DISASTER NURSING AND EMERGENCY PREPAREDNESS
For Chemical, Biological, and Radiological Terrorism and Other Hazards

TENER GOODWIN VEENEMA, PhD, MPH, MS, RN, FAAN

Fourth Edition

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—From the Foreword by Frederick M. Burkle, Jr., MD, MPH, DTM (Hon), FAAP, FACEP
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Professor & Dean, Johns Hopkins School of Nursing

"The contributing authors read like a 'Who's Who' of disaster leaders. They lend their special expertise and insights, which are supported and elucidated by cogent learning strategies in the use of case studies, student questions, and practical content in all areas of disaster participation, preparedness, policies, and research. For over 16 years this book has been the hallmark text in its field and this edition proves to be the best ever..."

—Loretta C. Ford, RN, PNP, EdD
Dean Emeritus, University of Rochester School of Nursing
Founder of the National Nurse Practitioner Program
Member, National Women’s Hall of Fame

Featuring the most current, valid, and reliable evidence-based content available, this three-time AJN winner once again presents an unparalleled resource for disaster and emergency preparedness. Disasters lay heavy burdens upon healthcare systems that stretch all levels of society. While natural and man-made disasters are not new, the global nature, rate, type, and totality of their impact has only increased. The fourth edition of this foundational text uniquely addresses the rapid changes in these crises and analyzes the latest attempts to provide timely, multidisciplinary healthcare. Nurses consistently comprise seventy or more percent of responders to local, national, regional, and global crises, and represent a potentially un tapped resource to achieve surge capacity goals and optimize population health outcomes. Considering recent world events and increasing geopolitical tensions, Disaster Nursing and Emergency Preparedness, Fourth Edition now features expanded content on the ubiquitous threat of terrorism, potential destabilization of nuclear, chemical, and biological weapons, emerging and reemerging infectious diseases, and increasing frequency and intensity of natural disasters from climate change.

This text promotes competency-based expert nursing care during disasters and positive health outcomes for small and large populations consistent with the Federal Disaster Response Framework. Whenever possible, content is mapped to published core competencies for preparing health professions’ students for response to terrorism, disaster events, and public health emergencies. The fourth edition retains the clearly organized format in each chapter that includes an overview, learning objectives, a summary, and case study with reflective questions.

New to the Fourth Edition:

- Addresses the most recent landmark agreements
  - Covers public health emergencies involving community violence and civil unrest
  - Expands coverage of planning for and accommodating high-risk, high-vulnerability populations
  - Aligned with the U.S. National Health Security Strategy and the National Planning Frameworks
  - Provides focused content on medical countermeasures
  - Includes an improved instructor package with guide, PowerPoint slides, and case studies with questions for reflection in every chapter

ISBN 978-0-8261-4417-1

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LEARNING OBJECTIVES

When this chapter is completed, readers will be able to:

1. Appreciate the scale of disasters and how sociopolitical, economic, and cultural factors contribute to the development of catastrophes and complex humanitarian emergencies worldwide.
2. Determine the contribution of nurses to global aid relief and the range of extended roles that exist for nurses at all levels and stages of the disaster situation.
3. Gain an initial understanding of the necessity for leadership and clinical decision making by nurses in the potentially risk-laden environments that often exist in disaster situations and complex humanitarian emergencies worldwide.
4. Affirm the importance of human rights, cultural awareness, and sensitivity for nurses working in multinational teams or in the care of individuals and communities who fall victim to disaster.
5. Identify the key ethical issues associated with nursing in disaster situations and show increased awareness of the difficulties associated with neutrality and independence.
6. Discuss the key elements of quality assurance in international disaster response and preparedness and how rigorous evaluation contributes to improvements in nursing practice for disaster situations worldwide.
7. Identify transportation and communication as potential major obstacles to relief efforts during disasters.
8. Appreciate that complex emergencies present increased risk to the personal safety of nurses working in disaster relief.

9. Describe the unique challenges for international disaster nursing that are posed by refugee or internally displaced populations requiring care in the acute or recovery phases of disasters.

**KEY MESSAGES**

In the context of a growing world population, urbanization of nations, and an increasing threat from climate change, disasters worldwide are on the increase. Despite some recent terrible disasters in developed countries, most disasters still occur in the developing world where economic and political factors strongly influence the level of preparedness and capacity for response. As poverty and uneven distribution of wealth is directly linked to disaster vulnerability, sustainable development and building community resilience in poorer countries is the only answer to future risk reduction.

Nurses play a key role in building community resilience, disaster mitigation, response, and recovery. They must continue to alleviate suffering and mitigate loss of life in the acute phase, support communities through mourning and remembrance, and provide education for community resilience building and community recovery. The initial focus on education for rapid and effective disaster response has been laudable, but a fresh impetus for community risk reduction and long-term recovery is now needed worldwide.

Good clinical leadership by nurses in disaster situations is always critical. Knowledge of basic triage techniques, advanced first aid, public health awareness and psychological first aid means that nurses can deal effectively with large numbers of casualties, families and/or groups of displaced people. However, as nurses are not operating in what could be defined as “normal” circumstances and do not have access to resources and professional support structures, clinical decision making can be much more challenging. On the spot decisions have to be made. While Nursing Codes of Conduct support such decision making, nurses need to be clear in advance that professional values and clinical leadership will be tested in disaster situations, especially in other countries and other cultures across the globe.

As is the case with all aid humanitarian relief workers, nurses are accountable for preservation of human dignity. Nurses must be able to operate within the context of the International Red Cross/Red Crescent Code of Conduct and display sensitivity to the political and cultural complexity of disaster situations.

Nurses might have to take an advocacy stance in relation to protection of human rights ensuring that victims are treated according to international humanitarian principles in the Code of Conduct, United Nations Declaration of Human Rights, and the Geneva Conventions. This includes people who may be defined as insurgents, rebels, or terrorists.

