Abstract
This paper defines disaster and discusses the ethics needed before, during, and after a disaster occurs. The concepts of values, liberty, freedom, the common good, and individual rights support ethical policies and actions. The four phases of disaster policies—prevention, planning, response, and mitigation—are grounded in ethical principles that are dominant in bioethics and nursing ethics. Triage ethics as well as the role and functions of the nurse are discussed. Specific ethical issues faced by nurses during and after disasters are detailed.

Key words: disaster, ethics, nursing

INTRODUCTION
The development in nursing education to focus on disaster nursing is timely and important and necessary. Before I focus directly on Disaster Ethics, I will discuss some background ideas to help us more fully understand the ethics basic to Disaster Nursing. Before focusing directly on Disaster Ethics, some background ideas to help one more fully understand the basic ethics to Disaster Nursing will be discussed.

Definition
Why do we call some events a Disaster and do not call other events a Disaster when just as many people are injured or killed? What are the characteristics of a Disaster?
Disasters are exceptional events that suddenly kill or injure large numbers of people. A disaster is a situation or event that overwhelms local capacity, necessitating a request to a national or international level for external assistance (Zack, 2011).
The difference between disasters and other large-scale problems with dire consequences for numbers of people is the degree of danger that is acceptable in normal daily life. These acceptable normal dangers are risks not disasters. For example, since the September 11 (2001) attacks, 245,000 Americans died in road accidents; more deaths than from Hurricane Katrina in New Orleans and the terrorist attack on New York City’s World Trade Centers. But this statistic about road accidents and deaths is not considered a disaster but a risk, which is pervasive in our lives (Beck, 1992).

There are both natural disasters and human-made disasters. As we come to understand more about human interactions with the physical environment, we can better understand what is natural and what is human-made or at least human influenced (e.g. global warming). Recently, a TV science program called Earth from Space showed life in the sea having an impact on the African Saharan Desert and the sand storm there, and then bringing minerals and rain from the African desert to Brazil to create the rainforest. Communication technology provides these and other new data to scientists.
The nature of the disaster is important and determines the end results. A pandemic of a highly contagious disease is considered a disaster. But in this case, the physical environment (houses, hospitals, water supply, etc.) is intact. The issue is isolation of those infected, which shifts the ethical ideal of individual rights to that of the common good. These ideals will be briefly discussed presently.
San Francisco had an earthquake in 1989. While everything had to be checked out for safety purposes, only a small neighborhood was greatly affected, as was the Bay Bridge. Most homes and hospitals, and the basic infrastructure were all alright so life went on as usual for...
many people. The emergency services were also able to function as per usual.

Then there was the Tohoku earthquake and tsunami in 2011 in Japan. The damage included flooding, landslides, fires, and buildings and infrastructure were damaged or destroyed. There were also nuclear incidents including radiation releases and human casualties (15,882 deaths, 6,142 injured, and 2,668 missing; Earthquake-Report Japan, 2011).

Given these different types and degrees of damage from disasters, the ethical dimensions of disasters are large and complex. Before these dimensions are discussed, the usual ethics that we use in “normal” times will be reviewed. “Normal times” mean the everyday situations we usually experience, for example, when a patient is in a functioning hospital with lights, running water, and other resources that are required for nursing care or for an intact community are functioning.

ETHICS IN NON-DISASTER TIMES

For normal times, Davis and Fowler (2010) summarized ethics as follows:

- **Virtue Ethics** asks: Who am I?
  - This is the character of the person. Virtues such as courage, compassion, integrity, trustworthiness, kindness, respectfulness are all evidenced by our behavior. They indicate who we are as a person.

- **Principle-based Ethics** asks: What should I do when I have an ethical problem? What is my ethical justification for my actions?

The frequently used ethical principles in health care and nursing are:

- **Respect for Persons**—In the USA, this means nurses have a primary obligation to the patient, which means we listen to them and respect what they say. They are part of the decision-making plans for their treatment and care.

