The ethics of disaster management

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Abstract

Purpose – Ethics is the foundation on which societies and cultures are based and are fundamental to political, social and economic decision making. Ethical dilemmas have created controversy and heated debate over the years. Disasters have been defined in public health terms as destructive events that result in the need for a wide range of emergency resources to assist and ensure the survival of the stricken population. Lack of medical resources, in conjunction with a mass casualty situation, can present specific ethical challenges. The purpose of this paper is to explore the ethics of disaster management.

Design/methodology/approach – In and after a disaster, ethical questions arise regarding appropriate and fair allocation of relief funds to help with recovery. Research in disaster settings poses unique ethical dilemmas. The researcher must determine how to balance the critical need for research with the ethical obligation of respect for, and protection of, the interests of research participants. Ethics as part of an educational program made available to health care providers may assist disaster responders to make the difficult ethical decisions involved in disasters. This literature review discusses these issues in conjunction with disaster response and recovery.

Findings – The cardinal virtues of disaster response are prudence, courage, justice, stewardship, vigilance, resilience, self-effacing charity and communication. These eight virtues are not considered all inclusive, no more than Aristotle considered that his morals or virtues were all inclusive. Ongoing work in disaster management will help to ensure that such situations are managed in an ethical manner that respects the rights and privileges of all those involved.

Research limitations/implications – The literature reviewed for this paper was based on peer reviewed scholarly writings. Concepts of ethics and justice are important issues in disaster situations. This paper offers ideas to prompt further discussion among disaster managers and students of disaster studies.

Practical implications – Social changes are reliant on an understanding of ethics and how it affects society. This paper puts forward ethical concepts to prompt discussion by disaster responders and managers with the hope of improving disaster management.

Originality/value – The paper is an original document that may be useful to students of disaster management and those who teach disaster management.

Keywords Research, Disaster relief, Disaster education, Disasters, Education, Ethics, Literature review

Paper type Literature review

Ethics is the study of codes of conduct and moral judgments concerning what is right and wrong (Jenson, 1997). The ethical behaviors of individuals, groups, organizations and nations is behavior that conforms to the accepted values, morals, and standards of conduct. Ethics is the foundation on which societies and cultures are based and are fundamental to political, social, and economic decision making. Social changes are...
reliant on an understanding of ethics and how it affects society. The study of ethics has
at its heart the study of what is right and what is wrong, what is acceptable and what
is not, what can be tolerated and what is not tolerable. To understand the ethical
dilemmas of disaster response and management it is important to understand the
background to ethics and the ethics that is applied in the everyday setting.

The study of ethics or ethical theory is often divided into metaethics, normative
ethics, and applied ethics (Fieser, 2009). Metaethics questions the foundation of ethical
principles by asking where these come from and questions the intrinsic meaning of
these principles. Metaethics focusses on the meaning of terms associated with ethics,
asks what universal truths are, and tries to establish the position of reason in ethical
judgments. Normative ethics is more practical in its application and seeks to determine
moral standards that could be used to regulate conduct and determine what is right
and wrong. Finally, applied ethics involves examination of specific controversial issues
that require a moral interpretation or position. Ethics as applied to disaster relies
on universal truths of what is right and what is wrong, determination of how these
universal rights and wrongs can be applied to disaster situations and finally the
morality of decisions made during a disaster.

Ethical dilemmas have created controversy and heated debate over the years.
“Lifeboat ethics”, a parable by Garrett Hardin (2001), discussed the allocation of
resources when resources are scarce and helps to describe some of the difficulties
involved in ethical decision making when needs overwhelm resources. Hardin's tale
had to do with feeding the developing world; however, similar decisions can be applied
to many situations. For example, if there are 50 people in a lifeboat, room for ten more,
and there are 100 people in the water, how is it determined which ten will be saved?
Ethical theories can be used to explain the decisions of who stays in the lifeboat,
who goes, and who is allowed to come aboard. A greater question is who decides who
stays in the water and who sits in the boat. Similar decisions must be made when
medical resources are limited, such as in a pandemic or when food is limited in famine
or disaster. Ethical decision making might rely on the principle of the end justifying
the means or the decision could be made based on utilitarianism. In such a situation,
should the psychologist or the medical professional be saved? Medical attention is
needed now, but in a week, the saved will need to be counseled to help them through
their guilt because others were less fortunate.

As Hardin (2001) wrote:

Even judging an act by its consequences is not easy. We are limited by the basic theorem of
ecology. We can never do merely one thing. The fact that an act has many consequences is all
the more reason for de-emphasizing motives as we carry out our ethical analyses (p. 50).

Ethical theory dominates discussions of social issues, politics, and economics. As life
becomes more global, and cultures and societies become intertwined, the issues become
more complex. Not the least of this complexity is those ethical principles involved in
the decisions that are part of the delivery of health care. One is required to do no further
harm and respect confidentiality, autonomy, and privacy of those in need. These rights
all play heavily in the ethical dilemmas involved in caring for the ill, injured, and
infirm.

