with curtains, then the visualization of cardiac monitor will be difficult especially when we are taking care of other patients." KF3_L.

Disaster nurses should try within the best of their abilities to respect the privacy of patients. The participants in this study cited that one of the reasons that made it difficult to respect a patient's privacy was because of the chronic shortage of beds and staff. This makes it a challenge for the disaster nurses to perform procedures on the patients. Aside from this, the confusion in the hospital following the occurrence of the disaster means that some patients do not respect triage, and move from one place to another seeking attention, with some even lying on the floor.

" We have broken some privacy; We cannot keep these patients closer at all times, but we have given these blankets to keep them covered and to keep their bodies covered. If there is any procedure, we are trying to keep it private" KF5_A.

"Some cases with multiple fracture injury or open fracture and they need separate bed, so we keep the highest danger cases in separate bed, for the green cases "cold cases", we keep two patients in one bed because there is no much beds" A2_A.

Some of the participants still exhibited an understanding of the culture of Saudi Arabia, since they did their best to try and provide cover to female patients. Another practice that was also observed was that female nurses would work to provide care for women patients while male nurses provided care for male patients, but this would be dependent on staff availability.

"For example, if a patient come to my bed, and there is everything available that will keep patient privacy, off course specially for female patients, I can't expose the patient to everybody, even if doctor he wants to do something or inspection, we are going with him, we are giving most privacy to the female patient" KF3_L.

"As much as possible we are trying to keep the patients' privacy but during the disaster, we received patients without clothes and we tried to cover the patients with the available resources we had in order to keep their privacy" KF5_A.

Sub theme 2.2: Justice and equity: Based on the experiences of the participants in this study, they believed that practicing justice and equity among patients during disasters would prove to be difficult depending on the situation.

"Justice itself is very broad, justice sometimes we need it and sometimes not, it's up to you how to handle the situation, you meet it or not, as a profession you just say we need to deal with it. I'll be honest with you, not all the time can meet that one specially in disaster situation" KF2_K.

Sub theme 2.3: Prioritization and triage: The work of nurses during disasters situation would logically require that they provide urgent care for patients who would require Cardiopulmonary Resuscitation (CPR).

" Only with three nurses the provision of the care based on the priority of the patients. CPR case was dealt first even if others ask for help" A1_R.

On the other hand, some of the nurses also provided care for patients who had greater chances to live than with patients who had lower chances of survival which is according to the standard of care during disasters. *"Sure, I will prioritize those patients with higher chance of survival rather than wasting time for the patients with poor prognosis."* A2_A.

Furthermore, it was seen that emergency managers could help in the triage process as well as in leading the emergency team which includes paramedics, doctors and nurses. The triage process that would be implemented would be to classify patients according to their condition. The easiest method used during the disaster was to employ four different coloured papers, with a sheet being posted on the chest of a patient.

"Every patient have a coloured paper on his chest that to explain the injured place, however, it is four colour, the black colour means the patient died, the green colour means the cold cases, the yellow colour means the patient need observation area, finally the red colour need CPR room" KF2_K.

According to a participant who was involved in a disaster from her country of origin, teamwork helped in effectively organising personnel in order to help all patients.

"In disaster situation in the CPR room, we have been divided into two groups or three groups that contain one nurse and one leader, one ER resident, and one doctor, so it is ok for us if three patients are coming together we can easily be managing" KF3_L.

The capacity to operate as a team was one of the topics that would be associated to the competency of a nurse, particularly in the triage process. For this study, it is divided into two with one being the understanding of the organisational hierarchy and duties, while the second is the unity of command. According to the participants, teamwork is one of the essential nursing competencies that would be required to achieve the best outcomes during disaster relief operations.

"Of course, I can tell you that I am personally thankful to all my team members especially the ER manager and all my colleagues for their great helping hands." KF5_A.

There have been disagreements on the triage process. They showed less competency and commitment in triage due to resource shortages and the lack of an organisation plan. In relation to this, organised and trained manpower specifically for disaster situations could provide significant help to nurses and other healthcare providers.

"We need more staff, more systematic and organised team especially in triage because triage is necessary for each hospital and also the most importantly manpower. One patient needs one bed and one nurse. So, the systematic manpower can be more effective in code red. If there's manpower in disaster it will give you physical and mental stress if they are not organised." KF1_E.