- **Do No Harm**—we do nothing willfully to harm the patient. We need to think about what constitutes harm. Is it harmful to aggressively treat a terminally ill patient near death, for example?

- **Do Good**—this principle means we give excellent nursing care and do for the patient over and above what is essentially required for good nursing care.

- **Truth-telling**—means that we tell the truth. As the individual patient is the focus of our ethical principles, this may be difficult under certain circumstances. For example, in the USA, the physician will tell the patient the diagnosis of cancer but may be vague about the prognosis and the patient asks you about that.

- **Promise-keeping**—means we keep our promises to patients. For example, if one says one will return this afternoon and give you a back rub then either one should do so or tell the patient why one cannot. One should say why they We take seriously what we say to patients because they do that too, and it is the ethically right thing to do.

Justice means we act in a fair way. We treat similar cases in a similar way. In an everyday example, if you have three children, you try and act fairly with them by giving each one the same amount of attention and your time. Or you bring a similar gift for each when you return home from a trip.

This principle is used to make health policies and to allocate resources in society. This is called **Distributive Justice**, which aims to distribute social benefits and burdens fairly.

**Ethics of Consequences** asks: What will happen and to whom if I do this act? Suppose the terminally ill patient asks his nurse, “Am I going to die of this cancer? You know the answer is most likely yes. But if you use the principle of truth-telling and say yes to him, what are the consequences for the patient, his family, the physician, the hospital, and his nurse? In thinking this through using ethical principles and the Ethics of Consequences, you could take both into account and make a decision about what you will do to be ethical.

**Caring Ethics** asks: what should the nature of this relationship with the patient be? How can I be caring? What does it mean to be caring?

Communitarian Ethics means the emphasis is on the connection between the individual and the community. It focuses on the need to balance individual rights with the common good. The community often has competing interest and the larger the city, the more difficult it may be to create a sense of community (Bellah, Madsen, Sullivan, Swidler, Tipton,1985).

Obviously, in a city such as Tokyo, there are numerous communities where people have some sense of the smaller area in which they live in as a community. After the 1989 San Francisco earthquake, I realized I only had a nodding acquaintance with the people on my street. I also realized that in a disaster, we all would need each other so I had a We Survived the Earthquake party where we all became beginning friends. But establishing and maintaining a sense of community needs more than a party. There needs to be both a formal structure of community available in emergencies and an informal sense of community based on relationships. Both Japan and the USA focus on the individual and the group, but
Japan seems to put more emphasis on the group while the USA puts more emphasis on the individual. If this is so, Japan possibly has a more developed Communitarian ethics way of thinking. This ethical theory is rarely discussed in bioethics or nursing ethics in the West.

SOCIAL CONTRACT

The Social Contract Theory, which has to do with the relationship between the government and its citizens, along with the relationship that citizens have with each other (Rousseau, 1997), will be briefly discussed. The Social Contract is an explicit or implicit agreement among citizens that justifies the formation of an on-going functioning of government, and emphasizes the rights of citizens in their relationship to the government. This theory takes as fact that people individually and in groups have fundamental rights to which they are inherently entitled.

The United Nations published the Universal Declaration of Human Rights (1948), which says: The will of the people shall be the basis of the authority of government (Article 21.3). Then it says: In the exercise of human rights and freedom, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedom of others and of meeting the requirements of morality, public order, and the general welfare in a democratic society (Article 27.2). This essentially is a modern social contract.

After the attack on New York’s buildings, the 9/11 Commission Report said in 2012 that the American people are entitled to expect their government to do its very best. They should expect that officials will have realistic objectives, clear guidance, and effective organization. They are entitled to see some standards of performance.

The word “entitled” here means that all of the American people have certain rights and therefore the government has an obligation to the people because of these rights. But we know that the best administrative organization and objectives to prevent disaster, with the corresponding public policy of honest disclosure, are insufficient without adequate public policies for disaster preparation and response. The best efforts may not provide complete safety, but they are essential if the government and its citizens are to have a social contract that includes the ethics for disaster.

