Hobsen's Choice in Disaster Medical Ethics

Rajeev Pagoda

Sri Lanka Air Force Base Ratmalana
rajeevpagoda@yahoo.com

Abstract— *Medical ethics is founded on three basic principles; which are the principles of beneficence, non-maleficence and respect for autonomy. The priority of these principles may change with different circumstances, such as in disasters, which sometimes may lead to challenges that are quite different from day today medical practices. Disasters make the medical practitioner more vulnerable to hazards; the hazardous working environment causes extraordinary additional stresses that a practitioner may not undergo in a normal environment.*

Disasters may lead to ethical challenges that are different from usual medical practices. In addition, disaster situations are related to public health ethics more than medical ethics, and accordingly may require stronger effort to achieve a balance between individual and collective rights. The author researched extensively on ethical consideration of Disaster Medicine. This paper aims to review some ethical dilemmas that arise in disasters and mainly focuses on health services.

Disasters vary considerably with respect to their time, place and extent. Therefore, ethical questions may not always have `one-size-fits-all` answers. On the other hand, embedding ethical values and principles in every aspect of health-care is of vital importance. It is only by making efforts before disasters, that ethical challenges can be minimized in disaster responses.

Keywords—Hazard, Ethical dilemma, ethical challenges, disaster medicine

I. INTRODUCTION

The disasters can be identified as natural, man-made or a combination of both when considering the aetiology of the disaster. This is better because it allows the responding organization to tailor its response. Another way of understanding disaster is whether disaster occurred due to internal or external factors. A good example for internal disaster is bomb threat to a hospital or blast in the hospital. An external disaster for the hospital is a blast in the community hall which makes the hospital, the response organization.

Disasters, whether unintentional acts of nature or human-made, can have profound effects on those who experience them. Although the physical dangers inherent in disasters are obvious, such events, including terrorism and bioterrorism, are a grave threat to mental health as well. Previous episodes of disaster have dramatically affected individuals, communities, and nations. In addition to affecting physical and mental health acutely, disasters can have more chronic impacts creating social and economic hardship, loss of employment, the dissolution of personal relationships, and the long-term deterioration of physical and mental health.

Complicating the situation is the absence of a standard definition of disaster, much less a uniform concept for an academic discipline of disaster medicine. The need to codify this emerging discipline and create such standards is becoming increasingly clear. The specialty of emergency medicine evolved as a result of the recognition of the special considerations in emergency patient care, and similarly the recognition of the unique principles in disaster related public health and medicine merit the establishment of their own formal discipline. Such a discipline will provide a foundation for doctrine, education, training, and research and will integrate preparedness into the public health and medical communities.

Ethics is the study of standards of conduct and moral judgment of a system or code of morals. Medical ethics is a system of moral principles that apply values and judgments to the practice of medicine. Modern medical ethics is founded on three basic principles; which are the principles of

beneficence, non-maleficence and respect for autonomy.

A. Beneficence

The term beneficence refers to actions that promote the wellbeing of others. In the medical context, this means taking actions that serve the best interests of patients. However, uncertainty surrounds the precise definition of which practices do in fact help patients. James Childress and Tom Beauchamp in their book Principle *of Biomedical Ethics* (1978) identify beneficence as one of the core values of healthcare ethics.

B. Non-Maleficence

The concept of non-maleficence is embodied by the phrase, "first, do no harm," or the Latin, *primum non nocere*. Many consider that should be the main or primary consideration (hence *primum*): that it is more important not to harm your patient, than to do them good.

C. Autonomy

The principle of autonomy recognizes the rights of individuals to self-determination. This is rooted in society's respect for individuals' ability to make informed decisions about personal matters. Autonomy has become more important as social values have shifted to define medical quality in terms of outcomes that are important to the patient rather than medical professionals. Respect for autonomy is the basis for informed consent and advance directives.