A health care situation that requires the application of specific principles occurs
when many patients require care at the same time. Because there is then a greater
demand for what can be supplied, decisions must determine who is treated first.
This process is called “triage”, which comes from the French word trier, “to sort, sift,
or select”. In day-to-day triage, the common sense rule is to serve persons whose condition requires immediate attention and defer care to those who are more stable and can afford to wait; however, all patients will eventually get care. The process helps to ensure that no one is lost, and all get care appropriate to their needs. In a disaster involving multiple victims, and resources are completely overwhelmed, new protocols come into play. Disaster triage allows that the most seriously injured are left to the end – and may even remain untreated – so that those who can be saved can be cared for. This approach is one of the few instances where the utilitarian rule applies in health care. The greater good rule can be justified because of the clear necessity for allocation of resources to benefit the most people (University of Washington School of Medicine, 1998).

Ethics is the study of standards of conduct and moral judgments as well as the study of what is considered to be right or acceptable behavior and what is considered wrong (Jenson, 1997). Professional ethics, then, is the accepted principles or moral codes that are applied to the practice of a specific profession, and ethical behavior is behavior that conforms to the accepted standards of that profession.

Disasters have been defined – in public health terms – as destructive events that result in the need for a wide range of emergency resources, to assist and ensure the survival of the stricken population. “Disasters present multi dimensions of relief efforts and their management needs a multi-institutional approach” (Cariappa and Khanduri, 2003, p. 286). Kathleen Tierney, former director of Homeland Security, described disasters as “Many people trying to do quickly what they do not ordinarily do, in an environment with which they are not familiar” (as cited in Auf Der Heide, 1989, p. 4). Because disasters pose unique and unusual problems and place people in unfamiliar situations, ethical issues often come to the front of the management of such diverse and constantly changing situations. According to the World Medical Association (WMA) (2010), disasters, regardless of cause, are characterized by a sudden and, for the most part, unexpected occurrence that demands timely actions to alleviate the situation. Disasters from a health care standpoint create damage that makes contact with, and access to, the victims difficult and often places the responder at risk. Disasters have unfavorable effects on public health due to pollution, risk of epidemic, and psychosocial issues.

Disasters require a coordinated multidisciplinary response to ensure that the necessary relief, which can include transportation, food and water, and medical supplies, arrives at the right place at the right time. The three-pronged approach to disaster response involves medical treatment in the form of paramedics, physicians and nurses, fire department personnel, and security forces that can include the military. Disaster responders can be faced with unusual situations in which the professional ethics that apply in routine emergencies and health care situations may be tested. According to the WMA, it is necessary for all disaster responders “to ensure that the treatment of disaster survivors conforms to basic ethical tenets and is not influenced by other motivations” (WMA, 2010, Para 2). While insufficient and often disordered medical resources, in conjunction with the mass casualty situation, can present specific ethical challenges, it is important that the basic ethics of beneficence and respect for autonomy and justice complement the individual ethics of the health care provider despite the chaos of the situation (Macciocchi, 2009). In certain situations, ethical dilemmas may involve choices between equally undesirable later motives or conflicting moral codes (Jenson, 1997, p. 8).
Rationing care in disasters

Health care disaster ethics are “A set of principles and values that serve to direct the duties, obligations and parameters of the delivery of health care in a disaster situation” (State Expert Panel on the Ethics of Disaster Preparedness, 2006, p. 1). Triage is a situation in which health care providers must turn to ethical guidelines to aid in making decisions. In complex emergencies and disasters, health care workers are required to make decisions in light of the relative scarcity of resources, about who receives health care and what level of health care is to be provided, where and for how long (Hogan and Burstein, 2007). A situation in which the demand for medical care exceeds the available resources necessitates the rationing of care and the need to make decisions that allow for the best possible use of the limited resources.

Triage is a recognized system that involves the medical screening of patients according to their need for treatment balanced with the available resources. Commonly recognized examples of triage include prehospital, disaster, emergency room, intensive care, waiting list for lifesaving treatments such as organ transplants, and battlefield situations (Repin et al., 2005).

Triage in a mass casualty event differs significantly from the triage process that is part of day-to-day care in a health care facility. In day-to-day operations in an emergency room or health care facility, triage focusses on seeing the sickest person first and ensuring that person gets all available lifesaving treatments, including transfer to definitive care facilities where advanced techniques are available to prolong life. In day-to-day emergency health care, this happens even when the likelihood of survival is poor. In these situations, triage is an ethical process in which the caregivers are duty bound to see and treat every patient who presents to the emergency room.

Disaster triage differs significantly from day-to-day triage because of the number of victims who present to the emergency room or who are being seen in the field at the scene and reviewed for emergency treatment and transfer to a definitive care facility. The numbers often clearly overwhelm the ability of the attending service to provide medical care for all of those who need it. To manage the multiple victims at a disaster scene, a system of who gets treatment and where treatment is given has to be in place. In a disaster or mass casualty incident, the goal of triage is the rapid sorting of victims with the intention of doing the greatest good for the greatest number of people applying utilitarian concept of ethics as proposed by Hutcheson, Bentham, and Mill that majority of the people be advantaged by a decision (Wilson, 2007). Disaster triage optimizes care for the maximum number of salvageable victims. Differentiation between patients who will survive with minimum care and those who will die even with all possible interventions is the role of triage. The system ensures that the scarce resources go to victims who will benefit most from optimal care and rapid surgical intervention. Effective triage both at the scene and later within the health care facility is often a major determinant of outcome.

