



Ethical and legal challenges associated with disaster nursing

Nursing Ethics
2015, Vol. 22(4) 493–503
© The Author(s) 2014
Reprints and permission:
sagepub.co.uk/journalsPermissions.nav
10.1177/0969733014534877
nej.sagepub.com



Fatemeh Aliakbari

Shahrekord University of Medical Sciences, Shahrekord, Islamic Republic of Iran

Karen Hammad

Flinders University, Australia

Masoud Bahrami

Isfahan University of Medical Sciences, Islamic Republic of Iran

Fereshteh Aein

Shahrekord University of Medical Sciences, Shahrekord, Islamic Republic of Iran

Abstract

Background: In disaster situations, nurses may face new and unfamiliar ethical and legal challenges not common in their everyday practice.

Research question/objectives/hypothesis: The aim of this study was to explore Iranian nurses' experience of disaster response and their perception of the competencies required by nurses in this environment.

Research design: This article discusses the findings of a descriptive study conducted in Iran in 2012.

Participants and research context: This research was conducted in Iran in 2012. Participants included 35 nurses who had experience in healthcare delivery following a disaster event in the past 10 years, either in a hospital or out-of-hospital context.

Ethical considerations: This research study was approved by the Ethics Committee of the Isfahan University of Medical Sciences.

Findings: From this study, five themes emerged as areas that nurses require competence in to work effectively in the disaster setting. This article focusses on one theme, the ethical and legal issues that arise during disaster response. Within the theme of ethical and legal issues, two sub-themes emerged. (1) Professional ethics explores professional responsibility of nurses as well as sense of ethical obligation. (2) Adherence to law refers to nurses' familiarity with and observation of legal requirements.

Discussion: This article adds to a growing pool of literature which explores the role of nurses in disasters. The findings of this study emphasize the need for nurses working in the disaster setting to be aware of professional responsibilities and familiar with legal requirements and the challenges related to observing ethical responsibilities.

Conclusion: In highlighting these issues, this article may provide a useful starting point for the development of an educational framework for preparing nurses and other health professionals to work in the disaster setting.

Keywords

Competencies, disaster, ethics, Iran, law, nurse, professional responsibility

Introduction

Nurses in many countries around the world practice according to a code of ethics. While many countries have developed their own code of ethics for nursing practice,^{1,2} the International Council of Nurses (ICN)³ have developed a code of ethics applicable for nurses worldwide. A code of ethics provides a standard by which nurses conduct themselves and their practice, observing ethical obligations of the profession and providing quality care. To achieve its purpose, a code of ethics must be understood, internalized, and used by nurses in all aspects of their work.³ This statement therefore assumes that nurses must observe a code of ethics regardless of the setting or context in which they practice.

Nursing in a disaster setting, however, challenges a nurses' ability to observe a code of ethics as they would in everyday practice. Ethical issues that arise in the disaster setting are multilayered and relate to issues such as allocation of resources, dealing with the scope and scale of a disaster situation, appropriate triage and treatment priorities, lack of privacy, working autonomously, and obtaining informed consent.^{4,5} As disasters vary considerably with respect to time, place, and extent, there may not be a "one-size-fits-all" answer for the ethical questions that do arise.⁶

In addition, practicing within a code of ethics framework, nurses are required to observe legal requirements in their everyday practice. Laws govern the scope of practice in which nurses can work and are informed by local, national, and international legislation embedded within existing professional codes such as the code of ethics and professional conduct. It is essential that nurses are aware of and practice within the boundaries of local, national, and international legislation on a day-to-day basis. Additionally, nurses need to be aware of legislation specific to disaster situations.

Legal and ethical responsibilities are important features of everyday nursing practice. However, legal and ethical issues specific to nursing in a disaster setting arise and potentially challenge a nurses' ability to make informed decisions and practice in a safe and competent manner. For the purposes of this article, we use the definition of a disaster supplied by the World Association of Disaster Emergency Medicine (WADEM)⁷:

A serious disruption of the functioning of society, causing widespread human, material or environmental losses which exceed the ability of affected society to cope using only its own resources; the result of a vast ecological breakdown in the relations between man and his environment, a serious and sudden event (or slow as in drought) on such a scale that the stricken community needs extraordinary efforts to cope with it, often with outside help or international aid.

