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Legal and Ethical Aspects of First Medical Response to Disasters – Background Paper



Holly Ashton

Centre for Science, Society and Citizenship

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Centre for Science, Society and Citizenship

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BACKGROUND

Disaster Definitions

Disasters are excessive events. They are excessive according to several points of view. The International Federation of Red Cross and Red Crescent Societies defines a disaster as;

“a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community’s or society’s ability to cope using its own resources. Though often caused by nature, disasters can have human origins.”

<http://www.ifrc.org/what/disasters/about/index.asp>

EM-DAT (The Emergency Events Database) similarly defines disasters as being situations or events which;

“overwhelm local capacity, necessitating a request to national or international level for external assistance. (A disaster is) an unforeseen and often sudden event that causes great damage, destruction and human suffering. Though often caused by nature, disasters can have human origins.”

<http://www.emdat.be/ExplanatoryNotes/glossary.html>

Essentially disasters are excessive at least in three senses, i) they exceed temporal capacity for holding, they explode in an instant that is hardly included in the standard, linear, succession of moments, which constitutes our normal experience of time. Disaster are collapses of time, black holes in our perception of a temporal cosmos; ii) disasters also exceed our capacity of coping; they are events with which we cannot cope both materially, psychologically and socially; iii) finally disasters are unthinkable events, not in the immediate, trivial, psychological sense, but in a more philosophical sense, say, they exceed human rationality. In brief, disasters are the break-in of nonsense in the normal, ordered, life. This is the deep reason why disasters challenge ethics and law. Ethics and law are – at different levels – the same enterprise, they are an attempt to bring a human order conveyed by language, a *nomos* and a *logos*,

into the nature, the *physis*. Ethics and law strive to give a rational foundation to human choices and behaviours, to justify rationally why one should choose this or that course of action. On the contrary disasters require immediate responses and they ignore the need to respect any principles or rules except those of surviving. Disasters are the benchmark that deeply challenge our ethical and legal convictions and put their relevancy at test.

There is then an inherent tension between disasters, ethics and law. In this paper we shall try to shed some light on the main issues raised by this tension and its chief policy consequences.

Medical First Responder Definition

The Free Online Dictionary describes a First Responder as ‘A person employed in the public sector—EMT, fire fighter, police, volunteer EMS—whose duties include provision of immediate medical care in the event of an emergency; FRs have basic emergency care equipment, O₂ and mask combinations, tools for extrication—eg Excaliber, Jaws of life, and defibrillators.’

(<http://medical-dictionary.thefreedictionary.com/first+responder>)

Introduction to Topic

During the last decade alone, numbers of disasters have dramatically increased (IFRC, Disaster Management Appeal, 2007), rendering clear disaster response policies more pertinent than ever before. Disaster response is vital for ensuring that people living in disaster stricken areas receive aid and resources to help them return to ‘normality’ as quickly as possible. Medical aid is one of the most important forms of assistance that responders to disasters provide, as populations recovering from the aftermath of a disaster (both the long-term and short-term aftermath) are extremely vulnerable from injuries and other health problems (Shoaf & Rotiman, 2000). In light of the importance of Medical Responders in disasters, it is timely to consider the legal and ethical issues that face these people as they go about their disaster response work.

David Fidler (2005) writes that ‘the importance of international law to the facilitation of disaster relief was recognized at least as early as 1927 in the Convention Establishing an International Relief Union’. However, despite being

the only attempt at a universal approach to disaster response and prevention, the Union failed to fulfil its promise and faded away. Without clear regulations in place, organising a co-ordinated disaster response is extremely difficult. That said, David Fisher, a senior legal research officer at the International Federation of Red Cross and Red Crescent Societies, points out that “legal barriers can be as obstructive to effective international disaster relief operations as high winds or washed-out roads” (Fisher, 2007, p.5). Clearly, in a disaster situation, every obstruction and delay in providing aid can prove fatal to large numbers of people and thus the importance of clear and effective laws in this area is vital.

Identifying the right ethical issues is also important. For instance, people who have just experienced a disaster and all the trauma that this entails are more vulnerable. Those rushing in to provide the response effort need to be careful to act in ways that will not create more problems by offending or upsetting the people they are there to help. However, there are many areas where it may be difficult – or even impossible - for responders to know what the ‘moral’ decision is.

In this paper, some background on current legislation relating to disaster response will be provided. Then, three particular areas relevant to medical disaster response will be looked at in greater detail, including the ethical issues that arise from them. Finally, some other issues which need further consideration will be presented.

Outline of Key Findings

In 2000, the International Federation of Red Cross and Red Crescent Societies (the International Federation) argued that despite the existence of some treaty law concerning disaster relief;

“At the core is a yawning gap. There is no definite, broadly accepted source of international law which spells out legal standards, procedures, rights and duties pertaining to disaster response and assistance. No systematic attempt has been made to pull together the disparate threads of existing law to formalize customary law or to expand and develop the law in new ways. . . . There are no universal rules that facilitate secure, effective international assistance, and many relief efforts have been hampered as a result.”

International Disaster Response Law Project – Chapter 8, p.145

As a result of this, the International Federation started work on the 'International Disaster Response Law Project' (2000). In this project, they started gathering together the various international instruments that currently contain legal policies relating to disasters. These include treaties, resolutions and guidelines, which have now been grouped to form what is increasingly being referred to as the "International Disaster Response Laws Rules and Principles" or "IDRL". A key basis for IDRL is Human Rights Law, within which many treaties set out rights relevant to international disaster assistance. These include rights to life, food and water, housing, clothing, health, livelihood, and freedom from discrimination, amongst others. Two of the key Human Rights treaties are 'The International Covenant on Civil and Political Rights' (1966) and 'The International Covenant on Economic, Social and Cultural Rights' (1966).