The military were the first to employ a form of triage. A French battlefield surgeon named Dominique Jean Larrey during the time of Napoleon originally devised triage. Larrey determined that there needed to be a system to codify patients into groups dependent on the urgency of their medical needs. Larrey also instituted the practice of initiating basic medical care at the scene as soon as possible. Before this time, the wounded were left on the field until the end of the battle and then treated in order of their rank in the army. Larrey’s system focussed on immediate lifesaving care and on treating the most injured first, resulting in an improved outcome. The next major
advancement in triage systems was in 1846 when John Wilson, a British Naval physician, recognized the need to better use resources by treating the most injured first and withholding treatment from those expected not to survive, and from those whose care could be deferred without significant risk (Hogan and Lairet, 2007). Jonathan Letterman, medical director of the Army of the Potomac, was said to have introduced triage and frontline medical care during the American Civil War, reportedly leading to a significant decrease in the mortality rates of the Union troops (Christian et al., 2002).

The First and Second World Wars brought further advancements to the triage of patients. In First World War, triages moved to a centralized point, and from this central area, the casualties were directed to appropriate facilities for definitive care. Second World War developed the tiered approach used today, with victims treated in the field by medics and then passed on to higher levels of care according to individual needs. This advancement in triage was one of the major lifesaving factors in Second World War. In the Korean and Vietnam conflicts, the addition of aeromedical evacuation as part of the rapid triage and transport systems further improved outcomes for victims. While military triage is aimed at treating the wounded that are most likely able to get back into the fray first, civilian triage is directed at maximizing the survival of the greatest number of victims (Nocera and Garner, 1999). According to Hogan and Lairet (2007) “As the art of triage has further evolved, casualty outcomes have improved” (p. 12). Now, approximately 200 years after instigation of the initial triage system, there are numerous disaster triage systems in existence worldwide, but all with the goal of doing the greatest good for the greatest number of injured (Brosnan et al., 2010).

Triage systems developed for use in civilian populations fall into two groups: primary and secondary. There are a number of different systems in use for primary triage of mass casualties; primary triage prioritizes victims for evacuation from the scene and transportation to definitive medical care. Secondary triage systems determine the order in which patients receive treatment once they reach definitive care or, if necessary when transport is delayed or lengthy, at the scene (Jenkins et al., 2008).

A feature of most triage systems is a filter that quickly identifies those who are not critically injured, or the walking wounded, as they are usually termed. These victims are placed in a minor category and go to health care centers that are not equipped to take high-level trauma cases. The transportation of the walking wounded takes place after the victims deemed to be in need of greater care have been dispatched to the appropriate center for their care. Patients not expected to survive are tagged black or expectant. Triage systems usually divide the remaining patients into immediate or delayed categories and color-code them as red and yellow, respectively. Red patients need immediate care, while yellow patients are non-ambulatory and do not meet the red criteria. Decisions are difficult in such situations, as victims who might have survived if they had been the only ones to present to an emergency room will be left to die for the greater good of the greatest number. Throwing all the resources into saving one non-breathing victim could mean that several more victims who needed less aggressive but emergency care would be lost.

Whatever the system used, triage requires ethical decision making. Typically in disaster triage, patients who require a large number of resources to save them would be disadvantaged to benefit a greater number of patients who need less care to maintain their lives. Hence, disaster triage, by its very nature, is utilitarian (Hogan and...
Triage in a disaster is an ongoing process and is done initially at the scene, on arrival at a health care facility, and at every entry to or exit from the health care system: the operating room, admission to intensive care, or for discharge home. At every one of these points, medical teams are required to make ethical decisions about who gets treatment and what treatment they get.

The WMA (2010), in an attempt to clarify the ethics of care for the physician in a disaster situation, stated that under the utilitarian concepts of the situation, it is considered ethical for the health care provider not to persevere to treat at all cost the victim who is deemed to be beyond emergency care, as scarce resources used on this victim may be better used for the greater good. The WMA added that decisions made not to treat a victim – due to the need to prioritize care as dictated by the scarcity of resources in a disaster event – cannot be considered a failure of duty. The focus in disaster health care is doing the greatest good for the greatest number of victims, and resources should be used where they will benefit the maximum number of persons. This utilitarian concept of the greatest good for the greatest number is the approach that Mill (1867) used as a functional basis of his ethics. Aristotelian virtues also come into play in the decision not to treat in a disaster. It takes courage to make an ethical decision that a patient cannot be saved and that the resources both in manpower and equipment are better used in some other area. The physician must show all patients compassion and respect for their dignity, for example, by separating them from others and administering appropriate pain relief and sedatives.

People in countries such as the USA, Australia, and the UK believe they have a right to medical care (Repine et al., 2005). This sense of license can lead to divergence between patients who are unwilling to settle for less and medical teams who are called upon to decide who can practically and ethically be treated in a mass casualty disaster event, when the resources are simply not available to care for everyone (Repine et al., 2005). The belief that every patient receives all possible treatment in every circumstance cannot apply in situations where the demand for care outstrips the supply of resources in personnel, equipment, and supplies (Hogan and Burstein, 2007; Repine et al., 2005).