This article discusses the findings of a study conducted in 2012. The aim of the study was to explore Iranian nurses' experience of disaster response and their perception of the competencies required by nurses in this environment. This article focuses on one of the five themes which emerged from the study: ethical and legal issues.

Methods

The study was conducted in Iran from May to November 2012 with the aim to explore participant's perceptions of what competencies are required by nurses working in the disaster setting based on their own experience of the phenomenon. In total, 35 nurses with experience in disaster healthcare were selected using

purposeful sampling. They all had experience in healthcare delivery following a disaster event in the past 10 years, either in a hospital or out-of-hospital context.

Face-to-face semi-structured interviews were performed with each participant. Each interview was guided by the question “*please tell me about your experience of working in a disaster?*” Additional questions were used to further explore the experience of nurses and their perceptions of the competencies required by nurses in a disaster setting. Where further clarification was required, a second interview was arranged. Interviews were conducted over 40–100 min and were conducted in Persian by the principal author. Quotes included in this article have been translated by the author into English.

The five steps of thematic analysis outlined by Braun and Clarke⁸ were used to analyze the interview transcripts. The resulting themes were also discussed by two researchers, experts in qualitative methods. In addition, the transcripts and a summary of primary results (codes and categories) were checked by the participants in order to improve validity.⁸ Following this process, five themes emerged from the study: (1) management, (2) ethical and legal, (3) teamwork, (4) personal abilities, and (5) technical skills. These are all broad areas that participants believe all nurses require competence in to work effectively within a disaster situation. This study focuses on the second theme.

Ethical considerations

This research study was approved by the Ethics Committee of the Isfahan University of Medical Sciences. Participant consent was provided prior to the interview process, and participants were made aware of their right to withdraw from the study at any time. Participants were assured that their personal information and recorded materials would be kept confidential, and participants would remain anonymous in any publications resulting from the study.

Study sample

Participants included 30 males and 5 females, with a bachelor’s degree in nursing. The average age of participants was 37.5 years, and their nursing experience ranged from 7 to 28 years. All participants in this study had experience in healthcare delivery following a disaster event in the past 10 years, either in a hospital or out-of-hospital context. More specifically, the events participants responded to include the Bam or Ahar earthquakes, flooding, and pandemic flu. All events were associated with high mortality.

There were a higher number of male participants in this study than females due to the fact that most of disaster operations in Iran are conducted by men. This might be related to the lack of female trained nurses to act in disaster situations as well as other contextual limitations.

Findings

Ethical and legal issues for nurses in the disaster setting relates to the boundaries within which nurses work. This theme is further divided into two main sub-themes: professional ethics and adherence to law. These sub-themes are discussed in more detail below and are summarized in Table 1.

Sub-theme 1—professional ethics

This sub-theme highlights how a disaster changes and challenges everyday nursing practice. Despite this, nurses feel a sense of obligation and professional responsibility which extends beyond their own individual needs. This was observed through maintaining a focus on professional responsibility and the importance of acting ethically toward patients despite the changed conditions. Within this sub-theme, two sub-categories emerged: professional responsibility and observing ethics.

Table 1. Sub-themes of legal and ethical competence.