Other areas of international law are also relevant to disaster response. For example, Customs Law, includes instruments such as 'The Kyoto Convention on the Simplification and Harmonization of Customs Procedures' (1999) and 'The Istanbul Convention on Temporary Admission' (1990), which reduce barriers to customs clearance of relief consignments and waive associated duties and charges. Laws have also been developed that cover issues relating to donation. Fisher notes that the relevant instruments deal with issues such as minimum donation commitments and the responsibility of donors to provide funding in 'ways supportive of equitable and appropriate relief'. Two of the most relevant instruments are the Food Aid Convention (1999) and 'Principles and Practice of Good Humanitarian Donorship' (2003). Within Transport Law, several treaties (e.g. The Convention on Facilitation of International Maritime Traffic, 1965) have individual provisions designed to ease entry of disaster relief items and personnel. Some aspects of Space Law are also relevant to disaster response, for example the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters (1999). Also, under the UN system, there are also laws for handling displaced people.

Telecommunications Law is one of the most clearly developed in terms of disaster response. The Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations (1998) calls for the reduction of regulatory barriers to the use of telecommunications resources during disasters. This covers import and export restrictions, use of particular types of equipment and use of particular radio-

frequency spectrums. It is one of the few legal documents relating to both state and non-government relief-organisations.

For Medical Responders to disasters, Health Law is particularly important. Various guidelines are included which cover such topics as drug donations, use of field hospitals and prevention/response to the spread of diseases.

Despite the fact that IDRL has managed to provide some clarity on the legal issues surrounding disaster response, it has also highlighted a number of gaps in current legislation. Fisher notes that these include a lack of ratifications of key treaties by a number of states, restrictions in scope (e.g. for dealing with different types of disasters), failure to address key players (often key aid groups such as Red Cross societies and NGO's are not included in policies) and areas of overlap. Thus it seems that there is still definite room for improvement and clarification on the law relating to disaster response.

Some of the most comprehensive global instruments in this area are non-binding resolutions, declarations, codes and guidelines. Many UN documents fall in this category including the UN General Assembly Resolutions 46/182 (1991), the UN General Assembly Resolutions 57/153 (2002) and the Hyogo Framework of Action (2005). The most widely used voluntary codes and guidelines in the field of disaster relief are 'The Code of Conduct of the International Red Cross and Red Crescent Movement and Non-Governmental Organizations' (1994) and 'The Sphere Humanitarian Charter and Minimum Standards in Disaster Relief' (revised 2004). Though immensely useful, as these documents are non-binding their global impact is a little limited.

As well as legal issues, there are also ethical issues to consider when thinking about responding to disasters. These include cultural issues, resource allocation, safety of responders, professional responsibilities versus family/community duties, setting of priorities (who to treat first, who to save first or who to protect first from harm? Also, which medical conditions to treat. For example, in a country struck by a Tsunami, should the medical responders have a duty to care for serious but non-disaster related conditions too?) and even the withdrawal of care (when and how should you go about taking aid away from a community who may have come to be reliant upon it?, when and how should you decide whether you should withdraw important medical support given to person that is not well responding to it, so as to re-allocate this support to other persons who

also need it?). There are also ethical questions concerning patient rights to privacy and autonomy in times of disaster.

Evidently, there are a large number of areas relevant to disaster response. Now three particular areas will be explored in greater detail. These are the topics of priority setting, 'state of emergency' and data protection.

Main Ethical and Legal Issues

Priority setting : the example of Triage

A Right to Health is one of the basic human rights. In disaster situations many people are likely to be in need of medical aid at the same time, however a lack of resources and healthcare workers means that naturally, some will have to wait for aid longer than others. In such cases, the law is not much help – how can we determine which people to prioritise for treatment and which to leave until later? Who gets assistance with some priority over others relies on a great number of factors that relate with one another in complex interactions. Some factors are beyond human decisions (for instance casualties lying at a location that cannot be physically reached). Some factors can be influenced by human decisions, for instance when deciding to send rescue planes in a crowded area after an earthquake rather than in a less populated desert of a country. So therefore, what “sets priorities” can be considered at many levels (from an international perspective, down to inter-individual consideration - a micro-local level).

On the field of disaster, triage refers to a way by which certain priorities are set. It is a method for labelling victims in order to determine who should receive treatment first but it is a contentious topic – if all have the same legal right to healthcare then how can we justify the labelling of certain people as being higher priority for aid than others? For this reason, much thought has gone into considering the ethics of triage.

Triage at disaster scenes consists of prioritising people for medical treatment. According to NATO guidelines, a colour-coding system may be used. The tags are, Red – immediate aid needed for someone with life-threatening but

treatable injuries, Yellow – for people who have potentially serious injuries but are stable enough to wait a short while before treatment, Green – for people needing only minor aid who can afford to wait a longer time for treatment and Black – for the dead or dying (people who are unlikely to survive given the difficult conditions and lack of resources). Epstein, in his article ‘Triage During Mass Disaster – Usual Rules Don’t Apply’, points out that triage at disaster scenes is by nature, very different to that which takes place on hospital emergency wards. Many emergency staff assisting in disaster situations, will be faced with many difficult ethical and moral situations which strain or violate the principles they have been taught at medical school (i.e. to provide optimum care for each patient they see). Jonsen and Edwards comment “this is one of the few places where a ‘utilitarian rule’ governs medicine: the greater good of the greater number rather than the particular good of the patient at hand. This rule is justified only because of the clear necessity of general public welfare in a crisis”.