The response to the earthquake in Haiti presented ethical dilemmas that were new to some of the responders. Because the disaster was so widespread, the response was for an extensive period and it continues today as new situations present themselves to health care providers. Dr Michael Millin, an emergency physician at Johns Hopkins Hospital in Baltimore, served in Port-au-Prince, Haiti, as medical director of the New Jersey Disaster Medical Assistance Team. Dr Millen spoke on public radio of his experience in Haiti as head of the medical team and cited several cases with which he had not had previous experience in terms of triage (Conan, 2010). According to Dr Millen, Haitian circumstances were such that patients not expected to survive were on some occasions, people who were alert, oriented, and speaking. In mass casualty situations, the black tagged or expectant victim is considered to be the victim who is not breathing and does not start breathing when the airway is adjusted to a position that should open the airway and promote breathing. If the patient begins to breathe, he or she is then moved to red status; if not, they are left as black status, and the health care providers focus their attentions on the salvageable victim (Hogan and Burstein,
A patient had presented to Dr Millen with what was diagnosed as end-stage tuberculosis. The patient was in need of oxygen, but supplies were extremely limited. Other patients such as asthma sufferers were presenting as in need of oxygen, and their conditions were reversible. Dr Millen said he had to make a decision as to whether he would provide that one individual the oxygen he needed to stay alive or reserve that oxygen for other patients who may get more benefit out of it (Conan, 2010, Para 7). Millen went on to say “And that was something that was a new experience for me and very difficult” (Conan, 2010, Para 7).

Triage, as an ethical principle of emergency medicine, offers an organized approach to determining who receives that care. It may not be possible for triage principles to be applied “rigorously and without favor to the powerful, the well placed, the noisy, or the well armed (who should simply and emphatically be told to lay down their weapons and act like responsible citizens)” (McCullough, 2006, p. 185). Triage should, however, adhere to well defined, quantifiable criteria. Triage must respect humanitarian law, allow where possible for informed consent, and be based on established medical criteria (Hogan and Lairret, 2007). Having a system in place that allows for organization of care helps the triage officer make the difficult decision involved in such work and protects both the practitioner and the patient.

Triage, like all systems, is not a static activity. It is an ongoing process with patients often triaged on a continuous basis (Bostick et al., 2008). Triage of patients takes place numerous times in the field, and people may be triaged again at health care centers, prior to surgery, and prior admission to intensive care units or regular floors. At every juncture, lifesaving treatments are given and decisions made on further treatment given in relation to available resources. Triage is a vital factor in scene management and the follow-up care in medical facilities.

While a number of different triage systems exist and are used in disaster situations worldwide, it is important to note that no perfect triage system yet exists (Hogan and Lairret, 2007). Effective triage requires a balance between the demands on the system and the supply of resources in relation to a balance between over triage and under triage (Christian et al., 2002). Currently, no metrics are available to determine which system is more successful than the next in ensuring the right patient gets to the right place at the right time (Jenkins et al., 2008). Triage has as its ultimate goal preservation and protection of endangered lives. In a disaster, an overwhelmed health care system could quickly deteriorate into a state of chaos in which no one is treated. The role of triage is to equip the health care provider with a methodical approach to using available resources to protect and preserve the most people for the greater good.

In a pandemic, public health emergency resources and health care personnel themselves are often affected by illness. In such a case, managers may be called upon to make ethical decisions about who will benefit from scarce resources such as mechanical ventilators, medications, and intensive care beds (White et al., 2009). Under normal conditions, all patients should have equal entitlement to health care; however, pandemic situations will make it impossible to ensure that all patients receive intensive care with the medication and ventilatory assistance they need for sustaining life (Christian et al., 2002).

The resources in such situations are finite, and it is necessary to have triage protocols in place that will assist in distribution of resources in a fair and equitable manner (Malm et al., 2008; Martin, 2007). The system will need to ensure that those who will not benefit greatly with allocation of critical care resources will be managed in such a way that their dignity and personal needs will be provided for with adequate
pain relief and social support for them and their family. The moral decision-making process in such cases is characterized by thoroughness and respect for the concerns of all the stakeholders (Fahey, 2007).

Disaster managers recognize that rules that usually apply to medical care are not applicable in situations where there are large numbers of victims placing demands on limited resources. Standards of care that exist in day-to-day health care cannot be applied in such a situation. Triage is such a system, an integral part of disaster response, and appropriate use of resources is not achievable without a triage system that allows the health care provider to ration care in an ethical professional manner, respecting the rights and privileges of all while meeting the understood need to do the greatest good for the greatest number. Mill (1867) said, “Each person's happiness is a good to that person, and then the general happiness must be a good to the aggregate of all persons” (p. 53). This is the key to utilitarianism, good for the greater good. Mill’s utilitarianism works in conjunction with justice. Aristotle set justice aside from the other positive virtues, and Rawls maintained that justice is distinct from the rest of what constitutes morality. With Mill, the utilitarian nature of triage is consistent with justice as triage benefits the most people and is based on the equality imposed by the situation and not by external forces. Such a principle is the basis for disaster triage.

**Ethics of disaster response**

In disaster situations, the main focus of the response is to provide safety, food, shelter, clothing, and security for the victims of the tragedy. This substantial and complex task requires significant funding both internally and externally. Such funding is seldom immediately available, hence disaster fund raising is in itself a complex task that poses unique ethical dilemmas (Jenson, 1997). Alexander (2006) said that in the twentieth century, news about a disaster is more quickly disseminated and reaches a wider audience. The public is able to become a more intimate part of the disaster, and they have the opportunity to view the suffering and devastation created by the disaster event (Brookings Institution, 2010). There can be a tendency to exaggerate the level of suffering that is being experienced overseas and an underestimation of the capacity of the disaster victims to help themselves (Jenson, 1997). This misrepresentation can have the effect of dulling the impact of more accurate statements in the future and making genuine calls for help more easily overlooked or even ignored.