VALUES, LIBERTY, FREEDOM, AND THE COMMON GOOD

All of these ethical ways of thinking can help us to reach a decision as to what the ethically right thing to do is. Ultimately, each of us has to use our values in making these decisions, so it is important that we have some awareness of what those values are in everyday life before we have a disaster.

For example, I greatly value the individual human, but I also know the importance of the common good. While individual freedom is basic to human thriving, this value must be put into the larger context of the common good.

The basic, important question is: Where do we draw the line and allow the group or the state to put limits on individual freedom? We have laws that limit individual freedom such as those about driving a car. That affects us all, both drivers of cars and pedestrians. There are also situations in which the individual alone has their freedom limited for the common good, for example, recently, a man with very contagious tuberculosis (TB) was told not to travel to protect other passengers. Public Health law was used to restrain him. But he did travel on a plane and was arrested when the plane landed. He potentially harmed all the people on that flight because he was breathing in a confined space that used an air-circulating system. His freedom was limited because of this and in the name of the common good. In thinking about the common good, one shifts from a focus on the individual to the group. Most nurses much of the time think of the individual patient and not so much about the group. Maybe community health nurses think more about the community than hospital nurses tend to do. These are important ideas that can re-focus our values when a disaster occurs. In a disaster, it is necessary to think of the individual but within a context. It is this context that makes such a difference in what we can and should ethically do (Wall & Keeling, 2011).

INDIVIDUAL RIGHTS AND THE GOOD SAMARITAN LAW

Generally speaking, we think of patients’ rights in two categories. First, there is the right to something such as good nursing care. And second, there is the right to be left alone. Informed consent is based on this second right (Davis & Fowler, 2010).

In a disaster, it may not be possible to maintain these rights. In the name of the common good, individual rights may be abridged. This must be done with care so that abridgement does not become abuse.
In the West, there is a concept called The Good Samaritan Law. This law, based on a Biblical parable, offers legal protection to people who give reasonable assistance to those who are injured, ill or otherwise incapacitated such as in an accident. It reinforces the duty to rescue; an ethical and legal principle. Such a duty arises, but is not limited to, those with a “special relationship” to society such as fire fighters, nurses and physicians.

The Good Samaritan Law not only encourages people to help each other under difficult circumstances, but also does not hold the helper responsible if anything goes wrong by recognizing the fact that in some circumstances, there will be a lack of resources and the person offering assistance may not have the specific skills required. context that lacks resources and the helper who may not have special expertise.

For example, suppose I am driving my car and see an elderly woman fall in a busy street. I would park my car in the street so as to prevent other cars from hitting the fallen woman. Then I would get out and help the woman to move to the side walk. I would also call for emergency assistance. If this woman does not recover or even if she dies, I cannot be held responsible; I did the best I could under the circumstances. Such situations can be a common occurrence in a disaster. With these ideas as a background, Disaster Ethics will now be focused on.

DISASTER ETHICS

In focusing on Disaster Ethics, the following phases in dealing with disasters will be discussed: Prevention, Preparation, Response, and Mitigation.

Prevention

At present, disasters are unpredictable, so it is not possible to prevent them for the most part. In addition, the variation in what we consider to be disasters means that it is difficult to make a detailed list of what to do and what ethically ought to be done to prevent all disasters. However, those in political power and groups such as health-care professionals together have the ethical responsibility to discuss issues that may create or add to the possibility of a disaster. For example, global warming, which already impacts the weather and the environment.

Most wars to date have been fought about land, but in future they will be about water. Global warming leads to less water, which leads to less to eat, which means people may die of starvation. This is not new in parts of Africa. Do we view global warming as a possible disaster in the making or as a risk to be lived with until Mother Nature gets better organized and lowers the temperature and provides rain?

Preparation

It is easier to talk about preparation than prevention. If a nation such as Japan or the USA is to be prepared, then all levels of government and individual citizens must be involved in the discussions and planning, and in the organization of the action plan.