Theme	Sub-theme	Sub-categories
Ethical and legal competence	Professional ethics	Professional responsibility Observing ethics
	Adherence to law	Familiarity with legal requirements Observing legal requirements

Professional responsibility

All participants discussed the importance of commitment to work and being responsible in their work. This emerged as a professional responsibility and includes factors such as accepting responsibility, being committed to work, dedication and selflessness, justice (non-discrimination), unprejudiced care provision, respecting human life, and performing procedures correctly. Participants believe that disasters place nurses beyond their normal scope of practice. While this might not be a societal expectation, it is something that nurses invariably do out of a personal sense of commitment or duty to their profession:

We should not expect nurses to provide care when personal risks outweigh patient benefits but when nurses accept to come and provide care it shows ethical commitment. (Participant 4, 12 years as a Registered Nurse (RN) involved in an earthquake and flood)

I think that making the decision to care for patients in a disaster and caring for critically ill patients beyond one's area of expertise requires extraordinary commitment and courage and I think that is ethical commitment and a necessary competence for a disaster nurse. (Participant 12, 7 years as an RN involved in an earthquake)

Participants believed that disasters take nurses beyond their normal nursing practice and raise specific issues about what nurses are obligated to do in providing care for patients and their responsibilities to their families and to themselves.

The sense of professional responsibility that nurses demonstrate in disasters may be at the expense of their own needs. Essentially, by ignoring their own needs and heeding the patients, nurses show devotion and dedication toward their nursing duties and responsibilities in a disaster:

Most of the time, they devote rest or sleep time to handle the injured. Most of the time, despite given opportunities for rest, they try to help the injured and all of these things indicate an individual's dedication to work which is much more than his or her duty. (Participant 18, 10 years as an RN, involved in earthquake)

Observing ethics

Additional to professional responsibility is a sense of ethical obligation and respect for patient rights despite the difficult circumstances. This was demonstrated through preserving privacy, observing and respecting the rights and dignity of those affected by disaster, complying with principles of appropriate care, respecting colleagues, making decisions based on ethical obligations and not based on personal opinions, maintaining integrity in records, avoiding violation of ethics for personal gain or loss, respecting others' beliefs and regarding these in providing care, and ethical behavior toward those who are unconscious or suffer from diminished consciousness.

Participants expressed a moral commitment to patients based on the individual religious belief of the nurses:

The value of saving human life is of great importance in our job. According to the Quran, you know that by saving one's life, it is like saving the life of all people and you would get rewards. Otherwise, if peoples' lives were worthless to a nurse then they do not have ethical commitment. You have to think that the victim could be a father, mother, or a child of a family. In this way, you do not allow yourself to miss anything that you can do for them. (Participant 11, 19 years as a healthcare manager, involved in earthquake)

Informed consent, restriction or violation of patient's rights, protecting the privacy, and confidentiality of patient information that is respected in everyday nursing practice might not be easy to observe in a disaster situation. Despite this, participants strongly agree that basic ethical principles must be practiced despite the chaos of the situation:

There are bunch of things you need to observe in the disaster scene. We cannot justify to ourselves that because it is a disaster situation there is no need for a patient's permission or to explain the actions that are being done. It means that a patient's rights should be observed and you should respect their characteristics and personality. (Participant 14, 10 years as an RN, involved in earthquake and flood)

If you have to restrict the patient you should explain the reason in a calm manner so the victims can accept the condition easier. In disaster because you have a lot of patient that need care and an expanded role. Clear, concise, and empathetic communication might be difficult but it can help alleviate anxieties and misgivings of the victims so you must try to do this and all of this are essential competence for nurse in disaster situation. (Participant 14, 10 years as an RN, involved in earthquake and flood)

Protecting the privacy and confidentiality of patient information is very important and as a nurse you must have ethical decision making for sharing the information just in a necessary condition that is related to patient health and it is a key element in establishing trust and credibility. (Participant 25, 18 years as an RN, involved in pandemic flu)

Respecting religious beliefs and observing privacy in providing care were also viewed as important ethical actions. Participants expressed that care be provided in a way that respects religious beliefs, otherwise treatment and encroaching on personal space may result in stress for the patient:

There might be different groups of people with different religious beliefs. There is no doubt that this would entail dealing with them differently. For instance, there may be many things which are considered important in Islam religion, while these may be of little value in other religions. For example, with children, it is important to touch them and with the elderly, you may hold their hand, which relaxes them. However, sometimes going into a patient's personal space brings them stress. Even taking a woman's wrist to check her pulse may create emotional tensions and violate her psychological balance. In this way, although the condition is very different in disaster and the time and human resource are scarce but a culturally sensitive, and gender-appropriate response must be enacted. (Participant 1, 24 years as a healthcare manager involved in earthquake)

As a competent disaster nurse you must be aware that those affected by disaster may have standards of justice and ethical traditions that differ from you so recognition and appreciation of such differences will help you to maintain the dignity of the victim and also to work toward sustainable recovery. If you have to do something against the personal beliefs of the victim you should explain to him/her that it would help the person to accept the situation easier. (Participant 19, 11 years as an RN, involved in earthquake)

Another manifestation of observing ethics was maintaining the integrity of patient records. Participants state that in a disaster, roles, relationships, settings, equipment, and the patient population become varied and sometimes unpredictable, challenging decision-making abilities:

Most of the time in disaster, pressures of work and subsequent lack of time make maintaining good standards difficult. You have to make judgments and decision about the patient condition yourself and so you should answer for your judgments but you must write honestly, what you did but there was no result or even if you did not do anything special, because it is disaster and no ignorance would be accepted and you must be competent to documents care in accordance with disaster procedures and in an ethical manner. (Participant 12, 7 years as an RN, involved in flood)

Based on the participant's experience, one manifestation of observing ethics was maintaining the integrity of records. Participants felt that maintaining accurate patient records was a moral duty which ensured effective patient outcomes:

Our job's rules stated that if there is no preventive item for reviving, you should do revive. However, when you do not revive and report death, even you check his pulse in front of his family and say that he/she has been dead for a long time this is the case that you did not write exactly what has happened. Although, no one would not notice but it is far from ethics and humanity. (Participant 5, 11 years as an RN, involved in earthquake and flood)

For example, the amount of drug or serum you give to a child is important because in the next stage when he goes to the hospital they will do some other actions based on what you write for him. It is far better to write honestly, what you did but there was no result or even if you did not do anything special, because it is disaster and no ignorance would be accepted. (Participant 12, 7 years as an RN, involved in earthquake)

Another important ethical competence that has been mentioned by participant was about data protection. They said that an important aspect of maintaining a legally sound health record is securing the record to prevent loss, tampering, or unauthorized use. Disaster situations may also throw up unique moral dilemmas concerning data protection. So nurses should be aware of legal aspects of data protection and follow ethical principles.

They believed that nurses may have to consider whether it could ever be acceptable to release data for the good of others. A nurse who has experience of participating in disaster response team in pandemic flu said that

If someone is discovered to have a disease such as SARS, Flu or other kind of contagious diseases you should say to other people that lived with him. People need to know where that person had been and which areas to place in quarantine. This could be necessary for controlling epidemics or imposing quarantines. (Participant 15, 17 years as an emergency nurse, involved in pandemic flu)

Participants in this study believe that maintaining respect toward colleagues when working under extraordinarily difficult circumstances is an ethical competency:

In extraordinary conditions you might have some conflict and dissidence with your colleagues about care of victims or doing some procedure but it is important that you be more patient and say your opinion with respect not be aggressive or lose temper. (Participant 10, 20 years as an RN, involved in earthquake)

Ethics are of great importance in another situation too, which is often missed by most of people. More precisely, it is about attitudes toward cooperating with colleagues even if they have poor information or performance. In the disaster response some of nurses might have low experience of participating in disaster response so they don't be able to do some procedures or may be anxious and panicky but they should not be disrespected even if they are at a lower level or are of poor professional performance. In other words, you do not have the right to treat them offensively because of their weakness. (Participant 15, 12 years as an emergency nurse, involved in earthquake)

Sub-theme 2—adherence to law

Everyday nursing practice is governed by preexisting legal requirements and regulations. However, this may change in a disaster setting where the environment changes. Participants emphasized that nurses must empower their legal knowledge related to disaster in order to continue practicing without risk of legal ramifications. This sub-theme includes two sub-categories: familiarity with legal requirements and observing legal requirements.