Veatch, in his article ‘Disaster Preparedness and Triage’ discusses two major options to emergency care based around two different moral principles. One is utilitarianism (‘greatest good for the greatest number’) and the other is based on the principle of justice and can be seen as being deontological in nature. Utilitarianism would have it that medical responders in a disaster should prioritise giving care to those who they can do most good for, whereas the principle of justice would support the view that those with the greatest need should become the top priority. Veatch goes on to discuss the analysis of triage provided by Baker and Strosberg. They noted that the two diverse moral approaches could be seen in the differing historical attitudes of the British and French. The British, largely influenced by two eighteenth century physicians who wanted to ‘efficiently optimize outcomes’, embraced a utilitarian approach. Thus, if improving morbidity and mortality statistics meant sacrificing some of those patients who were worst off and least likely to make good recoveries, then so be it. The French however, as seen from the ‘triage’ system developed by Napoleon’s surgeon general in the Napoleonic Wars, believed in treating first those with more serious injuries and only progressing to the less wounded once the other group had been made more stable. Thus, rather than being based on efficiency, the French system depended on the severity of injuries. But the opposition between the British and Dominique Larray’s French approaches cannot really be considered as an utilitarian way of thinking versus a non-utilitarian position. The concern of Dominique Larray was indeed to save the greatest possible number of lives (by letting aside “those who could wait [and

survive]”, and save the lives of the worst off, then come back to those lightly wounded. This can be seen as “medical utilitarian approach”, since what drives the action is a rule designed as to optimize the general number of survivors. Veatch comments that in terms of healthcare, the utilitarian approach is more compatible with the intuitions of most physicians and healthcare professionals. He suggests that perhaps in situations where many people require treatment at once, an extension of the Hippocratic Oath (and its benefit maximising ethics) is adopted with the community becoming the ‘patient’. However, Veatch also notes that this viewpoint is not often shared by lay-members of the public who often feel that it is ethically preferable to help those that are worst off even if this reduces the aggregate greater good (perhaps this stems from an innate feeling that if they were the injured person they would want to be treated and a fear of being ‘left to die’?) Veatch also uses a couple of examples concerning the issue of organ transplants (how to allocate spare organs) to highlight the fact that public policy tends to favour equality over efficiency. Though Veatch seems to make it clear that physicians favour a Utilitarian approach to triage, Epstein in fact seems to think that they are not comfortable doing this without some kind of guidance from their states or communities. For Epstein, medical workers are not so ready to shake off their Hippocratic Oath in times of disaster. This highlights the fact that it is important for medical workers to have clear guidelines which they can work to in times of emergency, both to lessen the likelihood of confusion and to relieve them a little of the ethical burden of the decision making.

The World Medical Association (WMA) released a statement on ‘Medical Ethics in the Event of Disasters’ in 1994 which was then revised in 2006. In a section relating to Triage they note;

- a. *It is ethical for a physician not to persist, at all costs, in treating individuals "beyond emergency care", thereby wasting scarce resources needed else-where. The decision not to treat an injured person on account of priorities dictated by the disaster situation cannot be considered a failure to come to the assistance of a person in mortal danger. It is justified when it is intended to save the maximum number of individuals. However, the physician must show such patients compassion and respect for their dignity, for example by separating them from others and administering appropriate pain relief and sedatives.*
- b. *The physician must act according to the needs of patients and the resources available. He/she should attempt to set an order of priorities for*

treatment that will save the greatest number of lives and restrict morbidity to a minimum.

World Medical Association Statement on Medical Ethics in the Event of Disasters (2006)

Another topic mentioned by the WMA relates to the importance of not making 'quality of life' judgements as a method of determining who should be treated. In other words, only medical status should be considered. Jonsen and Edwards (1998) also write about this. They note that in certain situations, a patients' quality of life may seem so poor as to suggest that intensive medical intervention is worthless. However they point out that various studies have been carried out which show that physicians often rate their patients' quality of life as lower than the patients themselves would rate it. It is not the place of healthcare workers to make such judgements. On a related issue, there is also the idea of social worth to consider. Healthcare workers should not make judgements related to the roles their patients have in society (i.e. prioritizing care for professionals or VIPs above unemployed or 'lower level' people). One possible exception to this could be prioritizing care of other medical workers who could then assist with the ongoing care-provision.

The WMA also comment upon such matters as informed consent, impartiality of medical workers in terms of respecting the religion, rites and cultural issues regarding their patients and confidentiality and discretion when dealing with third parties such as the media.

The American College of Emergency Physicians (ACEP) released a Code of Ethics (latest revision approved June 2008) which provides an outline of ethical issues that Emergency Physicians need to be aware of. Though the document is not specifically geared towards disaster response, many of the topics mentioned are also relevant in disaster settings. Particularly interesting is the mention of virtues needed by emergency physicians in order to behave ethically in their work. As well as courage and justice, four other virtues of vigilance, impartiality, trustworthiness and resilience are mentioned and explained. The document also mentions that physicians also have duties of beneficence, non-maleficence, respect for autonomy and justice. In a triage setting, the most difficult of these to adhere to would be respect for patient autonomy. Disaster settings will not always allow the luxury of patients who can comprehend the situation or give consent (e.g. due to the nature of their injuries they may not be conscious whilst initial triage is taking place). It may be necessary for medical

workers to make some decisions on behalf of patients where failure to intervene would result in serious harm or even death of the patient. However, ACEP make it clear that wherever possible, consent for treatment should be obtained from the patient or a delegated authority such as a friend or family member of the injured person.

As well as medical responders being affected by moral issues concerning their patients and job, they will also be faced with ethical dilemmas of a more personal nature. In responding to disasters, medical workers will usually be putting themselves in areas of danger where their own safety cannot be guaranteed, particularly whilst performing triage duties. Larkin and Arnold (2003) provide the example of treating victims who are contagious or radioactive. In such a situation, the medical responder has a duty to assist but may be afraid of the consequences of working with such patients. They may also be unwilling to put loved ones at risk (for example by exposing their family to infections).