Nurses providing aid relief to communities across the world must be aware of the international standards for delivery of aid. These are referred to as the Sphere Standards and are used by aid relief agencies worldwide.

**CHAPTER OVERVIEW**

Nurses care for nations, communities, families, groups, and individuals worldwide. The changing context of disasters on a global scale provides a backdrop to the discussion on the growth of aid response and the associated contribution of disaster nursing at an international level. Disasters are more often than not caused by natural events but increasingly they have become “complex humanitarian emergencies” due to economic, political, and cultural factors. If the disaster is on a large scale, the term “catastrophe” is sometimes used. With an increased focus on community resilience, care is provided at all levels and across all phases of a disaster. There is a new emphasis worldwide on disaster risk reduction through building community resilience (United Nations [UN], 2015). This invites nurses to work with local communities to reduce vulnerability to disasters. Effective disaster response at an international level requires nurses to have knowledge and skills for work in other cultures. There must be an awareness that clinical leadership and decision making in disaster situations can be outside the normal frame of reference of most nurses. This can present new and challenging clinical situations, which will test nurses to the limit. Specific areas such as communication, transport, personal security, prioritizing the care of victims of disaster, refugee health, and an increased personal, ethical, legal, and cultural awareness are discussed.
Disasters such as floods, famine, earthquakes, armed conflicts, and mass refugee movements are on the increase (Relief Web International, 2017; World Health Organization [WHO], 2017a). This means that many disasters are now defined as catastrophes or complex humanitarian emergencies (Leaning & Guha-Sapir, 2013). Since the time of Florence Nightingale, nurses have contributed at an international level to the care of nations, communities, families, and individuals who have fallen victim to disasters. While local nurses are among the first responders and normally provide most of the care, it is common practice for some nurses to travel abroad to provide assistance to other countries in disaster situations. Disaster, by its definition, normally requires outside help. As the major profession involved in healthcare worldwide, it is recognized that nurses are well placed to make an international contribution to disaster response. Working in all phases of the disaster, nurses contribute to disaster preparedness, response, management, recovery, and overall resilience building to reduce the future impact of future disasters (WHO, 2006).

Although it is a common sight on the international news reports to see nurses working in the world’s disaster zones, records of the nursing contribution are scant. A search of the literature reveals that the written nursing contribution to knowledge on disasters and the associated care of victims is small and most of the time it does not go beyond anecdotal accounts from those nurses who experience disasters. Some literature reviews and prepositional papers outline the key issues for nurses in disaster relief worldwide. This chapter in itself is one such contribution. Although these accounts are valuable and point to important needs of victims, communities, and nurses, it seems reasonable to propose that nursing science in relation to disaster relief nursing is still embryonic. This picture seems consistent across the world and is one of the main issues for disaster relief nursing in the 21st century.

This chapter explores the key issues associated with nursing in disasters, catastrophes, and complex humanitarian emergencies worldwide and how the context of aid relief is changing. Slow disasters are also discussed. Outlining the contribution of nurses to global aid relief and the range of nursing roles therein points out the importance of cultural awareness and sensitivity in disaster situations. A case is made for the education of nurses in international groups to foster such awareness and improve competence in working with other cultures and in international teams.

As disasters are normally associated with population displacement and social upheaval, there is always the potential for victims of disasters to feel that dignity is compromised and health as whole human beings is under threat. As key health professionals who value providing a holistic approach, nurses must become advocates for the maintenance of dignity and human rights for those affected by disasters. Ethical challenges are commonplace in disaster situations mainly because of the complexity and mix of political and cultural dimensions that exist in the affected population. This complexity may even exist within international aid relief teams.

As providers of aid relief to communities across the world, nurses must be aware of the need for accountability and quality of care. This is not easy as there is no universally accepted international minimum standards. In the absence of a single universal standard, some international governmental organizations (IGOs) and nongovernmental organizations (NGOs) have developed their own standards. The Sphere Project (2011; presently being rewritten for 2018) has developed universal international minimum standards.

Transportation and communication needs are explored as potential obstacles to successful humanitarian relief efforts and are presented as core knowledge for anyone considering entering the field of disaster nursing. The unique health requirements of displaced persons and refugee populations are described as an example of the types of humanitarian challenges nurses face. Fundamentally, nurses should be aware that most international disasters are now “complex humanitarian emergencies” and are best perceived as volatile situations. As is the case with all humanitarian workers, nurses are in almost constant threat of being robbed, kidnapped, raped, or taken hostage. While road traffic collisions and vehicle accidents predominate, awareness of personal security is critical. The chapter closes with the challenges associated with increased cultural awareness for nursing in disasters worldwide.

**SCALE OF DISASTERS WORLDWIDE**

Eshghi and Larson’s analysis in 2008 of disasters over the previous 105 years (1903–2008) suggests that disasters are on the increase but cautioned against believing that the world has become a more dangerous place. While improved global monitoring systems do contribute to a picture of increasing threat, it would be foolhardy to ignore other major contributing factors. An increasing world population (now at 7.5 billion as we write this chapter; World Population Clock, 2017), increased poverty and hunger coupled with increased urbanization, and a growing threat from climate change all point to the need to see disasters as a major threat to humankind (International Federation of Red Cross and Red Crescent Societies [IFRC], 2017). The Overseas Development Institute highlights that 325 million extremely poor people will be living in the 49 most hazard-prone countries by 2030 (Shepherd et al., 2013). Since the 2004 Indian Ocean Tsunami or Boxing Day Tsunami where an estimated 225,000 were killed in 11 countries and across two continents (WHO, 2017b), fundamental lessons about disaster response were laid down. Wahlstrom identified three main conclusions that may be drawn from the aid relief effort associated with the Indian Ocean Tsunami (Wahlstrom, 2005). These were the affirmation of a truly interdependent world, the need to design an accountability system that can report back quickly to the range of donors involved in a disaster response, and the need for better coordination of the international disaster relief response system. All this should result in affected communities and host governments not being put under as much pressure in the acute phase. In a review of the lessons for public health management in disasters, Nabarro (2005) also suggested new ways to develop public health capacity within disaster management systems in the wake of the tsunami. He proposed that from the WHO perspective it was no longer acceptable to merely observe and analyze. The need to monitor actions that emerged from the analysis of the response to the tsunami indicates that WHO must continue to
press world governments on disaster preparedness (Nabarro, 2005). Some of these ideas have been realized in international agreements such as the Sendai Framework (UN, 2015).