In the USA, we have the Federal Emergency Management Agency (FEMA) that is responsible for the coordination of the responses to a disaster that has occurred in the USA and that has overwhelmed local resources. You have the Fire and Disaster Management Agency (FDMA) as part of the Japan Ministry of Internal Affairs and Communications. This agency has a detailed website in English, so it is assumed that there is also one in Japanese. This information is helpful in understanding how the various responsibilities are allocated (www.fdma.go.jp/en).

Has there been enough education and concrete preparation for disasters at all levels of society from the national government to individual citizens? What roles do these national agencies have in this education? How can nursing assist in this matter?

Such education and preparation is an ethical imperative. How many nurses in Japan know what to do, where to go, how to help, who to help in a disaster? How many of you know whether there is a disaster plan for your area and what it is? How many of you have a three day supply of bottled water and food that lasts over time, which can be eaten without cooking in your home? How many of you have ways to discard human waste if there is no water?

How many nurses know how to cope in a nuclear situation, similar to the one Japan had two years ago? What virtues are needed, ethical principles used, and consequences to be thought about in the planning and preparation for disasters? Have nurses been prepared to think of the individual patient in the larger context of the Common Good? These questions cannot be answered for you, and all nurses need to give serious thought to these and other such questions. As members of the nursing profession, nurses together with other professional colleagues should develop policies and educate all citizens, and plan, not in isolation, but with those who have special knowledge, skills and ethical obligations.

While we cannot go through life thinking only of disasters, there is the very real possibility that most of us engage in denial that leads to such thinking as: It won’t happen here or to me. In addition to possible denial,
government structures can be a detriment to rational planning for disasters. For example, the USA Government has many agencies involved in homeland safety and security. In fact, there are so many uncoordinated agencies that do not talk with each other and in actually compete with one another in many ways. So, when a disaster happens, the preparation may or may not work. Hurricane Katrina in New Orleans and the big storm, Sandy, on the East coast demonstrated some of these problems.

But having a national Homeland Safety and Security Agency may lull people into a false sense of safety that supports their denial. The ethical question here is: How can governments and groups such as the Japanese Nursing Association (JNA) balance the need, which I think is an ethical obligation, to educate and help prepare people for disasters while at the same time wanting them to live a healthy life with feelings of trust and security? A once-a-year safety session in the neighborhood will not be sufficient, but to constantly bombard people with Disaster Preparation information does not work either. Nursing has a large role here, so these ethical and practical problems need much thought and action. The nursing profession in Japan has focused on educating nurse leaders to cope with disasters. If Japan does nothing to prepare all nurses, it may have well-prepared leaders and few prepared followers.

Response

Both preparation for and a response to disasters require plans, and both types of plans have ethical dimensions. One question that must be considered is: What assumptions are being made in our planning? Given the historical data on earthquakes in Japan, would Japanese authorities have assumed a quake of such magnitude as the 2011 one and the extent of the tsunami that followed? What are the assumptions? What are the data? Are the data used or not used? If the planning is not adequate later in a given disaster, then what response can be given? Such a question needs to be included in the original plan, so it becomes: This is the plan but if this plan is not adequate, given the extent of the disaster, this is what we do. What are some of the ethical issues in this planning and response? We have an ethical basis in the Social Contract and ethical ways of thinking through these issues using the ethical knowledge presented here.

The hard part comes in working out the details. What do all these abstract values, which we so often take for granted, mean in concert terms? Importantly, what do they mean for nursing organizations such as the JNA and individual nurses?

Mitigation

Mitigation is the ongoing effort to lessen the impact that disasters have on people and property; to lessen the loss of life and the loss of property. Without realistic planning and timely response to help the victims, the goal of mitigation is not possible. Because disasters are not easily predicted as to when and where one will strike, it is necessary to plan using whatever data are available. From experience in the USA, we know that an earthquake-prone area is California, while Hurricanes usually occur in the autumn on the south-east coast and can reach as far north as New York. Tornadoes occur in the middle of the country. This is the general pattern we have learned from experience; however, it is important for those responsible for planning and responding to think beyond these general patterns so as to mitigate any potential damage. It might help if planners thought of the worse-case scenario. Could those responsible in Japan for disaster response planning (to mitigate damages) have thought of such an event as the March 2011 disaster? And if so, what actions would be necessary based on this thinking? The placement of nuclear plants in earthquake-prone Japan and California will not be dealt with here, but it is a large health and ethical issue.