It is evident from all of this that Triage is indeed a big issue in terms of disaster response. At the same time as being a vital process for maximising resources and giving medical responders some way of organising the chaos ensuing from a disaster, it also throws up many ethical issues which need to be addressed. Though documents do exist which provide medical responders with some guidelines (e.g. The World Medical Association Statement and ACEP's Code of Ethics), there is still room for further clarification. It is important that ALL personnel responding to disasters in terms of providing medical aid can be secure that they are acting ethically and with the support of some kind of authority behind them.

'State of Emergency'

The Geneva Centre for the Democratic Control of Armed Forces (DCAF) notes that;

"A state of emergency derives from a governmental declaration made in response to an extraordinary situation posing a fundamental threat to the country. The declaration may suspend certain normal functions of government, may alert citizens to alter their normal behaviour, or may authorise government agencies to

implement emergency preparedness plans as well as to limit or suspend civil liberties and human rights.” (p.1)

<http://www.cmr-net.ch/publications/kms/details.cfm?lng=en&id=18420&nav1=5>

Extraordinary situations could include such things as natural or man-made disasters (e.g. acts of terrorism), civil disorder, declarations of war, epidemics and economic crises.

The notion of ‘State of Emergency’ (also known as ‘state of exception’ and ‘state of alarm’) is controversial as many people feel that the powers given to governments under such legislation reduce civil liberties and could lead to abuses of power. Indeed, in his book, ‘State of Exception’, the Italian philosopher, Giorgio Agamben writes that governments extend their power in times of crisis to the diminishment of citizenship and individual rights. He considers this dangerous, oppressive and violent – highlighted by his use of Nazi Germany as an example of a country operating in a state of exception. Other dictatorial regimes have also been known to use states of exception as a means for controlling the population and neutralising political opponents. However, it is also acknowledged that there need to be some measures in place in order for a country to effectively and efficiently deal with an emergency situation.

Agamben traces the concept behind state of exception to the ‘justitium’ and ‘auctoritas’ of Roman times. ‘Justitium’ was declared following a sovereigns death in the troubled period of ‘interregnum’ and was also used if there were invasions. It appears therefore to be the ancient precursor to ‘state of emergency’. ‘Auctoritas’ referred to the amount of influence and power an individual had. A quotation from Cicero states ‘Cum potestas in populo auctoritas in senatu sit’ (“While power resides in the people, authority rests with the Senate”). Thus it can be seen that modern governments may use their ‘auctoritas’ to declare ‘justitium’ or a state of emergency.

Most countries have some kind of emergency law procedure. Though naturally different countries will have different ways of approaching the issue and their own ways of implementing procedures, some international norms have developed which serve as guidance in order to prevent the types of abuse foreseen by Agamben. Article 4 of the International Covenant on Civil and Political Rights (ICCPR) allows signature states to derogate from certain rights guaranteed by the ICCPR in “time of public emergency” but they may only do

so in line with the extent required by the emergency. They must also declare the situation to the Secretary-General of the United Nations.

Both the ICCPR and the European Convention of Human Rights and Fundamental Freedoms (ECHR) have also set out various principles that must be observed by states adopting emergency law measures. These include such things as declaration, communication and proportionality (amongst others) of the state of emergency. They also highlight various Human Rights (as per the Siracusa Principles of the United Nations) which may not be limited even during the state of emergency. Thus, the right to life, prohibition of torture, freedom from slavery, freedom from 'post facto legislation', the right to recognition before the law and freedom of thought, conscience and religion must always be maintained whatever other restrictions are put in place. Currently the ECHR does not have legal force, however a referral to it in the Charter of Fundamental Human Rights, as amended by the Lisbon Treaty would make it legally binding were the Treaty to be ratified by all 27 EU member states. Currently, the Republic of Ireland have failed to do so after a referendum ended with a no vote. EU rules state that the treaty cannot enter into force unless ALL member states have ratified it. Until the point where an agreement can be reached whereby the Convention is included in EU legislation, it will continue to be enforced by the European Court of Human Rights.

It is worth noting that emergency situations arising due to war or political uprisings are very different in nature to situations arising due to a disaster. Whereas 'State of Emergency' may be appropriate for the former category, is it really the best tool to use following a disaster? This could be seen as turning a humanitarian emergency into a political one. Whereas there are elements to disasters which could render the use of such an instrument worthwhile (i.e. the need to act rapidly to overcome certain rules and legislations), it is questionable that declaring a state of emergency would be the only option available at such a time. In fact, if clearer disaster legislation were in place, there might be no need for emergency declarations in such circumstances at all. One could argue that in fact the existence of 'State of Emergency' is almost a get out clause for focusing on the development of more comprehensive legislation in this area.

Certain disasters, such as terrorist attacks, may be more conducive to the use of a declaration of State of Emergency as they are likely to have some political basis as well as often relating to a prolonged period of danger where the threat of more attacks may well be ongoing. Even in such situations as these

however, it seems relevant to ask whether the emergency law could be mitigated in some way to make it slightly more democratic.

In terms of Medical First Responders to disasters, we need to consider in what ways a government declaration of State of Emergency might affect them. For example would they be affected by clauses restricting movement or preventing group gatherings of certain numbers of people? If taking aid to a country operating under a State of Emergency, might they have more difficulty obtaining visas/entry and doing the job they need to do? If they should be exempt from certain emergency restrictions, how will the government identify bona-fide aid workers?