It is reasonable to suggest that disasters are probably one of the greatest global threats and challenges to the existence of the human race. This proposition exists even before consideration is given to the increased threat of pandemics. To date, most disasters have been caused by natural phenomena such as drought, windstorms, earthquakes, and floods. For this reason, it is necessary to consider the impact of natural disasters on the world, as it is from this source that the greatest demand is placed on nursing internationally.

The most vulnerable areas are those that very often make up the developing world (perhaps more importantly what one may term the “majority world”) and as such have little in the way of resources to cope with any disaster. This is further complicated by the effects of globalization, whereby the wealthier countries are able to exploit further developing technology to become wealthier, and the poorer countries struggle in the wake.

It is important to note, however, that in poorer countries it is more common to experience “slow” or “progressive” disaster events. This is where a disaster occurs over a period of months or years but can have the same devastating consequences as a sudden disaster. In addition, slow disasters often occur in countries that have endemic problems such as malnutrition and disease. Sub-Saharan African countries are a good example of this. Furthermore, the public health impact can be exacerbated by the overcrowding in refugee centers, thereby contributing to increased mortality and morbidity as a consequence of gastrointestinal disease and measles. Chronic malnutrition, chronic dehydration, chronic anemia, chronic malaria, meningitis in the African meningitis belt, HIV/AIDS killing people (or making them orphans who are immunocompromised) results in an ever-increasing vulnerability to pandemic influenza. While HIV/AIDS, malaria, and tuberculosis still remain major foci, the emergence of noncommunicable diseases in poorer countries is becoming equally devastating (Chan, 2017). Furthermore, the fact that 800,000 people across the developed and developing world die each year due to suicide (WHO, 2014) means that poor mental health must be recognized as a slow disaster.

Disaster response is always influenced by global politics and this often sets the context in which agencies have to operate. The passing of the Cold War era has resulted in a new world order or disorder that directly affects the provision of disaster relief nursing. In 2000, Janz and Slead pointed out that aid relief agencies must demonstrate a more reflective learning style and develop new skills to operate in an increasingly hostile and complex world. Described as the “disaster cauldron” by Katoch in 2006, it is clear that disasters are highly volatile and complex situations that require highly trained and specialized people who operate effectively, have a personal resilience and professional competence that enables them to operate within highly challenging and complex care delivery environments.

The delivery of humanitarian aid is an attractive and challenging experience for many of the world’s healthcare professionals. Nurses are drawn to relief aid for a number of reasons. The driving force may be religious, humanitarian, altruistic (Asgary & Lawrence, 2014; Carbonnier, 2015), searching for new experiences, need to attain personal growth or to test personal limits (Bjerneld, Lindmark, McSpadden, & Garrett, 2006; Hunt, 2009). Deployments are usually undertaken under the auspices of an IGO such as the United Nations (UN) or NGOs such as Save the Children International (www.savethechildren.net), World Vision (www.worldvision.org), Concern (www.concern.net), Médicines Sans Frontières (www.msf.org), or the International Federation of Red Cross and Red Crescent Societies (IFRC; www.ifrc.org/). The latter works on a system where the National Red Cross Society proposes “delegates” to IFRC.

Additionally, there may be a national or cultural focus to the aid-delivering organization. Most western countries are associated with disaster relief. This, however, is expanding to the Arab countries. Japan as a nation has been striving for some years with a considerable degree of success to become a key player in terms of aid relief delivery and academic pursuit in the field. Aid relief delivery is becoming increasingly culturally diverse. Readers might be interested in the Japanese-led Disaster Nursing Global Leader Program (DNGLP).

GROWTH OF AID AGENCIES AND CONTRIBUTION OF NURSING

The roots of the aid “industry” can be traced back to the Swiss national Henri Dunant who, following the battle of Solferino in 1859, set in motion the processes that resulted in the formation of the International Committee of the Red Cross (ICRC) in 1880 with its distinctive Red Cross insignia. In 1909, 37 IGOs and 176 NGOs were operating worldwide. However, by 1998, there were 260 IGOs and 5,472 NGOs operating. Ryan and Lummey (2000) make two observations regarding this increase: there is an ever-increasing demand; until recently, there was freedom to work in a climate of relative safety. In the 21st century, the numbers continue to exponentially rise with questionable rise in effectiveness. The UN Cluster System (Office for the Coordination of Humanitarian Affairs [OCHA], 2017) has helped to reduce duplication across agencies but overlap is still prevalent. Nurses deploying to the world’s disaster zones must be conscious as to how and where the employing agency fits into the UN Cluster (e.g., Oxfam will deal with water, WHO with health).