In a humanitarian disaster, the public tends to view the affected country or area as incapable of solving their own problems in part due to an over estimation of the effect of the grief and suffering on the people laid low by disaster (Jenson, 1997). This concept of the affected people does not consider the dignity and capacity of the affected population. Instead of looking for long-term solutions that help the disaster-affected communities return to normality and work to prevent further events, there can be a tendency to override basic rights and freedoms. According to Jenson (1997):

> Many relief workers lack even the most rudimentary knowledge of the languages, cultures, and politics of the countries they are working in; they are profoundly outsiders, prescribing solutions precisely when the devastated population is most vulnerable. Too many relief workers ignore the ethical problem posed by the power they can wield through relief assistance (p. 53).

It should be acknowledged that community knowledge is an important part of determining how to address community needs at all levels of disaster management.
(Stone, 2007). The ethical issues that should guide disaster management include the principles of equal and substantial respect, justice as fairness and allowing a community to have a major voice in its own recovery and planning for the future.

**Ethical allocation of recovery funds**

One of the most fundamental problems in disaster response is not the lack of funds but how the funds are spent (Jenson, 1997). Zhang et al. (2009) mentioned a problem of the contributions of private as opposed to government firms. Millions of dollars are spent on salaries, covering daily expenses, and transporting disaster relief experts to the scene. This money is spent in whatever country or countries that provide the base for the response effort. Ethical discussions revolve around the need to support contracted services within the affected communities. This would empower those communities and allow them to make decisions on how to prioritize the spending.

Ethical questions also arise regarding appropriate and fair allocation of relief funds after a disaster to help with recovery. For example, much has been written of the failure of all levels of government in mitigation, planning, and response to Hurricane Katrina (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006). McGee (2008) wrote of the failure of the federal government to work toward recovery through ethical expenditure of funds. The paper quoted numerous examples of inappropriate spending for questionable articles such as laptop and tablet computers that were charged to the taxpayers’ account. McGee questioned the ethics of federal funds being used to pay to subsidize the recovery of persons who knowingly lived in flood zones. Questions such as this open up an entirely new discussion about the ethics of recovery money.

Discussion also surrounds who is the most deserving and how that is calculated after a disaster. Other discussions arise about the fairness of allocating more to the first responders who risked their lives to save others. Ethical considerations include how economic loss is equated with pain and suffering, need and the role of the victim in the community (The Markkula Center, 2002). After a disaster, the ethics of allocation of funding are guided by the following approaches: utilitarian, rights, fairness or justice, common-good, and virtues (The Markkula Center, 2002).

The utilitarian approach for allocation of funds considers the greatest good for the greatest number or where to put the donations that will do the least harm and provide the most benefit (The Markkula Center, 2002). This approach considers the following: remuneration by considering the economic impact of the disaster based on lost earnings; by the pain and suffering than has been and is being experienced by victims; by need which takes into consideration the current wealth of victims and their families; and by the role of the victims in the community. Will allocating funds to a mayor or community figure ensure that they will in turn help other people? This approach takes into account the utilitarian approach of Mill and the second principle of Rawls’ justice as fairness.

The rights approach recognizes the right to be treated equally by the government and the right of the freedom of choice for the donors (The Markkula Center, 2002). This ethical viewpoint says that regardless of previous earnings or the profession of the victim, everyone should receive an equal amount of aid, with the total aid from government and from private bodies taken into consideration and equalized. This approach also allows that donors’ intentions be considered; however, it allows for redirection of funds if the original needs are met and other area needs remain unfulfilled.
In the fairness or justice approach, funding is distributed according to the economic impact, which means that those who were high-income earners have, in effect, suffered a greater loss and therefore should be compensated to make up for that greater loss (The Markkula Center, 2002). This view means that lower income earners would continue to be disadvantaged since they would probably not have had savings to help them through such a situation. The fairness approach also considers division of funding by considering the pain and suffering experienced by the families. The ethical arguments maintain that while the pain and suffering or death are valid benchmarks for determining aid, the determination of how much each victim suffered is a very subjective judgment and may be dependent on the ability of the victim to communicate that suffering. Other decriers of this method say that compensation paid to families of the dead do not in actual fact compensate the one who died. Actual need is another strong factor in the justice and fairness ethical standpoint. The need for food, clothing, shelter, medical care, and the education of children has been said to be a fair and equitable way to distribute funds, an approach that is designed so that total aid will not be directed to those who have adequate support from insurance and the like.

Ethical distribution of funds for disaster recovery is the subject of ongoing discussion. It must be noted that according to reports, disasters are increasing in frequency. A report from the Center for Research on the Epidemiology of Disasters states that weather-related disasters have quadrupled over the last 30 years in comparison to the previous 75 years (Blow, 2008). A Better Business Bureau (BBB) publication quoted the outgoing secretary general of the International Federation of the Red Cross (IFRC), who said that disasters nearly doubled from 1998 to 2007. Both papers agree that there is no indication that this situation will abate.

An article by the director of the International Strategy for Disaster Reduction (UN/ISDR) supports the need for a paradigm shift in disaster management. With climate change, increasing populations, urbanization, and deforestation, humankind is entering a period of new and increased risk from disaster. The author, Briceno (2004), spoke of the global need to identify both current and future risks, emphasizing the increased risks that come about with global climate change. The article quoted the former Secretary General of the United Nations, Kofi Annan, who said, “We can, and must build a world of resilient communities and nations” (as cited in Briceno, 2004, p. 3). While disasters must be responded to, and money must be spent to return the life styles of those affected to normalcy, the most ethical approach would be to spend time and money in mitigation of disasters through prevention of, and planning for, those disasters that are unavoidable. Such expenditure is morally ethical and can be considered as utilitarian.