Another issue is that of police power given to public health authorities during emergencies. Nancy Kass (2001) defines 'police power' as the states' authority to pass laws to improve the public's health and she notes that it dates to the 19th century. In recent years increasing possibilities of disasters concerning public health (particularly related to the threat of bioterrorism) have led to various proposals of legislation. George Annas (2002) discusses the Model State Emergency Health Powers Act, 2001. This bit of legislation enables the governor of a state to declare a state of 'public health emergency' if there is a threat of bioterrorism, epidemic or pandemic disease. It gives the state various powers including the power to enforce mandatory medical examinations, testing and quarantines, the power to take over all health care facilities in the state, and the power to change the functions of state agencies amongst other things. The failure of physicians and citizens to follow the orders of public health personnel would constitute a criminal offence. Annas points out that all of this seems rather extreme and that 'there is no evidence from either the September 11 attacks or the anthrax attacks that physicians, nurses, or members of the public are reluctant to cooperate in the response to a bioterrorist attack or are reluctant to take drugs or vaccines recommended by public health or medical officials'. He also comments that even if such a law were deemed necessary, 'it should be a federal law, not a state law. The reason is that bioterrorism is a matter of national security, not just of state police powers'. Annas is not alone in his doubts, the Act has been widely criticized and few states have adopted any parts of it (Sidel and Levy, 2004). In a report to the Centers for Disease Control and Prevention, Rothstein et al. (2003) noted that 'the SARS experience underlined the need for vigilance and restraint in the use of the political and legal systems to address emergencies' (p.7).

Altogether Emergency Law and the exercising of ‘police powers’ seem a little extreme for dealing with disasters. Following a disaster, be it man-made or natural in basis, the general public are likely to be feeling vulnerable and scared. It is unlikely that the Government would need to get heavy-handed with many people in order to make them comply with common sense initiatives such as quarantines in times of mass epidemics. Further to this, many of the provisions within emergency law seem irrelevant to disasters that are not political in nature. It seems that Governments may be relying on being able to implement Emergency Law as a way of avoiding the necessity of creating more comprehensive disaster legislation.

Data Protection

In the European Union (EU) directive on ‘the protection of individuals with regard to the processing of personal data and on the free movement of such data’ (1995), ‘Personal Data’ is defined as referring to ‘any information relating to an identified or identifiable natural person’. This information may include physical, physiological, psychological, economic, cultural and social specifics. Clearly if this information were freely available in the public domain then there would be many chances for identity fraud and discrimination.

The Universal Declaration of Human Rights (article 12) states:

“No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks”.

Thus the notion of Data Protection is highly important.

In disaster situations, an abundance of data will be created concerning the victims, but there is unlikely to be the organization or resources of a normal clinical setting and thus medical staff responding to the disaster will need to be particularly careful with the data being processed.

Disaster situations may also throw up unique moral dilemmas concerning data protection. For example, medical practitioners may have to consider whether it could ever be acceptable to release data for the good of others. This could be necessary for controlling epidemics or imposing quarantines. The European

Convention for the Protection of Human Rights and Fundamental Freedoms, Article 8 makes some provisions for this. It states:

- *Everyone has the right to respect for his private and family life, his home and his correspondence.*
- *There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.*

In their article, 'Ethics and SARS – lessons from Toronto', Singer, Benatar, Bernstein, Daar, Dickens, MacRae, Upshur, Wright and Shaul (2003) discuss ethical issues relating to epidemics. In particular, they consider what lessons can be learnt from the SARS outbreak that spread to Toronto from China. The researchers identified 10 key ethical values (individual liberty, protection of the public from harm, proportionality, reciprocity, transparency, privacy, protection of communities from undue stigmatization, duty to provide care, equity and solidarity) and five major ethical issues relating to an epidemic such as SARS. Of the five issues mentioned, one, 'Privacy of personal information and public need to know' relates to personal data. They write that the privacy of individuals should be protected, however in instances where information could help to protect the public from harm, it may be necessary to provide some details. For example, if someone is discovered to have a disease such as SARS, people will need to know where that person had been and which areas to place in quarantine. However, they stress that private information should only be released if there is no less obtrusive way to alert the public. Also, great care should be taken to avoid stigmatizing certain communities or ethnic groups. During the SARS outbreak, upon discovery that the woman responsible for introducing SARS to Canada was Chinese, many Canadians started avoiding other Chinese people and restaurants. This is clearly misguided and undesirable and shows the need for extreme caution being taken when considering the release of personal data.

Another issue to consider in terms of data and disasters is the issue of medical data mining. Data mining involves sorting vast quantities of data and picking out relevant information in order to advance research in a given field. During an epidemic it would be important to gather medical data and mine the information in order to obtain a better understanding of the disease and to

attempt to treat it quickly and efficiently. Cios and Moore (2002) note that there are many ethical, legal and social constraints on the collection and storage of medical data. They also point out that medical data, due to being very rich and often text/image based, is difficult to organize into mathematical structures thus making it harder to keep information on individuals anonymous. Issues of ownership, fairness and privacy are all highly pertinent, especially in this age of the Internet which has greatly facilitated our abilities to create and distribute data. Do individual patients own data collected on themselves? Or do their physicians (or even insurance providers) own the data? During an epidemic or other health-related disaster, decisions will need to be made quickly and clear guidelines need to be in place for the handling and processing of data in order to prevent problems further down the line. Cios and Moore talk of the importance of encrypting data so that an individual cannot be identified from the data held – currently many possible methods of encryption exist. More research needs to be done to identify the most effective and secure method, this could then be adopted so that in times when medical data mining becomes even more important than usual (i.e. due to being needed to develop emergency medications) there are clear guidelines in place which will enable researchers to act swiftly, ethically and without problems.