Nursing has a long association with the care of individuals, groups, and communities that experience disasters. Involved at local, national, and international levels, nurses have, with other healthcare professionals, played a key role in disaster prevention and in the delivery and management of care in disaster situations (WHO & International Council of Nurses [ICN], 2009). The types of roles nurses may hold range from senior managerial and leadership posts to providers of direct care. Such roles exist to assist with not only the preservation of life and maintenance of health during the acute phase, but also during the sequel or recovery phase of the disaster. A critical role is the involvement of nurses in “development work” in countries that are at risk of disasters. This type of work contributes to resilience and capacity building to have mature plans in place in the case of a disaster or indeed prevent disasters from occurring.
The contribution of nursing to disaster response and preparedness is viewed as being immense because nurses are one of the largest groups of frontline workers within the humanitarian community. The ICN holds the view that:

Nurses with their technical skills and knowledge of epidemiology, physiology, pharmacology, cultural-familial structures, and psychosocial issues can assist in disaster preparedness programs as well as during disasters. Nurses, as team members, can play a strategic role cooperating with health and social disciplines, government bodies, community groups, and non-governmental agencies, including humanitarian organizations. (ICN, 2001; WHO & ICN, 2009)

Despite this perception, critical evaluation of nursing’s contribution is scant, with little evidence to confirm that nursing input in disasters at an international level improves health outcomes. Disaster relief is a team affair where nurses contribute to the provision of healthcare in a multinational and multiprofessional environment. On the one hand, it may seem futile to delineate nurses from other professional groups, but on the other, it is valuable to focus on the unique contribution of nursing to this field. Nurses normally have a broad skill base that allows flexibility, adaptability, and creativity to adjust roles and accommodate rapidly changing circumstances. Such attributes are at the hub of working in disasters. As they have the largest numbers worldwide, they also have the largest number of students and thereby provide the greatest future resource for future work in disasters.

There is an immediate need for nurses to carry out valid and reliable evaluative studies that explore and document the value of nursing in this field. While there is widespread recognition of the contribution of nursing at an international level to disaster response and preparedness, more needs to be done in relation to development of a foundation for nursing science in the field. Nursing knowledge in this field is wholly dependent on personal accounts and literature reviews, which are of interest and value, but do not contribute to providing a quantitative empirical base value (see, e.g., Davies & Bricknell, 1997; Davies & Higginson, 2005; Deeny & McFetridge, 2005).

Conducting nursing research during disasters is not easy. There are ethical issues associated with research involving vulnerable groups. Lavin (2006) refers to the difficulties with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule in the United States and points out some important legal and ethical issues associated with research in disasters. Our experience of facilitating research programs for master’s degree students means that small qualitative studies are the easiest to manage. Interviews, focus groups, and ethnographic methods are the most common tools used and are the easiest to employ when seeking access to another culture and wishing to speak to people who are vulnerable. Personal diaries that constitute contemporaneous accounts could also offer valuable data if a retrospective reflective analysis is applied.

Sorting out the ethical issues in relation to conducting research in disasters is a worthwhile starting point. Ownership of data can be an issue. If data are collected in a community that has just experienced a disaster, the data belong to that community. They should have first call on the dissemination and implementation of findings. Just as in mainstream healthcare research where participants in the form of patient groups are heavily involved in research, so too should be the case in disaster research. Nurses are in a prime position to develop this process whether they wish to use an action research approach or carry out projects that are immediately applicable to the communities in which they work. Many nurses are closely involved with communities in disasters and could develop the science at the point of practice where it is most required. Although empirical work is scarce at present, it is only a matter of time before nurses carry out empirical studies that contribute to knowledge about nursing in disasters.

DEVELOPMENT OF AN INTERNATIONAL WORKFORCE

Growing global instability has resulted in changes in the nature of international disaster relief efforts. The work effort in disaster relief has increased in its intensity and demand along with a serious increase in risks to the personal safety of international workers. These changes mandate that the preparation of healthcare workers (in this case, nurses) needs to be as comprehensive as possible. It is essential that the individual be as prepared as possible for eventualities that may arise in what may be a potentially volatile and unpredictable environment. Equally, it is essential that the deploying nurse does not become a burden on his or her fellow workers in times of hardship and stress.

Until recently, the preparation for nurses undertaking international relief work was facilitated solely by the employing agency and often in isolation from other agencies deploying to the same area. These courses of preparation are of short duration and concentrate on team building and special role activities. Many of those participating in the past were doing so “to do their part” and considered it a short-term assignment. With the plethora of aid agencies now in place, there has been identified a clear need to ensure that there is comprehensive preparation of nurses undertaking this kind of work as a long-term career option and to ensure professional development in the area. Career development in disaster relief nursing requires a solid academic preparation as well as practical preparation, and many agencies now require master’s level qualifications.

When responding to a given disaster of any kind, the need for predeployment intelligence is absolutely crucial if the response is to be in any way meaningful. Of particular importance is the need to have a strong understanding of the culture and cultural norms of the population the disaster response aspires to aid. Due cognizance must be given to the hierarchical structures within communities and the role of gender. To ignore these issues is to court failure. It may be that a traditional needs assessment as undertaken from the Western perspective with Western disaster responses is not what the population either wants or is willing to accept. This is undoubtedly challenging to the Western practitioner, but to respond in a culturally sensitive and community-focused way is to respect the culture within which the work is to be undertaken. Any interventions are far more likely to be successful if designed within the cultural norms of the community that is affected.

Nightingale clearly applied a process of compliance (to her wishes) and not concordance whereas in the 21st century
a philosophy of concordance as opposed to compliance is required. Involvement of significant personalities and leaders within a community will ensure a positive attitude in the recipients of the given response. The aim must always be to empower giving maximum ownership of the response to the local community rather than adopting a paternalistic stance. At the completion of the disaster response, relief workers and other healthcare providers will leave, and the community will need to become self-sufficient and sustain the gains that have been made. It is not acceptable to create dependent communities as has happened in the past only to abandon them to the fate of further disasters.

A further critical appointment that needs to be made in any area where there is a language difference is that of the interpreter. An “interpreter” is very different from a “translator,” and a clear distinction must be made. A translator is a person who merely states words from one language to another; the interpreter not only conveys words but also adds context and meaning to the words that can be crucial in a culturally sensitive environment. Consider the meaning of the word “terrorist,” for instance. This is a culturally defined term dependent on the country in which one is located; one person’s terrorist may be another’s “freedom fighter.” Individuals may consider humanitarian aid to one population or community as preferential treatment. A skilled interpreter can make a very powerful difference when conveying meaning, context, and appropriateness of the discourse with enhanced communication as an outcome.