Sub theme 2.4: Decision making: The disaster nurse should not perform certain medical procedures on the patient without their consent. Among the major categories associated with the ability of nurses is their understanding of their responsibilities and boundaries, along with those of other team members during catastrophic circumstances. Moreover, appreciating the roles that other organisations play during the disaster as well as understanding the significance of the unity of command in disaster relief would appear to be the competencies which are of the greatest importance in the study. According to the participants, a competent disaster nurse needs to have the ability to think fast, be patient, autonomous as well as have a holistic view when making decisions.

"Really, it was scary, it was like measure your competency as a nurse, and you will have to deal with which priority you have to do first; you had to think fast. You have your own idea, how to be care your patient because the doctors are not so much and not always around" KF4_S.

Sub theme 2.5: Level of standard care: Sudden changes, stress, insomnia and being in consecutive shifts without any chance to receive enough rest are critical challenges that nurses in disaster situations can encounter. For most nurses, tolerating pressure and stress, working in unforgiving conditions as well as the ability to carry injured victims can serve as some of the demands on health caregivers who are physically present at the disaster scene. This can have adverse effects on the standard of care that nurses can provide in a disaster situation.

"No, no time to provide a standard of care because of time, because we have priorities in the patient care. If a disaster, that time is more patients and more crowded, we are under pressure; we just trying to provide urgent care" A3_A.

Sub theme 2.6: Documentation: Disaster nurses should strive to document all the patients coming into the health facility so that doctors can know what medication the patient has received and which procedures they

should undergo. Most of the participants in this study stated that documentation during an emergency is a challenge. Some of them proposed that several computers should be given to emergency departments in the hospital to assist with documentation. Almost of the nurses thought that the presence of a specific emergency sheet during a disaster would help in order to help dealing with patients that have no identification, resulting to people just being assigned numbers.

“During the disaster most of the casualties are unknown. In this situation, it is better to have a standard identification format. So that going to the reception area and making the file as unknown following by numbers in order to prevent identification error can be controlled to some extent.” KF1_E.

“No details documentation, only the documentation we write is name, age, nationality, medications, the vitals, and fluid we given, not all nursing note documentation will be written, we write this in a paper and attaching that to their chest” A3_A.

Nevertheless, there are other procedures used to identify patients such taking a photo of arriving patients during the prioritisation process. This could help in the identification of patients as well as assist relatives when they ask about their family. It is also significant for the emergency manager to document all things which occurred during the disaster. However, there were times when lower levels of commitment and competency were exhibited due to unorganised planning from the emergency manager.

“When the patient arrives, we did prioritisation; then we take a photo of her/his face, and we put this photo in the admission paper of the patient to recognise all patients who admitted to the hospital, Unfortunately, I could not document anything due to confusion of responsibility ” KF2_K.

Theme 3: Realities of practice: Disaster nurses faced several challenges to the realities of the ethical practice that includes staff shortage, relatives and communication.

Sub theme 3.1: Shortage of staff

Staff shortage is one of the most serious challenges among nurses involved in disaster relief operations. There can be very few doctors and nurses who are present during emergencies. Even when a hospital would be forced to ask for doctors and nurses from other hospitals to come and help, the number of health caregivers may still fall short in comparison to the number of patients. The participants in this study proposed that the number of doctors and nurses need to be increased to deal with natural and manmade disasters. Although nurses suffered from a shortage of healthcare personnel, they showed a high level of competency and commitment during the disaster operations.

“No specialization services available for neurology and orthopaedics. But thank god first aid care was given for such patients and transferred to specialized hospitals immediately” A3_A.

“If one doctor caring for four or ten patients, it is difficult to manage them, especially because most of the cases were critical. So, we need more staff either nurses or doctors.” A2_A.

Sub theme 3.2: Relatives

Relatives present a major source of problems for disaster nurses. First, some relatives may not understand the severity of the problem in the hospital. Therefore, they may start harassing healthcare providers and coercing them to leave the other patients to attend to their relatives. This increases the level of stress among disaster nurses, who are already under immense pressure due to the huge number of patients that have varying degrees of injury. *“Relatives were keep on asking about patient condition and this may interrupt the care. In addition, this may in turn add stress to the working environment and focus of care.”* KF3_L.

On the other hand, relatives can also help by providing information about the patient to healthcare providers.

“We are keeping one relative with one patient according to the patient condition, and if there is relative we collect the history from them as patient condition” A1_R.