Another issue with data protection could arise from the use of Telemedicine during disasters. According to Garshnek and Burkle (1998), Telemedicine was first applied to disasters during the mid 1980's. Since then, advances in technology and improved understanding of how best to use it in disaster situations have led to an increase in popularity of the use of telemedicine when possible to the extent that Ferguson, Sarkisian, Young and De Ville de Goyet note that "Telemedicine has become an integral part of national and locally coordinated medical and public health responses to emergencies and disasters in most developed countries" (p.121). However, as commented by Devon Herrick 'Telemedicine provides benefits, but security and privacy risks abound'. Without comprehensive security measures there are risks that private medical information could be viewed or even stolen by others to perpetuate fraud. Of course, during a disaster response, it will likely be more difficult than usual to ensure that security procedures are thought through and adhered to, thus the importance of clear guidelines for using telemedicine during disaster response is apparent.

Overall, it can be seen that disasters create many different ways in which medical data may be used and there is a clear need for those people providing

the disaster response to have guidelines to follow to ensure the ethical treatment of such private data. Current Data Protection legislation may not be adequate to assist in disaster situations where the amount of data being created and used may be overwhelming. Also, the circumstances may make it difficult to adhere to usual codes of practice concerning storage and processing of the data.

ISSUES FOR FURTHER CONSIDERATION

The three issues explored in detail within this paper are by no means the only topics relevant to disaster response but they are certainly three areas where the legal constraints and ethical dilemmas placed upon medical responders demand further exploration and clarifications. Other topics include contingency planning and preparedness, withdrawal of aid from disaster regions, issues concerning the distribution of aid to different disasters and children.

Contingency planning, and preparedness.

Contingency planning and preparedness is an important issue to consider in terms of ethical and legal implications of disaster response. In fact, it attempts to 'respond' to disasters which have not yet occurred. The debate concerns the fairness of resource allocation. The issue first came to light following the anthrax case in the USA, when the government immediately put funding into researching suitable vaccines and spent millions on stockpiling antibiotics that would be effective against anthrax. The question is, were these measures really necessary or were they a knee-jerk political reaction which detracted from actual health conditions that required immediate treatment? To date, thankfully the stockpiled anthrax drugs have not been needed, however had there been a large-scale terrorist attack involving the substance, the American government would have been praised for its foresight in preparing such magnificent reserves of medications. It is perhaps due to this that 'the stockpiling of "prophylactic countermeasures" remains the focus of many current preparedness initiatives' (Green, 2004) for potential acts of terrorism. However, the present lack of need for the vaccinations and antibiotics could make the vast amounts spent on them ethically questionable. Particularly when the same money could have gone towards research and treatment of current,

ongoing medical problems such as heart disease and AIDs. Sidel and Barry (2004) note that;

‘Compared to the almost 3 000 lives lost on 9/11 and the 5 people who died from the dissemination of anthrax spores, since 9/11 more than 1 million Americans have died because of tobacco, more than 250 000 from alcohol abuse, more than 75 000 by gun-related violence, and more than 30 000 due to AIDS... As resources for homeland security have greatly increased, resources to prevent or reduce the occurrence of a wide range of other important public health problems—such as the prevention of deaths due to tobacco, alcohol, guns, and AIDS—have markedly decreased.’

Sidel and Barry conclude by saying that Bioterrorism poses extremely difficult ethical dilemmas which need to be confronted in order to create a balanced approach which manages to both strengthen public health systems and protect the health and civil liberties of citizens.

Of course acts of bioterrorism are only one type of disaster which may face a population. Other forms of contingency planning and preparedness against disasters could include such things as spending money on building up a communities’ flood defences or strengthening buildings in earthquake zones. Such activities are likely to cause fewer ethical dilemmas than bioterrorism however as the instances of large-scale disasters concerning floods and earthquakes are numerous whereas to date, no large-scale act of bioterrorism has occurred to justify the extensive spending in this area. Though as previously mentioned, were such an event to occur, any previous criticisms of spending and stockpiling would surely be forgotten.

Withdrawal of aid from disaster regions

Another area that became evident whilst reading around this topic concerns the withdrawal of aid from disaster regions. Mary Anderson comments “If a disaster response does nothing to prevent future disasters and, in fact, leaves the victims it intended to help more vulnerable than they were before, can it be morally justified?” (p.35). In terms of medical response to disasters, it is sometimes the case that following a disaster, the level of medical care actually increases in a region. For example, impoverished villages might have access to

things such as antiseptic, immunizations and pain relief that they have previously had to do without. Dr. Ken Berkowitz, a medical ethicist from the VHA National Centre for Ethics highlighted this in a National Ethics Teleconference in 2002 when he asked; “..in a declared disaster, the level of care that is provided often becomes higher than the baseline for that community, especially if it is in a poor or indigent or sometimes otherwise neglected area or even in an under-served community. What are the ethical responsibilities we have when we start to withdraw that higher level of care back from that community?” At present there don't seem to be any clear answers to this question either from a legal or an ethical viewpoint.

Another related issue to consider concerns the ethical obligations of companies and industries involved in ecological disasters. For example, the well-documented 'Bhopal Disaster' occurred when in December 1984, there was a dangerous gas-leak from a Union Carbide factory in Bhopal, India. The leak led to the immediate death of over 3000 people due to gas poisoning and the toll of dead and injured continues to grow to this day (now over half a million people have been affected by the disaster) as people suffer the effects of contaminated water (Union Carbide never cleared and decontaminated the plant when it was shut down and so poisonous chemicals seeped into water supplies and local land). For almost 24 years, survivors of the tragedy have had to cope with hardly any medical resources and the knowledge that the culprits of the disaster have evaded justice. Union Carbide did eventually assist in the building of a specialist hospital for victims of the disaster, however this was only in response to an order from the Supreme Court in India. The hospital took almost nine years to build and has been criticized for some of its practices (for example taking in 'non-Bhopal' paying patients who some claim get priority treatment - see Bhopal.org). Another problem in this particular case has resulted from DOW's refusal to accept responsibility for Union Carbides' liabilities in Bhopal. DOW merged with Union Carbide in 2001 but has so far flouted international merger law which would see it take over the responsibility for Bhopal. Perhaps there need to be clearer policies regarding the duties of companies (and those that merge with them) that cause disasters.