The importance of predeployment education and training cannot be overemphasized. Most NGOs run in-house preparatory training, which is agency and often mission specific. However, in a world where nurses are pursuing a full career in the provision of aid, there is a need for career development that meets both employment and academic developmental needs. Such programs should be multicultural and multinational in order for those students to experience cultural diversity and its complexities. This experience can then be transferable to the field to positive effect. There is a need for a physical component to the preparation, as often-deployed personnel have to live and work in some very harsh and hazardous conditions where teamwork and mutual support strategies are essential to group harmony and well-being. Survival and coping strategies for living in hostile environments are also valuable and should be included in all training programs.

ETHICAL ISSUES IN DISASTER NURSING

Awareness of the ethical underpinnings of aid relief is critical if nurses wish to participate in such work and be effective in the long term either as practitioners in disaster relief healthcare or as advocates for individuals and communities who experience disaster. Nurses in all parts of the world normally have a focus on the care for individuals, families, groups, and communities and should be accustomed to the ethics underpinning such work. Normal working ethics associated with respect for persons, confidentiality, veracity, fairness, and justice that have now to be applied in a culturally complex world are also applicable in disasters. However, healthcare in disasters requires practitioners not only to continue with their normal ethical practice but, most importantly, also to be able to modify it to suit the challenge of the environment. Providing healthcare in a disaster situation, especially in another country, is unlike the normal day-to-day environment at home. Disasters are complex and demanding situations that nurses may not have experienced before. There are issues over fair distribution of aid, triage, and prioritizing need. Most importantly, the whole presence of an international aid relief team in a country outside their own is an ethical issue and can have profound impacts on personal ethical stances.

As discussed earlier, recent evidence suggests that altruism and humanitarian values remain as strong motivators for humanitarian workers (Asgar & Lawrence, 2014; Carbonnier, 2015). Despite this, to ensure effectiveness and even survival, it is critical that nurses dispense with naivety that aid relief is only about being altruistic and caring toward those who have experienced loss because of disaster. Aid relief is principally a political action undertaken by those who have resources to help those who do not. Arriving in another country or community with resources in the form of food, water, sanitation facilities, medicine, knowledge, and skills has both cultural and economic impacts. It is critical therefore to ask, Why are we here? What do we want to achieve? It is important to answer the questions fully and honestly, otherwise the ethical tensions experienced in the disaster situation will be more difficult to deal with and may result in difficulties with relationships at all levels. This process of reflection should not be limited to individuals but extend to teams, organizations, and even governments. There is little point in participating in aid relief if the communities and nations who receive the aid do not benefit in the long term. Preserving dignity is about respect and tolerance for all elements of life and culture. As with all helping behaviors, aid has the potential to patronize and mitigate dignity. It is this type of ethical awareness that is needed prior to embarking on any mission to provide aid relief to other nations, communities, families, and individuals. This awareness is almost an ethical principle in that it should be considered when making ethical decisions in disaster relief nursing.

At its core, however, disaster relief nursing is based on the ethic of being humanitarian. The IFRC defines this humanitarian ethic as

…an ancient and resilient conviction that it is right to help anyone in grave danger. This deeply held value is found in every culture and faith, as well as in the political ideology of human rights. The ideas of the “right to life” and an essential “Human dignity” common to all people are framed in international humanitarian law (IHL), human rights conventions and the principles espoused by humanitarian organizations. (IFRC, 2014)

These values are similar to the values and ethics of nursing worldwide. The International Council of Nurses Code of Ethics (ICN, 2000) emphasizes the centrality of respect for human rights including the right to life and to dignity. Appreciating that those who fall victim to disaster are at risk of losing life and having their dignity compromised or removed, it is critical that a full appreciation of the ethics of disaster is accommodated.

Since 2004, the IFRC has recommended that to apply the humanitarian ethic it is necessary to be neutral and independent. Although nurses, irrespective of culture or country, should
find it easy to accommodate the ethics of humanitarianism, the reality may be very different. Most disasters worldwide are now complex humanitarian emergencies and are fraught with political, ethical, and tribal conflict. To display respect for the dignity of all groups, it is often difficult to be neutral and independent. Even if an individual nurse or group of nurses claims to be neutral, their nationality, flag under which they operate, passport they hold, color of their skin, or perceived religious beliefs may place them in a particular box that may not be perceived as neutral.

Walker (2006) discusses the need to reflect upon the Code of Conduct for the International Red Cross and Red Crescent Movement (see IFRC & ICRC, 1994). He outlines that the Code was principally devised for natural disasters and is not as applicable in complex emergencies. In 2004, however, Hugo Slim, the resident scholar and ethicist at the IFRC/Red Crescent, proposed five “moral hazards” aid relief workers should be aware of. These still apply today and are as follows (IFRC, 2014):

- Complicity in abuses (feeding refugees may help armed factions regroup)
- Legitimizing violations (prioritizing aid over investigating rights violations may encourage a climate of impunity)
- Aid’s negative effect (too much aid may undermine local markets or depopulate areas)
- Targeting and triage (the neediest may be left to die if others can be more effectively helped)
- Advocacy or access (condemning abuses can mean agencies are expelled)

As is the case in all ethical situations, the most important thing is that the individual practitioner is aware of the consequences of action and inaction. A clear understanding that aid is a political action and aid relief has potential to destroy as well as build for the future is important. Awareness, especially in complex emergencies of the difficulties with neutrality and independence, is very helpful. Most importantly, however, promoting the ethic of humanitarianism not in a naive way but in the context of full political and cultural awareness is critical.