Sub theme 3.3: Communication

All the participants in this study agreed that having good communication skills is one of the essential personal attributes for a disaster nurse. There needs to be good communication between the nurse, who is the care provider, and the victim of the disaster. Excellent communication skills, whether verbal or non-verbal in nature, should be one of the most emphasised nursing care requirements. The participants mentioned that communication skills would consist of two subcategories, with the first being communication between the nurse and other health care providers and the second would be communication between the nurse and the patients. Accordingly, communication among nurses and the ER along with the provision of adequate information about the disaster can be helpful in preparing nurses.

“There was heavy rain and heard about some trouble in the holy mosque. Immediately CODE YELLOW (disaster outside and all staff should be standby) was announced. After 30 minutes CODE RED announced, and the hospital became ready to receive the casualties.” KF4_S.

The nurse needs to show that he or she has adequate information and has the intention to help the patient. When the disaster nurse gives information about the problems and treatment interventions, the nurse shows the patient that he or she understands the situation. It can sometimes be hard to communicate to patients who are unfamiliar with the language used by nurses, especially in a disaster situation.

"The language barrier is the most important problem as the patients don't speak English or Arabic and no translators to help immediately which is a really difficult situation. During such situation consent cannot be taken from such patients and initiation of care is needed to save the life of the patient. So immediate and proper decision making is essential in such times." AI_R.

IV. Discussion

This qualitative research explored the ethical aspects of disaster events among emergency nurses in Saudi Arabia. The study discussed the required ethical competencies for nurses in disaster relief with categories being highlighted to show the various critical aspects of such skills.

Nurses' ability and experiences: Coordination in the disaster scene and along with the management of oneself and other resources available would be important among emergency nurses during the disaster^{10,17}. Based on the experiences of the participants, a disaster nurse should be a competent manager, as their role is critical especially during disaster response. Competency among nurses can be attained through the management of psychological and emotional stress while ensuring safety at the scene of the disaster. Technical competency is also a critical characteristic for a disaster nurse, and this was consistently seen in the data acquired in this study¹⁸. It was established that one's scientific ability forms a critical component of a disaster nurse's competency. Emergency nurses should be familiar with disaster situations, basic scientific knowledge, ethical principles, and appropriate courses of action, aside from having the practical ability to enhance the technical competencies of other nurses working in disaster zones. If the nurses who participated in this study lacked command in such areas, it would have been impossible to provide adequate care at the scenes of those disasters⁵. It was also seen that there would be no particular role for the emergency manager during a disaster, with the intensity of the disaster and resource shortages also leading them to work. The role for the emergency manager during disasters must be established in order to enhance the addressing of patients' rights and the organisation of the nursing plan¹⁰. Aside from this, ethical challenges and nurses' abilities were also among the critical factors in the study, which included two aspects. The first aspect is professional ethics while the second is adherence to rules. The analysis showed that the participants found moral commitment and observance of standards as a critical competency to demonstrate professional conduct during a disaster situation. On the one hand, adhering to the ICN and WHO's professional standards of nursing care would be one of the applications of the ethical concept which has been determined from the participants' responses in this study². Professional ethics incorporates concepts such as accountability or accepting responsibility which is critical during emergencies. On the other hand, the ICN code of ethics demonstrates that nurses must be giving safe, ethical and sound care that is accompanied by the observance of ethics as well as respecting the rights of patients during disaster situations, which is seen as the moral duty of nurses¹⁹.

Disaster intensity: It is crucial to adhere to rules during adverse situations¹⁶. Besides, it is also vital for nurses to adhere to legal regulations when making decisions during dangerous circumstances such as the provision of care in disaster scenarios. Teamwork is a fundamental competency that nurses need to respond to disasters. Moreover, personal abilities were also mentioned as necessary for disaster nurses. These include physical capabilities as well as the nurse's ability to control emotions at the scene of the disaster. Such skills can help tell whether or not the nurse is qualified to serve as a disaster nurse. Nilsson et al. (2015) point out that the physical capability of the individuals is one of the special abilities that are necessary for the care providers at the scene²⁰. Allender et al. (2013) argued that calmness and emotional stability are required for people who volunteer at disaster scenes to provide care²¹. It is also of critical importance to consider the conditions as well as capabilities at the site because these are parameters that determine whether one is qualified or not to act as a disaster nurse. Being able to respond to possibilities and to comply with conditions are important attributes for rescue teams in the scene of a disaster⁷. Participants in the present study also mentioned competency as one of the key determinants of a disaster nurse's qualification for the job.