Familiarity with legal requirements

Familiarity with laws and regulations for disaster situations was highlighted in relation to awareness of legal precedents and of existing protocols and guidelines. Knowledge of existing legal requirements may prevent legal problems from arising:

Obviously, a nurse should know to what extent they are free to act and what cases could cause legal problems for them. In disaster situation clinical choices are unprecedented so you must be familiar with the regulation in disaster situation to have reasonable legal protections. (Participant 7, 9 years as an RN, involved in flood)

There are invasive actions that nurses are not allowed to do. Legally we have weaknesses; and nurses should learn what is illegal, because these actions will not be supported. Honestly, we learned these things through work; and may not be familiar with all the legal rules. Nurses need to be thoroughly familiar with guidelines and protocols to avoid this problem. (Participant 10, 20 years as an RN, involved in earthquake)

Observing legal requirements

For participants, observing legal requirements during disaster response relates to compliance with national and local rules and regulations when providing services, and performance to meet guidelines, were all examples of observing legal requirements. Participants believe adherence to rules is important because the legal environment changes drastically during disasters. Risk of liability, discrimination, and other claims stemming from the provision of medical triage necessitate transparency, accountability, and fairness in making triage decisions. Also, there is pressure to perform skills that are unauthorized, there is less supervision, and one's personal standards become even more significant and important:

A disaster nurse should follow the legal rules in every situation even in a disaster scene. There are many times that you have to do something special, for example doing an invasive procedure “that you are not authorized and expert in them although there are some physician or other experts in scene” you may have self-contention but then you find out that legally you are not allowed to do it on your own, or you want to transfer the injured by yourself, but you should not violate the rules. There may be many cases like this, but in each action, it must be shown that you are observing the rules. (Participant 29, 18 years as an RN, involved in earthquake)

Law is an umbrella under which actions are done. You should observe national and local rules exactly, because these guidelines are of great importance, both for you, to avoid getting into legal trouble, and for the injured to receive services in a designated framework. In the Bam earthquake, I did a tracheostomy for a patient because I wanted to save their life at that moment, but then I was blamed for it because legally I was not allowed to do that. (Participant 21, 19 years as an RN, involved in earthquake)

One participant, who was a manager in a center for emergency and disaster, warned,

Nursing care and actions should be in accordance with scientific and professional standards or with protocols and regulations. A person cannot go in and do whatever they think is right, because this would result in legal issues. (Participant 2, 7 years as an RN, involved in flood)

A nurse in a disaster situation should abide by the rules and laws that are present in their normal scope of practice. During a disaster, the legal environment changes extensively. Nurses might be faced with legal uncertainty, some nurses may act without knowledge of legal ramifications; others may not act at all because of legal concerns. This is dependent on familiarity with legal requirements.

Discussion

This article identifies ethical and legal aspects of nursing in a disaster setting. Participants in this study demonstrated professional responsibility and observation of ethical principles when working in a disaster environment. Despite the challenges that a disaster creates in regard to practicing safely within ethical and legal frameworks, participants in this study felt that it was essential to continue to observe these requirements regardless of the challenges. Additionally, participants in this study illuminate ethical and legal competencies essential for nurses working in the disaster setting.

The importance of observing ethical practice despite the chaos of the situation is emphasized throughout this study. This also corresponds with other studies where patient rights such as privacy, dignity, religious values, patient consent, and independence should continue to be observed in disaster situations as in everyday nursing practice.^{9–11}

An understanding of legal knowledge is essential for nurses working in disaster situations. This includes familiarity with existing legal requirements, guidelines, and protocols and adherence to rules in the disaster setting. This is supported in the literature which highlights that it is essential that nurses working in disaster situations know local rules and regulations related to what is permissible and what restrictions apply when providing care in disaster situations, as well as having an understanding of state and federal law.^{11–13}