Increased political awareness may come at a price. The case example (Box 16.1) presents a situation where a nurse who is politically aware prior to getting involved in disaster relief experiences an issue when he arrives at the disaster. In this case, the political awareness results in an ethical situation that has the potential to compromise the mission.

Average rates of mortality tell us only that so many percent will die. Observations must tell us which in the hundred they will be, who will die. (Nightingale, 1860, p. 124)

The need for financial and business governance has been acknowledged by NGOs for several years. Tandon (2013) stated:

The governance of NGOs focuses on policy and identity rather than the day-to-day issues of the implementation of programs … governance requires the creation of structure and processes which enables the NGO to monitor performance and remain accountable to its stakeholders. (p. 42)

**BOX 16.1 Case Example of a Nurse Experiencing Ethical Conflict in a Disaster Situation**

**BACKGROUND**

John Black has been a charge nurse in Accident and Emergency for over 30 years. Throughout his career, he has always placed a high value on the idea of culturally sensitive care. Recently, the unit in which he works was awarded a quality mark for “Transcultural Care.” This was for an accident prevention project with adolescent ethnic groups in inner city housing. He has also been known to advocate for improved public health services for minority groups in his city. He is a member of Greenpeace and Amnesty International.

**ISSUE**

Recently, he took a leave of absence from work and joined an nongovernmental organization (NGO) that provides healthcare to victims of disasters worldwide. Until he arrives in the country, he is unaware that some of the internally displaced people (IDP) he will be caring for are ex-prisoners of war who were accused of mass rape and torture during the previous political regime in the country. The present government has given a reprieve for all prisoners in an effort to build peace. John experiences an ethical and professional issue. Can he work in this situation or should he consciously object? Should he ask to be placed in a different part of the country where there is less of a possibility of meeting such people? Should he ask to be sent home?

**SOLUTION**

Before considering this issue at a personal level, it is necessary to consider the different stakeholder relationships involved. NGOs are normally in a country at the request of the host government, World Health Organization, or the United Nations Office for the Co-Ordination of Humanitarian Affairs (OCHA). Prior to signing up for the mission, John would have been told of these contractual arrangements and should have been briefed on the culture and background of the groups with which he may be involved. It is more likely, however, that the mission had to be organized quickly and there may not have been time to provide this level of information. Disasters are not selective when it comes to victims. A disaster will normally involve a cross section of the society in which it
Over the years, an increasing amount of project evaluation has been conducted. The founding of the Active Learning Network for Accountability and Performance (ALNAP) in 1997 provided a central repository for project evaluations and reports. ALNAP produces an annual report based on evaluations, and this information should be used to learn lessons from and improve the quality of care and disaster response. Furthermore, this network provides a valuable resource for existing as well as prospective humanitarian workers. Most of the webinars are open to the public (see www.alnap.org).

In 2002, Rosen argued that a review of working practices is required within humanitarian agencies. It is therefore unsurprising that donors are now demanding an assurance that the myriad of aid agencies delivering humanitarian relief on their behalf are doing so to a recognized and predetermined standard.

A high quality, effective, efficient, and coordinated response to a disaster is required to ensure that the needs of those affected by calamity or armed conflicts are met. It is widely recognized that those affected by disasters have an increased risk of becoming ill or dying from, among other things, diseases associated with inadequate or poor sanitation or water supplies, which are avoidable but often inevitable following a disaster. Therefore, affected individuals may become reliant on the skills of those involved in humanitarian assistance for their survival (see Chapter 19, “Restoring Public Health Under Disaster Conditions,” for further discussion). An initial assessment of the disaster area is therefore essential to gain an understanding of the situation or emerging situation, health risks, and population needs.

The Sphere Handbook, 3rd edition, published in 2011 and a new edition being published in 2018 (originally launched in 1997) hold the view that the basic human rights of those affected by calamity and conflicts were not being upheld. In 1994, a multidonor evaluation concluded that there were unnecessary deaths in Goma in the Democratic Republic of Congo. Goma was the city that dealt with the massive influx of refugees from the 1994 Rwandan Genocide. This catalyst brought about the Sphere Project. Initially, those involved developed the Humanitarian Charter and followed this with the Sphere Project Minimum Standards in Disaster Response (The Sphere Project, 2011), both of which were derived using input from hundreds of experts from 228 aid agencies from 30 countries (www.sphereproject.org). The Sphere Humanitarian guidelines are scheduled for an update in 2018. Readers are advised to visit the Sphere Project website for the updated guidelines.

The purpose of the Humanitarian Charter and the Minimum Standards in Disaster Response was to improve the effectiveness of humanitarian assistance initiatives, and to increase the accountability of international agencies, and arguably even the donors participating in humanitarian efforts. The charter and the standards are based on the belief that first, all possible steps should be taken to alleviate human suffering that arises out of conflict and calamity, and second, that those affected by a disaster have a right to life with dignity and therefore a right to assistance (The Sphere Project, 2011). There is a common belief that all possible measures should be taken to alleviate human suffering arising out of conflict or calamity. The principle of a right to a life with dignity is drawn from the UN Charter and the Universal Declaration of Human Rights. Life with dignity is a fundamental human right; however, individuals and cultures may have different perceptions of what this concept means. Nurses must therefore participate and collaborate with local representatives of the community to ensure understanding and cultural compliance.

The Humanitarian Charter is committed to achieving a quality service and encourages both agencies and governments to adopt such standards. Standards have been drawn up to ensure adequate supplies of water, to minimize the spread of disease, and to provide sanitation, vector control, management of waste, and promotion of hygiene. Additionally, Sphere minimum standards arguably demonstrate the basic level of assistance required for all people at any time. Achievement of the minimum standards can, however, depend on a range of factors, sometimes beyond the control of the agencies (e.g., environmental factor). A need for such a strong focus on standards has been questioned when grave issues such as lack of access to populations or gross violation of protection persist. Sphere has argued that such standards were initiated for the purpose of improving quality and accountability of a humanitarian response.