Realities of practices: Communication skills and interacting with other members of the health team are also critical competencies for nurses. Difficulties in communication between nurses and patients would come up when nurses and patients come from various countries and cultures, leading to their use of different languages²². This is especially significant because Saudi Arabia would be receiving millions of Muslims from various countries annually during Hajj season, where the stampede disaster occurred during 2015. Professional communication and effective teamwork are also of great importance in care delivery², and this is entirely in line with the findings of the present study. Based on the variety of injuries and other problems, it is important to have the skills to perform various medical procedures as a disaster nurse as well as critical thinking in for ethical practice in various scenarios. Even if one does not have a one-size-fits-all process suitable for answering all

ethical questions¹, it is important to have knowledge and to practice ethics to improve the nurses' performances particularly during disasters. Being able to properly do first aid among various different procedures while also respecting the rights of patients and practicing other ethical concepts may result to better outcomes for healthcare service delivery. As such, nurses being the key members of the team should be in a position to perform their duties correctly. Accordingly, these findings may serve as a guide for the design of courses to better prepare nurses for working in disaster situations, as well as providing a basis for further studies. It is necessary to develop a national document on the ethical guidelines for nurses who would care patients affected by disasters. Additionally, it is crucial to formulate a practical and ethical approach to medical care under such extreme conditions. An educational curriculum for nurses is required to prepare all nurses who might be called upon, in the future, to triage patients, allocate resources, and make difficult decisions about treatment priorities and comfort care. Increasing the familiarity of nurses with such situation could enhance their psychological as well as self-management of their emotions while providing care at a disaster scene.

V. Conclusion

Nurses need to be able to understand ethical nursing care during these critical circumstances. According to the World Health Organization, there are some roles that disaster nurses must have adequate knowledge and be skilled in so that they can provide effective and ethical care during disasters. In relation to this, it was observed that the nurses' ability to apply ethics in disaster scenes would be characterized as personal and could very well affect how the situation would be managed. Ethical knowledge was associated with nurses' experience, and this could be a factor in handling possible ethical challenges. Additionally, because each nurse is unique, the differences could be existent when providing care during the disaster. The disaster intensity can also serve to strongly challenge nurses to practice ethics. Triage skills was also mentioned as a vital competency since it is a critical and immediate intervention that may be done at the scene of accidents. This is in agreement with the experiences that the participants of this research which argued that such skills would be necessary for dealing with disasters. The participants also believed that solving of the barriers due to ethical issues could support victims because it was the core of nursing intervention. Ultimately, these findings may serve as a guide for the design of courses to better prepare nurses for working in disaster situations, as well as providing a basis for further research.

VI. Limitations

For effective results interpretations, there is a need to focus on distinct study limitations. Firstly, the self-reporting is a major limitation associated with distinct perceptions of the ethical knowledge which might fail to elicit the actual levels of knowledge by the participants. Secondly, lack of a clear approach to ensure that the results are generalised since they are accurate to the hospitals carrying out with this study. Thirdly, the privy of the implication of the questions varied from one participant to the other leading to diverse data interpretations more specifically in the discussed questions. Lastly is the time-consuming in the qualitative research which normally demands extended time for completing the expectations particularly to the nurses work in emergency department which consider as busy department. Accordingly, the scope of the selected number of interviews which were three in one hospital and five nurses in the second hospital that improved the process of collected data.

VII. Implications For Practice

This study could help nurses during and after a disaster by limiting points of weakness as well as enhancing the mitigation of ethical challenges. The present study used a comparatively small sample. As a result, this limits the applicability of the outcomes. Nonetheless, the selection of the participants from various countries, working backgrounds, and variable disaster forms could help to ensure that the findings can be applied to the disaster nursing framework in Saudi Arabia. Accordingly, it is recommended that ethical and legal issues for disaster nursing are incorporated into nursing curriculums to raise awareness for nurses in the future. The results of this study may provide beneficial information for the design of educational content for courses and training. It will also be important for educators to increase the awareness level of nurses who come from different countries in order to standardize the ethical knowledge of healthcare professionals. Further research is necessary to explore the most appropriate methods in preparing nurses to adhere to ethical practice during disaster response.

Provenance And Conflict Of Interest

The research did not have any personal or monetary matters of conflict and was uncommissioned.

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