II. DISASTERS AND ITS MANAGEMENT CYCLE

Disaster Management is the discipline dealing with and avoiding risks. It is a discipline that involves preparing, supporting and rebuilding society when natural or human-made disasters occur. We can divide any disaster situation in to three phases.

A. Pre disaster Phase - Mainly involves the mitigation that tries to minimize the effects of disaster. Good Examples are building codes and zoning; vulnerability analyses; public education. Preparedness is planning how to respond. Some Examples are preparedness plans; emergency exercises/training; warning systems etc.

B. Disaster Phase - Response is efforts to minimize the hazards created by a disaster. Search and rescue; emergency relief are examples for response.

C. Post disaster Phase – Mainly involve recovery which is basically returning the community to normal with some development. Good examples are temporary housing to permanent housing; grants; medical care, infrastructure development in better ways etc.

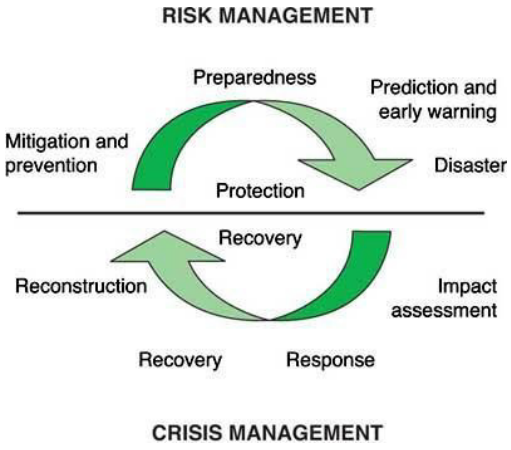

Figure i. Disaster management cycle

III. ETHICS IN DISASTER MEDICINE

Ethics in disaster medicine deals with ethical issues and dilemmas in natural and human-made disasters. Disaster ethics is a very broad field, in a sense that it compasses numerous topics from individual to collective ethics. We will discuss disaster ethics addressed in three phases of disaster: (i) pre-disaster (pre-event) or preventive phase, ii) disaster (event/ crisis) and early response phase, and iii) post-disaster (post-event) or rehabilitation phase.

A. Ethics in Pre-Disaster Phase

Developing strategies to prevent disasters or to decrease the magnitude of the disaster related injuries and damages are regarded as an ethical responsibility. Developing a preventive ethics approach in this pre-disaster phase also helps to reduce conflicts during the crisis phase. Within this scope, capacity building to increase knowledge and skills of disaster relief professionals and the populations at risk, developing disaster recovery

plans, practicing and updating these plans as needed, building strong partnerships among organizations and institutions with potential duties in disaster relief, preparing legislations and manuals as to better respond to the ethical conflicts in disasters as well as informing all partners about this ethical framework are crucial. Accordingly, the World Medical Association (WMA) recommends that disaster medicine training be included in the curricula of university and post-graduate courses in medicine.

B. Ethics in Disaster and Early Response Phase

In this phase, reaching the disaster site as quickly as possible is the most crucial step. In line with the principles of the ethical practice of public health, "Public health institutions should act in a timely manner on the information they have within the resources and the mandate given to them by the public". If the health authorities and health-care workers act slowly, ignoring the fact that time is vital, they may be late in saving lives and violate the principle of doing no harm.

Triage, as the second most important step, is often considered critical in the distribution of limited medical resources, where highest priority should be given to the principles of beneficence and justice. According to the WMA Statement on Medical Ethics in the Event of Disasters (1994); "In selecting the patients who may be saved, the physician should consider only their medical status, and should exclude any other consideration based on non-medical criteria". Many systems (e.g. START, SIEVE, Homebush Triage etc.), have been proposed for the so-called primary triage or scene triage, which is defined as the initial assessment of victims at the disaster site.