Distribution of aid to different disasters / Media Response

Another issue concerns the distribution of aid to different disasters. Presently there is much inequality, with some disasters becoming the source of media frenzies whilst others go un-noticed. The UNDP/UNFPA, UNICEF and WFP, addressed this issue in the Joint Meeting of their Executive Boards on 25 and 28 January 2008.

‘Earthquakes, tsunamis and other sudden-impact hazards are generally covered extensively by the media due to the scale of their impact on human lives. ‘Small-scale’ meteorological disasters receive less attention from the media, but can cause extensive, cumulative damage and affect large numbers of people. Due to their frequency and the effects they have on livelihoods – and given the difficulty vulnerable groups have in coping with the aftermaths of disasters – small-scale disasters such as local floods, landslides and fires are often as devastating as larger, sudden-impact events.’ (Joint Meeting of the Executive Boards of UNDP/UNFPA, UNICEF and WFP 25 and 28 January 2008 United Nations, New York. Par 11)

Medical responders may find it difficult to obtain the resources and support needed for the less publicized events. It could be a good idea to involve various media related groups such as the International Federation of Journalists and news agencies such as the BBC and CNN in a common reflection on the allocation of resources in different disasters and in developing some solutions (for example guidance concerning the ways disasters are reported on and recommendations about what coverage should include). A survey carried out in Great Britain by CARE International (2007) found that 74% of the 1003 adults polled believed it to be the media’s responsibility to inform them about emergencies earlier so that they could donate money towards emergency prevention. Alastair Stewart, newscaster and patron of CARE International UK, is quoted on the CARE website as saying “news editors must sit up and listen to what the public want to hear about. The media has a responsibility to look for new ways of reporting emergencies, particularly food crises, before they reach their peak and after”.

As noted in the ‘Living on the Edge’ report by Care International (2006), media involvement is vital for raising public awareness by leading to public appeals and donations, however they note that;

“Time and again, appeals from aid agencies, the UN and governments go largely ignored by donors until there is political pressure to act. Even the media are slow off the mark – typically not showing interest until the devastation of the emergency has peaked, and then quick to move the spotlight elsewhere, long before the emergency is over. This fuels a widespread lack of public awareness and understanding of the preventable, predictable and long-term nature of these emergencies.” (p.5/6)

The media is a vital resource and better management of it could lead to improved disaster responses around the world.

Children

The issue of children in disasters poses specific ethical problems for response workers. As pointed out by the Joint Meeting of the Executive Boards of UNDP/UNFPA, UNICEF and WFP;

“Children almost always suffer the most from disasters, whether through loss of life, psychosocial trauma, disruption of education or long-term adverse impacts on their resilience and coping mechanisms. In all aspects of risk reduction, the specific needs of children should be integrally addressed, their capacities enhanced and their participation encouraged and facilitated. Education, public awareness, community-based preparedness, as well as disaster-resilient public infrastructure, constitute some of the most important objectives of the HFA to support risk reduction for children.” (Joint Meeting of the Executive Boards of UNDP/UNFPA, UNICEF and WFP 25 and 28 January 2008 United Nations, New York. Par 17)

The UN ‘Convention on the Rights of the Child’ (1990) clearly establishes the law in relation to children but this will not necessarily make the task of medical responders easier. As well as the ethical issues already discussed (e.g. triage, data protection) being relevant to children, there are additional issues due to the vulnerable nature of children. Thus responders are likely to be faced with children who have been displaced from their homes and separated from their families. Children may become victims of trafficking, illegal adoptions, the under-age sex trade and labour camps. Art 3.1 of the Convention states that : “In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative

bodies, the best interests of the child shall be a primary consideration”. This understates that other primary considerations may exist, and possibly conflicting the child’s best interest. Rather than providing an answer, this statement opens the paths to further ethical reflections.

Abramson and Garfield (2006) discuss the children who were displaced by Hurricane Katrina in New Orleans. From interviewing a sample of adults living in the trailer communities where the displaced families have been housed they report that the children living in such communities suffer from serious medical and mental health problems including asthma, behavioural problems and learning difficulties that were not apparent before the disaster. Despite this, they note that appropriate health care (including specialized care) and medications are either fragmented or completely absent. They write;

“The medical and mental health needs documented in this report may be regarded as the consequence of inadequately treated chronic diseases, psychological and emotional traumas secondary to the chaos and despair of a massive dislocation, and the social deprivations of the chronically-poor and the newly-impooverished. At a deeper level, though, the problems relate to the loss of stability in people’s lives: families that are increasingly fragile, children who are disengaged from schools, and the wholesale loss of community, workplace, and health care providers and institutions.” (p.1)

Of course, the issues faced by the children and families in this report are the same ones faced by children following any disaster. If we know that the root cause of many problems for children is a result of stability loss in their environment, then responders need to consider ways in which appropriate disaster response can take this into account, to develop aid programmes that aim at returning stability as soon as possible.