Nurses are one of the largest groups in the frontline within the humanitarian community, especially in the healthcare arena. As highly skilled professionals, they have a vast contribution to make in relation to quality assurance in international disaster response, especially with respect to knowledgeable, effective, efficient use of resources, as well as being educators and promoters of health. Evaluation of the effectiveness and quality of any contribution is important for overall quality assurance and improvement in aid relief delivery worldwide. Continuous quality improvement and quality assurance are key to ensuring accountability for efficient and effective delivery of humanitarian aid. Nurses are ideally placed to influence and monitor these two processes.
COMMUNICATION AND TRANSPORT AS OBSTACLES TO AID RELIEF

It is common for a disaster to affect more than one country at a time, or to cross borders. Disasters that involve multiple nations create additional obstacles that must be effectively addressed in order for humanitarian efforts to be successful. The two primary obstacles faced by disaster relief professionals are those of communication and transport. The success or failure of the communication and transport systems in any disaster response will influence the overall outcome of the relief response effort. In the developed world, high-tech communications systems are often ineffective in disaster situations. Equally, in the developing world, communication and transport may not have existed in the first place. Irrespective of location, disasters will result in communication and transport difficulties. Those involved in disaster response must always have a well-thought-out and easy-to-use communication and transport plan.

The physical size, location, and geography of the countries affected by the disaster may also contribute to transportation hardship. Some types of disasters (e.g., floods, hurricanes, and earthquakes) physically disrupt roads, bridges, tunnels, and railway lines. Transportation needs include movement into the situation (human resources, supplies, and equipment) and movement out of the situation (moving victims away from chemical or radiation disasters). International environmental disasters occurring with nationalities at war pose even larger challenges as conflicting members of the society may limit transportation, making the safety of those involved an additional consideration. Natural disasters such as famine may result in thousands of people migrating from one area to another.

It is therefore essential that expertise be available and appropriately tasked to undertake a command and control role in ensuring that there is a coordinated and focused response. It is essential to ensure that those involved in the relief response effort are appropriately trained in the use of a wide variety of communications systems and can use with confidence accepted protocols for passing information accurately, for example the International Phonetic Alphabet. It should be noted that a few areas of the world do not have the capability to support the use of mobile or cell phones. Nevertheless, even in countries that do have established networks, these may be compromised during disasters. Effective communications are essential in that they are an adjunct to the ability to deploy an appropriate response in a timely fashion. Predeployment training and transportation planning are imperative for the success of any response. Technology such as the now highly developed Geographic Information Systems (GIS) has greatly enabled planners to have a real insight into the scale of the problem for which they are planning. This technology is proving its worth repeatedly in terms of responding to complex disasters. Additionally, of course, there is the easily accessible Google Earth system that can give planners a great deal of information about terrain and population density.

There are challenges to ensuring that an effective communications and transport plan is in place and operating to potential. A great deal of time and effort is required to ensure that this takes place. Poor communication and a less than timely arrival of transport carrying essential aid can seriously compromise the credibility of the organization involved.

The issue of personal safety when deployed in response to a disaster is highly important. It is evident from the numerous kidnappings over recent years that the symbols that once gave at least some semblance of protection are no longer respected as such and it could be argued to accentuate the risk to the wearer. Predeployment training must be given to address the issue of personal security that is country/region specific as there is clearly no one training package that fits all scenarios. Post 9/11, there has been a shift in the paradigm in which the military were seen as deploying to create the so-called humanitarian space within which humanitarian actors, that is, the NGO organizations could operate in some safety; now the risks are inherent in all regardless of philosophy, mandate, or mission. As Wheeler and Harmer (2006) point out, there is also the issue of private military firms (PMFs) to consider. It is clear that there is a proliferation of such organizations working to contract in areas such as Iraq. The use of PMFs is somewhat controversial. They may support military operations, they may be used to support infrastructure development, and they may also be employed to provide security to humanitarian organizations. This raises the question of neutrality (if one believes this is possible) and impartiality given that the PMFs operate under contract. In 2017, this still remains a major issue for all humanitarian workers including nurses. The best general advice on personal safety normally centers around IFRC’s “Stay Safe” manual that emphasizes the Seven Pillars of Security (Tangen, Dyer, & Julisson, 2011). This is a must-read document for nurses who are considering deployment.

As road traffic collisions and vehicle accidents are a major threat to life, those who deploy must have good awareness and skill. An international driver’s license is essential. Drivers must be able to adapt to the types of vehicles that may be locally procured in frequently remote areas. It is often necessary to drive heavy manual vehicles often without the benefit of power steering and many of the accessories that are standard in the developed world. The ability to maneuver such vehicles over difficult and sometimes hostile territory is an essential skill as is the ability to recover vehicles should they go off the “road” (which can be anything from a trail to a paved street). It is important to have a codriver who acts as navigator, even in vehicles following well behind, as the movements of the lead vehicle also have to be checked. Codrivers can assist the driver, help prevent mistakes when driving under pressure, and provide relief when battling fatigue. The temptation to fill a vehicle to the maximum capacity may well be laudable; however, other considerations need to be made in the use of available space. Vehicle modifications may be required depending on environmental conditions, for example adding snow chains or sand tracks, or using heating or air-conditioning (if available and fuel allows). Replacement automotive parts can prevent a roadside breakdown. Adequate amounts of fuels and lubricants, and at least two spare tires that are functional and in good order, should be brought along. The driver must have the capability to change them if required. This is often a major undertaking with large vehicles. Maps, compasses, flashlights, first aid kits, rations, water, and personal survival equipment are essential additional items.
CARE OF DISPLACED PERSONS
AND REFUGEES