The government and other parties that are involved with planning and responding to disasters have an ethical obligation to Do No Harm and plan so as to lessen the harm to citizens in a disaster; the concept of a risk: benefit ratio must be used. How much risk is permissible and what benefits and to whom are available? By using the ethical principle of distributive justice, so that burdens and benefits are shared fairly in society, how much of the nation’s resources should be spent on disaster readiness and on health care in general, schools, roads and other social needs? And if planners decided, using the concept of mitigation, who would get what resource, would the government ask some communities to move away from the coast? Is this a possible loss of individual and community liberty for those being asked? Can the government demand such action? Whatever plans are made, the response given and the mitigation of loss resulting, values and ethics are a major factor, although it is often unspoken.

These are very difficult decisions due to our limited ability to predict the unknown because there are major uncertainties in disasters. In addition, if planning and responding are based on consequences ethics, this possibly means that not all patients will be saved. Consequences ethics is based on the idea of the greatest good for the greatest number. This does not necessarily
mean that all patients can be saved or should receive medical treatment and nursing care. Whose life is saved when all lives cannot be saved? Whose property is rescued when not everyone’s property can be rescued?

In summary, the definition of a disaster has been covered, ethics in non-disaster times have been outlined, the concepts of values, liberty, freedom, the common good, individual rights and the Good Samaritan Law have been mentioned and a brief summary covering Disaster Ethics using the categories: Prevention, Planning, Response, and Mitigation has been presented. Nursing ethical responsibilities in disasters will now be addressed.

NURSING ETHICS IN DISASTERS

How nursing develops in terms of disaster care in Japan must be controlled by the people who live in Japan. A few ideas that might help in that development will be mentioned below.

First, this development can and should build on what already exists in society—a sense of belonging to a group, which many people believe they have in Japan; for example, an organization such as the Japanese Nursing Association with its branches around the country, and other professional organizations.

Every nurse should know what is available in the national, prefectural, and local government organizations to deal with Planning, Response, and Mitigation. They need to know what plans exist and what values are imbedded in them. Some nurses should be centrally involved as members of an ongoing committee to develop Disaster Protocols that set guidelines about standards of care and allocation of scarce resources.

Standards of Care in Disasters

In the USA, an Institute of Medicine group developed the Guidance for Establishing Standards of Care for Use in Disaster Situations (2012). Members of this group included: nurses, physicians, public health professionals, lawyers, and bioethicists. They focused on Crisis Standards of Care that fit a variety of crisis types. Their report discussed the following:

- Definition of a crisis or disaster (2012).
- Developing Crisis Standards of Care protocols.

To ensure that Crisis Standards of Care protocols enable a response that is ethical, legal, and consistent within and across state borders, the following is necessary:

- A strong ethical grounding.
- Integrated and ongoing community and health-care provider engagement, education, and communication.

- Assurances regarding legal authority.
- Clear indicators and lines of responsibility.
- Evidence-based clinical processes and operations.

An ethical framework is the basis of all guidelines and public policy. Ethically and clinically, good planning will aim for equitable allocations of resources and fair protection for populations. Is it possible to uphold core professional values and behaviors during and after disasters? Yes, to some extent. Health professionals do the best they can under disaster circumstances. What this means in concert terms needs to be developed within a specific context. The Good Samaritan Law is one legal and ethical response to this situation.

Ethical values include the concept of fairness and the professional obligation to care for, or give care to, and to safeguard resources. Tensions can arise between these two ethical principles of giving care and being very careful with resources. The ongoing committee with nurse members who focus on disaster standards of care will have to determine how best to weigh competing demands given local values, priorities and available resources.