The ethics of disaster research
Research in disaster settings poses unique ethical dilemmas (Jesus and Michael, 2009). The researcher must determine how to balance the critical need for research with the ethical obligation of respect for and protection of the interests of research participants in situations where individuals are under the exceptional stresses found in a disaster. Disasters, by definition, make individuals and social groups more vulnerable, and those within those groups that are already vulnerable, e.g. children, women, and impoverished communities, become more susceptible to exploitation and abuse. While experts agree that research about people and the effects of disaster on the population, their social organization and their environments is essential in the aftermath of disaster, this research must be contextual, and culturally and regionally
appropriate (Sumathipala, 2008, Para 2). In such situations as a disaster, where the victims of disaster are more vulnerable and more open to exploitation, the researchers must be careful to conduct themselves and their studies in such a manner as to ensure the same ethical approaches of respect for persons that guide all research. In disasters, a utilitarian approach is applied to the management of resources in which the greatest good is done for the greatest number of people. Jesus and Michael (2009) say utilitarianism, as important as it is in disaster response, should not carry over into disaster research. “Individual rights and the basic principles of respect for persons, beneficence, do no harm, and justice may not be ethically subjugated for the ‘collective good’ gained from research” (p. 111).

US federal regulations provide researchers with the ethical construction on which to undertake research (National Institute of Mental Health (NIMH), 2009). These regulations define both the standards for ethical research and the necessary process for prior approval to conduct it by institutional review boards (IRB). The regulations afford additional protection to vulnerable subjects, including the unborn, children and youths, detainees, the intellectually impaired, and the socioeconomically and educationally disadvantaged (Federal Policy for the Protection of Human Subjects, 45 CFR §46.111, 1991 as cited in NIMH, 2009).

Large-scale disasters, e.g. the 2004 tsunami in the Indian Ocean, Hurricane Katrina, 9/11 and the recent Haiti earthquake, illustrate the challenge to disaster research to maintain and respect human rights (Sumathipala, 2008). Such challenges are increased as disasters cross borders and increase the global divide and disparities that exist within and between societies in the developed and the developing world. Sumathipala (2008) described the arrival of doctoral students from developed countries who wanted to complete research for their studies. In some cases, the victims felt harassed by the survey takers and in many cases, the lack of local knowledge and social mores created situations that offended cultural sensitivities. But researchers and ethicists can work together to overcome such problems.

While there is wide-ranging agreement that disaster research is important, there is also an agreement among ethical researchers that research must undergo the same rigorous ethical tests that guide all other research (NIMH, 2009). Research protocols that apply to disaster research must take into consideration the capacity of participants to make informed decisions and the vulnerability of taking part in the research. Fundamental to it all is the need to ensure that the benefits to the participants outweigh the physical, emotional, and social risks to the participant.

The NIMH (2009) says that research should assume that those affected by disaster retain the capacity to be involved in the informed consent process that is part of participation in research. In cases where this assumption is questionable, individual assessments should be conducted. Participation in research is the choice of the potential participant. Research proposals must, at all times, consider the psychological state of the participant and have apparatus in place for timely referral of subjects in need of health care.

All research must be reviewed to determine the amount of risk, the originality of the research, and the risk-to-benefit relationship (NIMH, 2009). In disaster-related research, it is mandatory to consider the potential effect of the research on the individual or the community prior to undertaking the research. The goals and objectives of the research must be made clear to potential participants, and any therapeutic intent, or lack thereof, should be highlighted. Informed consent procedures should reduce the likelihood of participants mistaking research for clinical services. Explanation of
the research should be presented in an environment that is favorable to informed decision making and that allows for questions concerning the research work. Confidentiality for the participant and of the resulting data must be an intrinsic part of the process. Results must be made available to the participants, and all research must include training and provisions for research staff to support them through the emotional challenges that will likely be faced by researchers and participants.

Despite the challenges and potential problems involved in disaster research, the research community has a responsibility to undertake disaster research with the intent of making important contributions to the knowledge base that will help alleviate current and potential future suffering for the victims of disasters and their families (Sumathipala, 2008). The scholarly community can serve both the needs of the growth of knowledge and understanding of disasters while at the same time maintaining the dignity of victims of traumatic events. Sumathipala (2008), when speaking of her own experience in Sri Lanka with researcher workers after the 2004 South East Asian Tsunami, said:

Researchers are in a strong position to promote and safeguard ethical standards – if they are truly convinced by and committed to them. They know what methods their research needs, and if they consider ethics as a part of research design, they can improve the quality of their results by incorporating higher ethical standards and appropriate safeguards (Para 8).

There is little argument that disaster research is necessary to improve conditions for the greater good. Carefully and ethically managed disaster research has the potential to improve disaster management in all stages of the disaster cycle, including mitigation, planning response, and recovery. Research in the wake of a disaster must consider above all the needs and priorities of the affected communities. The research work undertaken in such chaotic times must be limited to research that cannot be conducted under non-disaster conditions (Sumathipala, 2008). The benefits of the research must clearly outweigh the risks, and research undertaken in any part of the world must follow the same rigid standards – that research must follow in countries in which a robust set of rules and regulations exists – that protects the vulnerable against abuse and mistreatment.