WMA recommends that the physicians should set an order of priorities for treatment that will save the greatest number of lives and restrict morbidity to a minimum. In connection with this, some patients, whose condition exceeds the available resources, may be classified as "beyond emergency care". According to WMA (1994), "It is ethical for a physician not to persist, in treating individuals "beyond emergency care". The physician must show such patients compassion and respect for their dignity, hence separate them from others and administer appropriate analgesia sedatives. Halpern and Larkin (2006) contribute to this discussion by stating that health care has to be equitably distributed rather than equally, with each victim receiving care according to medical need. On the other hand, critical questions on when and how to apply disaster triage still remain. Domres B; Kock M; Manger A; Becker HD; (2001) argue that disaster triage is ethical only under extreme situations. Sztajnkrycer MD; Madsen BE; Ba'ez A; (2006) also contribute to this discussion by reporting that resources are rarely scarce in events viewed by the general public as disasters and the number of affected people may be misleading to switch to disaster triage.

In literature, there are numerous studies that reveal high rate of over-triage and under-triage in disaster situations. WMA recommends that disaster triage should be entrusted to authorized, experienced physicians, assisted by a competent staff.

Informed consent, which is used frequently on daily medical practice, is another important ethical challenge in disasters. There might be exceptions to informed consent, such as in disaster and other public health emergency situations. WMA Statement on Medical Ethics in the Event of Disasters (1994) states that in a disaster response, it should be recognized that there may not be enough time for informed consent to be a realistic possibility. Although health professionals in disaster relief are expected to make every effort to start and sustain available treatments according to priority, some victims might refuse treatment. In that situation, mental health state of the victim should be assessed. If there is any doubt, the treatment should be continued to avoid any medical or legal consequences. If the examination reveals no significant mental problem, then health professionals may try to convince the person for the recommended treatment, whenever possible. If time permits, the last option might be to ask the victim to sign a document indicating that s/he does not accept the treatment.

Refusal of treatment might be more complex in pandemic disasters. Although refusal of treatment usually seems as an individual decision, the patient`s right to refuse treatment may conflict with the health professionals` duty to protect public health. Patients with highly contagious diseases may pose a significant threat for other people. In these situations, every effort should be made for

the diagnosis and proper treatment of infected persons, including trying to convince the patients, who refuse treatment, by explaining the potential risks to public health.

Pandemic disasters may also pose other ethical dilemmas with respect to the autonomy of individuals. Although the WMA International Code of Medical Ethics (1949) states that "A physician shall owe his/her patients complete loyalty", it is generally accepted that physicians may in exceptional situations have to place the interests of others above those of the patient. Mandatory reporting of patients who suffer from designated diseases is one such exception. Physicians should fulfil their duty to report, although patients should be informed that such reporting will take place. Public health measures in pandemic disasters, such as vaccination campaigns, risk communication, quarantine and isolation are also worth noting with respect to potential ethical dilemmas. In all of these dual-loyalty situations, protection of public from harm is usually regarded as a superior goal than respect for autonomy. In the case of vaccination, it is widely accepted that risk-benefit ratios must be calculated for all immunizing agents.

According to Last (2004), scientists working in emergency situations like an epidemic, have an ethical duty to be open in dealing with the public. Last argues that public has the right to know what the experts know. Within this scope, implementing the principles of risk communication to avoid unnecessary fear and anxiety among the public is of vital importance. In disaster situations, delivery of appropriate and updated information to health-care workers on a regular basis is also critical to minimize misinformation, mistrust and refusal of public health measures among the public. According to Soliman and Rogge (2002), information helps survivors make informed decisions that are intrinsically related to their life arrangements and future well-being.