Specific Difficult Situations

There are many difficult situations to cope with in implementing disaster plans. But if the planning provides guidelines for ethical actions, this can help health-care practitioners to provide treatment and care during and after disasters.

Two such situations, both of which deal with rationing, restrictions, and responsibilities, will be mentioned below. If life-saving resources, such as water, drugs, and sterile equipment are limited or non-existent, and if numerous people have been injured by the disaster, then we must rely on triage.

Triage is the medical screening of patients to determine their priority for treatment. It is the separation of a large number of patients injured into three groups: those not expected to survive even with treatment, those who will recover without treatment, and the priority group of those who need treatment to survive. This is the Ethics of Consequences or the Greatest Good for the Greatest Number ethics.

Triage disregards factors such as age, gender, and social class. The only variable used is probability of survival with treatment. The Ethics of Consequences is the overall frame to ethically justify triage. The fact that survival is the only factor that should be used to decide who is treated reveals the ethical principal of justice as fairness.
What if just after a disaster has happened there is no physician available in the area but there are nurses? How ethically should this be planned for and what is the role of the nurse? Triage decisions are based on diagnosis, and physicians have the legal and ethical obligation to diagnose. Are there implications for the Good Samaritan Law here? In addition, should all nurses gain knowledge and skills to cope with such a situation? Importantly, should there be a nursing leader to coordinate nursing care and if so, how is this planned for?

Another difficult issue in need of discussion and requires development of guidelines for is: What is meant by professional responsibility or the ethical duty to care?

Nurses should focus their care only on survival if they have a treatment group. However, all patients in normal times can receive nursing comfort care, and this includes dying patients. This fact may make ethical decisions during disasters more complex for nurses. This is a specific topic that needs much attention within the nursing profession because it is at the heart of disaster nursing. Whatever decisions are made in Japan, nurses will find rationing of nursing care difficult, in terms of coping professionally and emotionally.

Nurses working in disaster zones need a support person or group to help them deal with their concerns about triage and other difficult situations. The realities of rationing and restrictions change the meaning of professional responsibility. How much and what kind of clinical nursing should be given and to whom will greatly depend on resources that may be scarce. Nurses themselves are a vital resource in any attempt to save human lives during and after disasters. Regardless of the type of disaster and how extensive it is, nurses will be greatly needed, unless there are no survivors.

The question arises about the extent of the nurse’s duty of care in disasters. In non-disaster times, health professionals can run the risk of becoming ill or, in rare situations, die as a result of contact with patients. However, this is not ethically required of nurses. Hospitals could not continue to function if nurses were ethically required to become sick or die from giving nursing care. This is even more relevant in disaster situations where nurses really can make the difference between life and death for patients.

While there is potentially more risk for nurses working in disaster situations, they have an ethical obligation to do no harm to themselves as they are a vital and often limited resource. I believe that the extent of their duty to care is to do the best they can under present circumstances without doing harm to themselves.

If a nurse, caring for one patient, decides to be heroic in order to help this patient and dies in the process, then that nurse had denied other patients of the benefits of her/his nursing care.

How many other patients might die because of this one heroic act that limits nursing care for others?

SUMMARY

It would be presumptuous of me to tell you in specific terms what is needed for disaster care and how to go about organizing and implementing that care in Japan. I do not know enough and I am an outsider, although I think of Japan as my second home.

All of you know something about disaster nursing; some may know a great deal more about it than others. Those of you who have been at the front lines of recent disasters in Japan can share your experiences so all can learn from the past. A Spanish philosopher once said that those who do not know the past are doomed to repeat it (Santayana, 1905).

What I have attempted to do is give you ways of thinking about the ethical dimensions of this care. Disasters often reveal our basic assumptions, our values, our ability to change our mind-set in changed circumstances to meet the needs of the moment, and our ability to act in these changed circumstances.

I hope this information will prove helpful to you in your tasks of preparing Japanese nursing to deal with disasters in the future.

Thank you for inviting me to write about this topic and I wish you all the very best in your important work.

REFERENCES