Individuals, families, and communities are often forced to leave their homes or country because of disaster or the threat of disaster (United Nations High Commission for Refugees [UNHCR], 2017). “IDP” is the term used to describe persons who are displaced within national boundaries. It is estimated that 62.6 million people are forcibly displaced across the world (UNHCR, 2017). The term “refugee” is used to describe an individual who is displaced and moves across a national boundary. This distinction is very important. Refugees have a right to receive international protection, whereas IDPs remain the responsibility of the home government. The UNHCR (www.unhcr.org) has legal responsibility for refugees but not IDPs (UNHCR, 2017). Aid organizations can help in situations where populations are displaced within national boundaries but this is often random and inadequate. Negotiations with host governments or sometimes local authorities can be more difficult in the absence of UNHCR. Nurses who work in aid organizations or indeed local nurses must be aware of the distinction between the terms “IDP” and “refugee.” It is suggested that IDPs are more vulnerable due to the absence of international protection. UNHCR currently cares for 22.5 million people in all corners of the world and in all types of situations (UNHCR, 2017). Conversely, the fact that refugees have a legal right to assistance can cause discontent in the host population if they are seen (or perceived) to be gaining better treatment and facilities than the host population. This is a difficult balancing act for the aid delivery teams.

Since the end of the 1960s, most refugees have originated from countries in the southern hemisphere (Médicins Sans Frontières, 1997). The mass population movements often associated with Sub-Saharan Africa during the 1980s have also occurred in Eastern Europe during the Balkan conflict and more recently are being manifested once again in the Mediterranean. Images of large groups of displaced people—mostly women, children, and older people—walking on roads or traveling in heavily laden vehicles or makeshift boats are synonymous with disasters worldwide. Englund (1998) described the problems associated with being uprooted from one’s community; losing family members; and, more often than not, experiencing intimidation, persecution, and rape, that result in most refugees being physically and mentally traumatized. This analysis still stands today.

The priorities for management of healthcare in relation to such groups should center on basic requirements such as water and sanitation, food and nutrition, shelter and safety, control of communicable diseases, and psychosocial recovery. Individuals and groups who are refugees may be disoriented and traumatized but have the ability to retain creativity and survival methods. Individuals and communities who experience disasters may have already established coping mechanisms and methods for survival. Working closely with community leaders is critical to any healthcare plan. Recent evidence confirms that nursing can do a lot in relation to meeting basic healthcare requirements. A deep appreciation and cultural understanding to deal effectively with loss of human dignity and feelings associated with traumatic memories are important (Al Qutob, 2016; Davenport, 2017; McBride, Russo, & Block, 2016; Pinehas, van Wyk, & L ee ch, 2016).

Placing the existing cultural sensitivity and empathy related to the experience of displacement at the center of care, nurses can provide expert and person-centered emergency public health support. Initial assessment and care that involves measles immunization, water and sanitation, food and nutrition, shelter and site planning, lifesaving interventions in the emergency phase, maintaining normal social structures required for feelings of security, and maintaining psychosocial well-being are all critical.

SUMMARY

An increasing world population, increased urbanization, increased hunger, and an increasing threat from climate change, mean that many communities throughout the world are at risk of disaster and/or catastrophe. As they lack the necessary resources to respond effectively, there is an urgent need for nurses worldwide to work collaboratively with communities and focus on risk reduction, resilience, and capacity building. The scale of disasters—slow and acute—that is threatening the developing world is outstripping the capability for response. This is despite the exponential growth in NGOs and international groups providing aid. Disasters are becoming more complex and in many cases highly volatile situations. Terms such as “catastrophe” and “complex humanitarian emergencies” are now used. There is a need for an acute awareness on the part of all who participate in disaster relief of the ethical underpinnings and cultural, political, vehicle transport, communication systems, and personal security issues associated with disasters.

Although a significant nursing presence in disaster response exists worldwide, there continues to be a paucity of empirical evidence documenting the influence of nursing on health outcomes. Clearly, there is a need for robust preparation of nurses that is both theoretical and practical, and this should be underpinned by empirical evidence about nursing in disasters. Such preparation must equip nurses to meet the holistic needs of nations, communities, families, and individuals who fall victim to disaster and require support and education to recover and build community resilience to mitigate future disasters. In a multinational/multicultural setting, there is a defined need for cultural awareness to be at the forefront of any disaster response. A community focus as opposed to a medical focus is recommended if the key concepts of nursing in disasters and catastrophes are to be realized.

STUDY QUESTIONS

1. Identify the five most affected countries by natural and human-initiated disasters or catastrophes in the past year. Are there similarities?
2. Examine the perinatal mortality and gross domestic product (GDP) of these countries. Consider the level of capacity building and/or community resilience that exists. What are your conclusions?

3. Select a recent paper on the management of healthcare in disaster or catastrophic situations and determine how nurses contribute to the overall relief effort.

4. Reflect on how you would cope in a disaster situation as a healthcare professional. List the major difficulties and advantages associated with working in multinational teams in disaster situations. Consider your cultural background in this context.


6. Explain the importance of cultural awareness and cultural considerations in planning care during a disaster response.

7. Identify an ethical issue that you are likely to encounter in a disaster relief situation.

8. Select a recent disaster in a country or group of countries. Write a short plan on how you would set about improving the resilience of the local community to mitigate against future disasters.

9. You quickly realize that the disaster is still in the acute or emergency phase. Go to the World Vision (www.worldvision.org.uk), CARE (www.care.org), or Islamic Aid (www.islamicaid.org.uk) website. Find out how you can assist. Concentrate on the transport and communication difficulties, cultural issues, and ethical issues.

10. When you arrive in the host country, you are faced with assisting the local nurses establish a healthcare facility for a large refugee camp. Outline how you would organize your team in the first 72 hours. Concentrate on achieving the minimum standards for humanitarian relief and remain focused on accountability for nursing, personal security, and the safety of your team.

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