WMA Declaration of Lisbon on the Rights of the Patient (1981) states the major role of physicians in allocation of scarce resources as the following: "In circumstances where a choice must be made between potential patients for a particular treatment that is in limited supply, all such patients are entitled to a fair selection procedure for that treatment. That choice must be based on medical criteria and made without discrimination". Development of clinical practice guidelines in the pre-disaster phase and using these guideline-based criteria in health resource allocation in the response phase may minimize potential ethical conflicts that arise during decision-making in disasters. In this regard, Lin and Anderson-Shaw (2009) proposed a clinical model for decision making in allocation of mechanical ventilators in disaster/pandemic situations, which was based on the ethical principles of beneficence and justice and utilized the concept of triage. In the model, the researchers recommended formation of a pandemic triage committee to allow decisions to be made by a team of professionals rather than individual physicians. In addition, they proposed a palliative care protocol and early family involvement for families of patients to be aware of the protocols, thus avoiding potential conflicts.

The division of labour among organization and institutions is considered as one of the ethical aspects of disaster response. Accordingly, every effort should be made to assign labours according to the expertise of each organization. Hussein (2010) contributes to this issue by stating that networking with other service providers is both an ethical and an operational need. Spending available financial resources, as another ethical issue in disaster response, should also be considered. According to the UNDP (1997), millions of dollars are spent on salaries, per diems, transportation, and other costs for the disaster relief experts of countries other than the affected country; however, disaster response spending should primarily be done by contracting services from the affected communities themselves.

Health workforce is one of the most important human resources in disaster response. On the other hand, this workforce might be negatively affected by disaster conditions (e.g. pandemic outbreaks, environmental pollution, military conflicts), which may pose significant threats for the relief workers` own safety and health. Hesitation of health-care workers to perform their duty in pandemic disasters is one such example. Many studies in literature indicate that health professionals constitute a significant proportion of the victims in pandemic situations. In addition, numerous literature findings reveal unwillingness of at least some health professionals` to treat patients with communicable diseases. In daily practice, medical codes of ethics make no exception for infectious patients with

regard to the physician's duty to treat all patients equally; however, disaster conditions might have its own unique risks. Therefore, the question of where to draw the line between acceptable and unacceptable level of risk for health-care workers still remains to have more concrete answers.

According to a recent WHO publication (2007) on ethical considerations in pandemic influenza; "Countries should develop policies that clearly delineate health-care workers' obligations, which can be recognized in one or more of the following ways: moral obligations, professional obligations, contractual obligations, non-contractual legal obligations." Furthermore, it is stated that the duty of health-care workers to work with health risks is not unlimited. The guide concludes that "From an ethical perspective, the least problematic enforcement mechanisms are those that have been voluntarily adopted by those who will be affected by them. Thus, governments should encourage professional organizations to develop policies regarding professionals' obligations to work during epidemic". WHO (2007) also recommends governments and employers to minimize risks to health-care workers by giving adequate education and by taking preventive measures, which the health-care workers, by an ethical obligation are expected to comply with. In case of morbidity or mortality of health-care workers, medical and social benefit systems are proposed. According to the UNDP (1997), relief institutions have special ethical obligations to their staff during humanitarian emergencies. Adequate preparation and training beforehand, and effective counselling and support during and after operations are strongly advised.

In literature, complex humanitarian emergencies and armed conflicts are often classified as disasters. In relation with the duty of health professionals in emergency and disaster situations, participation in the acts of torture, death penalty or inappropriate treatment constitute a critical ethical challenge. WMA, with the Declaration of Hamburg Concerning Support for Medical Doctors Refusing to Participate in, or to Condone, the Use of Torture or Other Forms of Cruel, Inhuman or Degrading Treatment (1997), is responsible to support physicians who resist to be involved in such inhuman procedures or who work to treat and rehabilitate victims.

Respect for diverse values, beliefs, and cultures in the community constitute one of the principles of the ethical practice of public health. Disasters generally create situations, in which, some health services are delivered by health-care workers who are originally not from the affected area. Foreign health-care workers, whether from the affected country or from another country may have difficulties in communicating with the patients or treating them.