Ethical principles and procedural values that can help provide the structure from which ethical decision making in a disaster is possible are recognized as those that consider the multiple religious, cultural, social, economic, geographic, and ethnic backgrounds of people in the affected area (State Expert Panel, 2006). Such moral values or virtues include fairness, respect, solidarity, and limit of harm. The concept of fairness requires fair and equitable allocation of resources that gives due consideration to fair treatment of the most vulnerable. In disaster, given the relative limitation of resources, the fair distribution of such resources is governed by the greatest good for the greatest number. Respect for person involves recognition of the uniqueness of the individual and their intrinsic value regardless of age, gender, ethnic background, religious affiliations, social status, physical or mental capabilities, and socioeconomic background. Respect for persons involves fair and just treatment for all. Those who cannot be treated in a disaster situation due to lack of resources will still be provided with palliative care and be allowed to retain their dignity. Solidarity implies a commitment not only to family and friends but also to the greater community. Each person has an obligation to consider the greater good rather than their own self-interests.
Health care professionals commit to an ethical code of “do no further harm”. Even in disaster scenarios where resources are limited, health providers may be required to limit the care given to mitigate any potential harm. To achieve the greater good, the basic rights of another should not be violated. Hogan and Lairet (2007) gave the example of a situation in which five immediate or red-tagged casualties and five delayed or yellow-tagged casualties arrive from a disaster. In one secondary surgical evaluation of the five red-tagged casualties, the surgeon finds one needs a liver, another, a kidney, one a new heart, and another will survive with a lung transplant. The surgeon also notes a reasonably healthy individual in the yellow-tagged victims. The ethical concept of do no further harm is a clear indication that the sacrificing of one human being for the four others is not an option. As Hogan and Lairet said clearly, the rule in such a case might read that the surgeon will not kill and harvest the organs of one person to save the others no matter what possible benefit to the greater number of people. Such an act is morally wrong and is for most people believed to be wrong without the need for a written rule.

In addition to the moral values that guide disaster management, procedural values must include reasonableness. Decisions about treatments are made using evidence-based practice, science, and experience, and these are all based on the moral guidelines for all humanity. Actions during a disaster must be reasonable or believable to the average person. Ethical arguments continue, however. In the Katrina disaster, Dr Anna Pou and the nurses administered heavy sedation and pain relief to patients who subsequently died (Scelfo, 2007). The authorities arrested Dr Anna Pou for murdering nine patients who were residents in a long-term acute-care unit in a New Orleans hospital. Two nurses arrested along with Pou had their charges dropped in exchange for evidence in front of a grand jury testimony. In late July of 2006, a Louisiana grand jury refused to indict Pou. Although a legal case came to a close ethical discussions did not. Rick Simmons, Dr Pou’s attorney said that “different rules are going to have to be enacted to govern the conduct of medical providers in mass disaster events”(Dawkins, 2006, p. 5). In normal situations, these health care providers would be culpable, however, in this case, the courts decided that it was reasonable to believe that the health care providers had acted in the interest of the patients to relieve pain and anxiety and were not practicing euthanasia. The discussions of the ethical implications of this case will, however, go on for a long time:

“The ‘international community’ is nothing if not a mass of individual, corporate, and governmental entities who look at the world through a variety of ethical traditions. These traditions help us reason about the nature of human good. We generate solutions consistent with those traditions and the world as we find it” (Jenson, 1997, p. 64).

Ethical management of disaster and emergencies is a complex business that involves communication, education and training, awareness building, resource acquisition, and planning and allocation as part of the disaster management cycle of mitigation, planning, response, and recovery (Jenson, 1997). Prevention is of course, the keynote of disaster management. When disaster does occur, a timely, effective, culturally sensitive, and gender-appropriate response must be enacted. Such a response must recognize that those affected by disaster may have standards of justice and ethical traditions that differ from those of the responders. This point is especially true in the international environment. Recognition and appreciation of such differences helps to maintain the dignity of the victim and helps to work toward sustainable recovery.
Education and training for emergency and disaster management

In education and training for emergency and disaster management, ethics is not usually part of the curriculum. Most courses will involve teaching definitions of disaster, phases of disaster response, the incident command system, medical care in disaster, disaster logistics, use of disaster-specific equipment, and disaster recovery, including critical incident debriefing (Kellison et al., 2007). Yet disaster situations present complex moral and ethical challenges at the patient, caregiver, and societal levels (Larkin, 2010). Stakeholders in disaster ethics include not only patients and their care providers, but public health officials, policy makers, insurance bodies, non-government organizations, the press, and the general public.

Disasters also come in various degrees of intensity. Not all disasters are as monumental as Hurricane Katrina or the recent Haiti earthquake. Not all ethical questions in disasters are as dramatic as having to decide who gets a life vest on the sinking Titanic or which of the 60 people out of the 100 get a seat in a lifeboat. Disasters do cross borders and affect people and their livelihoods. Although there is no single agreed-on definition of disaster, most would agree that they are complex emergencies that affect the lives and livelihoods of people and property and exceed the capacity of a community to respond to it (Perry and Quarantelli, 2005; WHO, 2008). An earthquake that happens in Bam, Iran, will have different challenges than those that happen in San Francisco. In addition to the differences in settings and in cultures, there will be varying political, economic and legal norms, and values that make moral and ethical response to the disaster challenging.