ISSUES FOR THE INTERNATIONAL AND EUROPEAN AGENDA

The impact of globalization means that relief efforts for disasters now tend to be ‘global’ with many international groups getting involved in response efforts. This is perhaps also due in part to the perceived/probable link between the increased number of disasters relating to the effects of Global Warming – a problem which will impact everyone and which needs to be tackled on a global

scale. Many disasters occur in Third World countries and members of the more developed states should feel responsible for helping those affected to recover from the disastrous effects. However, with global response comes a wide range of differing cultural and ethical values which can make it difficult to assess the most acceptable way to proceed without causing further distress and stepping over unfamiliar moral boundaries. It is also apparent that there is currently a lack of international legislation relevant to disaster response. Though perhaps the situation is not as dire as first glance would suggest (there are many treaties and instruments in different sections of various laws which, once explored provide some guidance), the field would greatly benefit from a comprehensive review and the creation of an official document clearly stating all laws relevant to disaster response. Whilst The International Federation of Red Cross and Red Crescent Societies and the Sphere Handbook have gone some way to providing this, they are not legally binding documents. Disaster response is a serious issue and needs to be treated as such. As it seems likely that the instances of disasters will increase over the coming years, we need to act now to ensure that in the face of such events, the people providing the vital medical aid will not face unnecessary barriers to impinge their efforts.

Within Europe there needs to be a focus on internal regulations and harmonization among member states. The Public Safety Communication Europe website states;

“On the background of recent natural and man-made disasters which have highlighted the need for a more effective EU response, it is becoming more and more obvious that better cooperation between EU countries is crucial.”

<http://www.publicsafetycommunication.eu/index.php?id=122>

Main problems are related to disparities between regions (global health within the EU and relations between neighboring countries), disparities between countries (border management, contact tracing, adoption of social distancing measures, equity principles for resource allocation, etc), and how to ensure health care for mobile workers, for mobile population groups and other socially excluded groups within and across countries. What would happen for instance if a disaster strikes in one of the European member states that doesn't have sufficient resources? Will the other member states support the response by transferring their means, stocks and human resources capacity? Other open issues include; access to intensive care in emergencies, priority setting in vaccination programs, vulnerable populations and public awareness campaigns in different regions of Europe.

At present there are two main pieces of EU legislation covering the issue of civil protection which were developed as a result of the May 2006 Barnier Report. One is ‘Council Decision 2007/779/EC, Euratom establishing a Community Civil Protection Mechanism (recast)’ and the other is ‘Council Decision 2007/162/EC, Euratom, establishing a Civil Protection Financial Instrument.’ Together these two pieces of legislation cover the European approach to three main stages of the disaster management cycle - prevention, preparedness and response. Also, in December 2007, the European Consensus on Humanitarian Aid was signed by the European Parliament and the European Council. This consensus is an important and detailed framework concerning the improved delivery of humanitarian aid at EU level (Brussels, 5.3.2008, COM(2008) 130 final). However, there is still more work to be done. In its recent Communication on Reinforcing the Union's Disaster Response capacity (Brussels, 5.3.2008, COM(2008) 130 final) the EC state that; ‘Greater coherence, effectiveness and visibility are still needed to achieve the objective of a more integrated EU disaster response capacity’. The Commission goes on to highlight the following action points to be implemented by 2008:

- 1) Better inter-institutional cooperation
- 2) Reinforcement of the European Humanitarian aid capacity
- 3) Development of European civil protection
- 4) Strengthening capacity across Community policies and instruments

They propose various measures to help achieve this which are to be put in to practice over the year ahead. These include;

- turning the Monitoring and Information Centre (MIC) into a fully fledged operations centre with access to standby resources
- better coordination with the UN and the Red Cross to tackle problems with humanitarian aid delivery
- a new Europe-wide disaster response training network to build on the experience gained in the civil protection training programmes
- early warning systems in the EU and further afield, making use of the single European emergency number 112

http://ec.europa.eu/commission_barroso/president/focus/disaster-response/index_en.htm

The implementation of such measures will be vital to creating a more coordinated and efficient disaster response process throughout Europe and will go a long way towards ensuring that responders to disasters, including medical

responders, have a clearer framework within which to function. The Communication suggests that discussion on this important topic is heading in the right direction, now it is important to keep the impetus going.

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ANNEX 1: ONLINE RESOURCES ON ETHICAL AND LEGAL IMPLICATIONS OF DISASTERS

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<http://www.emdat.be/ExplanatoryNotes/glossary.html> - EMDAT Glossary definition of Disaster.

<http://www.ifrc.org/docs/appeals/annual08/appGA1.pdf> - link to IFRC Disaster Management Appeal (2007) pdf document.

<http://www.un.org/documents/resga.htm> - United Nations General Assembly Resolutions Links Page

<http://www.icrc.org/web/eng/siteeng0.nsf/htmlall/code-of-conduct-290296> - The Code of Conduct for the International Red Cross and Red Crescent Movement and NGO's in Disaster Relief

<http://www.nimcems.com/mini-drills/Pdf/Triage%20Beyond-Red-Yellow-Green.pdf> – NATO Guidelines for Triage

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http://ec.europa.eu/commission_barroso/president/focus/disaster-response/index_en.htm - European Commission, Disaster Response Capacity

ANNEX 2: INTERNATIONAL TEXTS OF REFERENCE

Universal Declaration of Human Rights (1948) <http://www.unhchr.ch/udhr/lang/eng.htm>

The European Convention for the Protection of Human Rights and Fundamental Freedoms (1950) <http://www.echr.coe.int/nr/rdonlyres/d5cc24a7-dc13-4318-b457-5c9014916d7a/0/englishanglais.pdf>

The Convention on Facilitation of International Maritime Traffic (1965)

The International Covenant on Civil and Political Rights' (1966)

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International Covenant on Civil and Political Rights (1976)
<http://www2.ohchr.org/english/law/ccpr.htm>

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