Lacking essential legal knowledge in disaster situations has been highlighted in the literature as a reason behind why nurses feel unprepared for decision-making.¹⁴ The literature supports the need for a legal framework regarding provision of care in disasters and that nurses and other members of a disaster team be familiar with these rules and act according to these guidelines.^{15,16}

This study highlights that a sense of professional responsibility underpins nursing practice in a disaster setting. Participants in this study demonstrated a commitment to nursing which extended beyond their everyday scope of practice and their individual needs as a person. This aligns with the literature which suggests that professional duty is common among health professionals worldwide.¹⁷ Two main areas for consideration are highlighted by the study: observation of ethical principles in the disaster setting and knowledge of and adherence to legislation. Participants in this study were asked about their perceptions of the competencies that are relevant to nurses working in the disaster setting and highlighted these key areas as important for inclusion as competencies.

Acquiring professional competencies for providing care in disaster situations is an often debated issue in the nursing profession. This would be facilitated by familiarity with professional ethics as well as rules and regulations.¹⁸ In the face of the many challenges in a disaster situation, it is crucial to have clear guidelines for nurses to allow them to follow ethical principles.¹⁹ In addition, post-incident debriefing and a review of nurses' experiences are recommended to reinforce their development in applying ethical principles to their practice successfully.²⁰

This study examined the ethical and legal competencies required for nurses to provide care in disaster situations. Aside from the technical skills required by all nurses, our study demonstrates that nurses must also possess ethical and legal skills. As most professional competencies are acquired through educational courses, it is important that ethical competencies and knowledge of the law required for disaster situations be incorporated into academic curriculums and in-service training. Teaching nurses about the ethical and legal challenges in critical situations would enable them to take appropriate actions and make appropriate decisions when faced with challenging situations.²¹

It is not appropriate to address the ethical and legal questions at the time of the disaster, but rather in advance, as part of the ethical and legal education of nurses.^{22,23} Important issues such as triage and prioritization, legal standards of care, justice and equity, informed consent and patient autonomy, expanding scope of practice in disaster nursing, and the ethical responsibilities of nurses to care for those affected by disaster need to be addressed in advance. 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 consensus on the ethical guidelines for nurses who care for those affected by disasters and to formulate a practical, ethical approach to medical care under such extreme conditions. An educational curriculum for nurses is required to best 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.

Conclusion

This study is one of the first to explore the ethical and legal issues affecting Iranian nurses in a disaster setting. While ethical and legal issues are paramount to everyday nursing practice, this study highlights the need to incorporate them into nursing in the disaster context. It is not appropriate to address the ethical and legal questions at the time of the disaster. Nurses need to be aware of how a disaster challenges legislation and their ability to practice within ethical boundaries ahead of time to inform their decision-making. Important issues such as legal standards of care, justice and equity, informed consent and patient autonomy, expanding scope of practice in disaster nursing, and the ethical responsibilities of nurses to care for those affected by disasters need to be addressed in advance as part of educational programs. 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.

Study limitations

The relatively small sample size limits the transferability of results to nursing cohorts outside of Iran. However, selection of the participants from different provinces, working backgrounds, and forms of disaster experience assists in ensuring that the findings are broadly applicable to the context of disaster nursing care in Iran. Additionally, findings of this study may have limited transferability to other nursing populations due to the higher number of male participants.

Implications for practice

It is recommended that ethical and legal issues for disaster nursing are incorporated into nursing curriculums to raise awareness for nurses ahead of time. It is important for nurse educators to understand that knowledge of ethics and law would provide students with ways of conceptualizing situations and arriving at practical ethical and legal solutions in disaster situations. The results of this study may provide beneficial information for the design and educational content of courses and training. Further research is necessary to explore the most appropriate methods for the preparedness of nurses for disaster response.

Acknowledgments

The authors would like to thank all nurses who participated in the study.

Conflict of interest

None declared.

Funding

This study was supported by a grant from Isfahan University of Medical Sciences.