The United Nations, which states clearly that “All human beings are born free and equal in dignity and rights and are endowed with reason and conscience and should act toward one another in a spirit of brotherhood” (United Nations, 1948, Article 1). Despite ongoing work by such bodies as the United Nations, there remain varied definitions of the entitlements of people related to their age, gender, caste and their political or social standing. It is important, therefore, in a multicultural environment, to discuss the varying issues that come to the forefront of a discussion on ethics, particularly when specific ethical issues arise.

The health care provider’s ultimate goal, be it in day-to-day emergencies or complex situations such as disaster, is to provide a quality of care that enhances the situation of the patient within the confines of the situation. Education on disaster management that includes the concepts of health care ethics and how they can be applied to such demanding situations can only help to improve the potential for an ethical and moral response to patient care.

Ethical decision making cannot be carried out by one person, culture, or community (Jenson, 1997). Ethical decision making requires debate and a consideration of historical, cultural, and individual experiences among those who bring different ideas to the table. Communal analysis of concepts and situations helps to build a mutually agreed-upon foundation from which to guide actions that have consequence in a diverse world. This concept holds particularly true in the world of disaster management that crosses many borders, both internally and globally.

Conclusion

According to the classical theorists, Aristotle (1869), Kant (1990), Mill (1867) and Rawls (2001), ethical considerations play a large role in the direction an organization takes for the accomplishment of a shared mission and vision. Ethical practices help to provide stability for organizations in a rapidly changing and increasingly complex world. In contrast to day-to-day emergencies, disasters are characterized by a relative
lack of time and resources and are “Many people trying to do quickly what they do not ordinarily do, in an environment with which they are not familiar” (Tierney as cited in Auf Der Heide, 1989, p. 4). There is not time in disasters for lengthy discussion or decision making. The dynamics in such situations change quickly and often dramatically. In the case of Dr Pou, the situations in the health care facility were far from normal. According to reports, electricity was lost, the basement was flooded, the temperature was over 100°F, backup power failed and the ventilators could no longer be operated, and the lights were out (Lo, 2009). In such circumstances, the very ethical foundations of routine, patient, and family-focussed health care are threatened (Larkin, 2010). Optimal management of complex emergencies and disaster involves more than an understanding of the basic processes of disaster management, the rationing of resources, triage, incident command, and care in extreme circumstances. And while it is important to understand such ethical concepts as utility, justice, and fairness, disaster management requires that the health care provider go beyond the standard of bioethical principles and look to codes of ethics and ethical conduct to guide decision making at the patient, provider, and societal levels. Ethical codes of conduct such as those put forward by the International Committee of the Red Cross (ICRC) provide guidelines for the International Red Cross and Red Crescent movements and other such non-government organizations (Larkin, 2010). These guidelines state that humanitarian aid comes first (International Federation of Red Cross and Red Crescent Societies, 2010). The right to receive humanitarian assistance is a primary principle that recognizes the need for unconstrained contact with affected populations. The driving motivation in disaster management is alleviation of human suffering. Humanitarian aid is neither a partisan nor a political act and must not be perceived as either.

Humanitarian aid is given without consideration of race, creed, nationality, age, gender, or other qualifiers and is prioritized based on need alone (International Federation of Red Cross and Red Crescent Societies, 2010). Human suffering is to be alleviated where it is found, and the degree of aid will be relative to the degree of suffering. The ICRC guidelines recognize the crucial role played by women in all communities and will work to ensure support for this role within the aid programs.

Humanitarian aid, according to this international code of conduct, while recognizing the role of religion in society, will not be used to further religious positions (International Federation of Red Cross and Red Crescent Societies, 2010). Nor will humanitarian aid be used to further political position or as an instrument of foreign policy. Humanitarian aid will be distributed according to the needs of individuals, families, and communities.

The code of conduct of the Red Crescent and Red Cross movements further state that all culture, social mores, and customs of all communities will be respected (International Federation of Red Cross and Red Crescent Societies, 2010). Such factors are important in the uniqueness of a society and must be considered in the delivery of aid. Humanitarian response will, wherever possible, be built to include local capabilities, and wherever possible the capacity of those communities will be strengthened through use of local organizations. In seeking funds for disaster assistance, the ICRC will not portray the victims of the event as helpless, but will respect their dignity and their resiliency.

This code of conduct places a high priority on coordination of efforts both within and outside the affected community (International Federation of Red Cross and Red Crescent Societies, 2010). Relief aid will be undertaken in such a way that it involves the input of the end user. The ICRC recognizes that disaster management is only successful when the recipients are fully involved in the design, management, and implementation
of aid programs. The code of conduct also recognizes the need to mitigate disaster through making decisions that reduce future vulnerabilities. Aid programs will be built and maintained in such a way that they recognize environmental needs. This structure has the long-term goal of allowing the beneficiary to arrive at a condition of independence from external aid. The code of conduct recognizes the high standard of professionalism and expertise that is required to manage disaster events and to guide effective disaster recovery, and thus hold the organization and all of its participants accountable and responsible for upholding the code of conduct.

The cardinal virtues of disaster response are prudence, courage, justice, stewardship, vigilance, resilience, self-effacing charity, and communication. These eight virtues are not considered all inclusive, no more than Aristotle considered that his morals or virtues were all inclusive. Ongoing work in disaster management will help to ensure that such situations are managed in an ethical manner that respects the rights and privileges of all those involved.

References


Further reading


About the author

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