References

1. American Nurses Association (ANA). Know the law/ethics of disaster response (ANA). *Nursing World*, <http://nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Work-Environment/DPR/TheLawEthicsofDisasterResponse> (2013, accessed 7 November 2013).
2. Nursing and Midwifery Board of Australia. Codes and guidelines, <http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Codes-Guidelines.aspx> (2010–2013, accessed 5 September 2013).
3. International Council of Nurses (ICN). Code of ethics for nurses, <http://www.icn.ch/about-icn/code-of-ethics-for-nurses/> (2012, accessed 7 November 2012).
4. Larkin GL and Fowler RL. Essential ethics for EMS: cardinal virtues and core principles. *Emerg Med Clin N Am* 2002; 20(4): 887–911.
5. Hick JL, Hanfling D and Cantrill SV. Allocating scarce resources in disasters: emergency department principles. *Ann Emerg Med* 2012; 59(3): 177–187.
6. Karadag CO and Hakan KA. Ethical dilemmas in disaster medicine. *Iran Red Crescent Med J* 2012; 14(10): 602–612.
7. WADEM. Health disaster management guidelines for evaluation and research in the Utstein Style: glossary of terms. *Prehospital Disaster Med* 2002; 17(Suppl. 3): 144–167.
8. Braun V and Clarke C. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
9. Dennis H and Duncan C. *Introduction to research methods*. 3rd ed. London: Pearson Publishing, 2010.
10. Hinchliff S, Norman S and Schober J (eds). *Nursing practice and healthcare*. 5th ed. Boca Raton, FL: CRC Press, 2008.
11. Ulrich CM. *Nursing ethics in everyday practice*. Indianapolis, IN: Sigma Theta Tau International Publishing, 2012.
12. Deeny PD, Davies K, Gillespie M, et al. Global issues in disaster relief nursing. In: Veenema TG (ed.) *Disaster nursing and emergency preparedness for chemical, biological and radiological terrorism and other hazards*. New York: Springer Publishing Company, 2007, pp. 571–585.
13. American Nurses Association. Position statement on registered nurse's rights and responsibilities related to work release during disaster, <http://nursingworld.org/responsibilitiesdisasterps> (2002, accessed 15 May 2013).
14. Jose MM. Cultural, ethical, and spiritual competencies of health care providers responding to a catastrophic event. *Crit Care Nurs Clin North Am* 2010; 22(4): 455–464.
15. Gebbie KM and Qureshi K. Emergency and disaster preparedness: core competencies for nurses: what every nurse should but may not know. *Am J Nurs* 2002; 102: 46–51.
16. Agency for Healthcare Research and Quality (AHRQ). Altered standards of care in mass casualty events, <http://www.ahrq.gov/research/altstand/index.html> (2005, accessed 10 October 2013).
17. Veenema TG. *Disaster nursing and emergency preparedness for chemical, biological, and radiological terrorism and other hazards*. 2nd ed. New York: Springer Publishing Company, 2007.
18. Gebbie KM, Hodge JG, Meier BM, et al. Improving competencies for public health emergency legal preparedness. *J Law Med Ethics* 2008; 36(1): 52–56.
19. Canadian Nurses Association. *Code of ethics for registered nurses*. Ottawa, ON, Canada: Canadian Nurses Association, 2008.

20. Danna D, Bernard M and Schaubhut R. Experiences of nurse leaders surviving Hurricane Katrina, New Orleans, Louisiana, USA. *Nurs Health Sci* 2010; 12: 9–13.
21. Stanley A. Disaster competency development and integration in nursing education. *Nurs Clin North Am* 2005; 2005(40): 453–467.
22. Subbarao I, Lyznicki J, Hsu EB, et al. A consensus-based educational framework and competency set for the discipline of disaster medicine and public health preparedness. *Disaster Med Public Health Prep* 2008; 2: 57–68.
23. Arbon P, Ranse J, Cusack L, et al. Australasian emergency nurses' willingness to attend work in a disaster: a survey. *Australas Emerg Nurs J* 2013; 16: 52–57.