Besides interfering with optimum health care, cultural, religious and linguistic barriers may also have significance with respect to creating ethical dilemmas. If health professionals and patients do not speak the same language, every effort should be made to find interpreters. However, in the presence of cultural or religious differences, interpreters may not be enough to overcome communication problems. Without any preparation, international relief workers may be at risk for delivering culturally inappropriate services, such as distribution of condoms to adolescents of a conservative community. Such interventions might negatively affect the overall relief efforts. Therefore, foreign professionals have an ethical duty to be aware of any cultural and religious differences, when delivering preventive and curative health services. According to the WMA Statement on Medical Ethics in the Event of Disasters (1994); the physician must respect the customs, rites and religions of the patients. In this respect, community participation in disaster relief efforts is a useful approach in planning services, which are ethically sound and widely accepted by the affected community. Ensuring an opportunity for input from community members is also one of the principles of the ethical practice of public health. This approach helps to deliver services on a needs-based. Most studies in literature indicate that participation of community members make significant changes in the recovery phase of disasters.

Another principle of the ethical practice of public health is the empowerment of disadvantaged community members. Health professionals working in disaster response should pay special attention to vulnerable groups; including children, women, elderly, people with disability, refugees and other minority groups, since these groups are usually affected more negatively than the general population. In line with the ethical principle of justice, it is also crucial for relief workers to try to

avoid actions that may cause stigmatization and discrimination of vulnerable groups.

Vulnerability is also related with the topic of disaster research, which is among the most important ethical challenges' of disaster medicine. Today, there are numerous policy documents, such as WMA Declaration of Helsinki (1964), International Ethical Guidelines for Biomedical Research Involving Human Subjects (2002) and The Ethics of Research Related to Healthcare in Developing Countries (2002) that guide health professionals in their scientific research; however, disaster situations may pose their own conflicts with respect to the study group, informed consent, etc. That`s why research in disasters may be difficult to perform according to the existing declarations. The event and early response phase of disaster, there is greatest respondent vulnerability and least social order to conduct research. In the long term recovery period, the social order increases, whereas the vulnerability of affected people decreases. According to Abramson (2007), the social context of a disaster defines the research and the ethical landscape. In relation with this context, he proposes researchers to ask several critical questions before conducting any disaster research: timing of the study, presence of any time limit, nature of exposure to disaster or agent, characteristics and vulnerability of the study group, potential risks and benefits to study participants, local support, informed consent, referrals for help, logistics and potential risks to the research team are the main questions that have to be answered by the researchers to plan disaster studies in the most appropriate and ethical way. According to the principles of the ethical practice of public health, public health institutions should protect the confidentiality of information that can bring harm to an individual or community. However, media interest in the disasters and people affected by disasters raises ethical issues on privacy and the principle of respect for autonomy.

Media plays an important role in dissemination of information for both the general community and disaster victims. In addition, disasters covered by the media receive more attention. However, media news may interfere with the private life of the victims. In addition, the WMA Statement on Medical Ethics in the Event of Disasters (1994) states that the physician has a duty to each patient to ensure confidentiality when dealing with third parties. It is also important to designate health-care workers, who are experienced in media relations. Another ethical issue with media relations is that some organizations tend to work in disaster relief primarily for the media coverage, since they link future funding options with their image in the media. Here, the ethically appropriate approach would be to provide assistance with the primary and only goal to help disaster victims, which will eventually be followed by positive responses from both donors and the public in general.

C. Ethics in Post-Disaster Phase

All ethical values and principles that were mentioned for pre-disaster and early response phases should also be recognized in the aftermath of disasters; however, health care professionals should act according to the requirements of the new phase. WMA Statement on Medical Ethics in the Event of Disasters (1994) states that "In the post-disaster period, the needs of survivors must be considered. Many may have lost family members and may be suffering psychological distress. The dignity of survivors and their families must be respected".

According to the UNDP (1997), a disaster response should prevent future disasters and decrease vulnerability of the victims. Opposite to common thinking, developmental efforts should start with the early stages of disaster response, rather than the post-disaster phase. This approach avoids development of a dependency syndrome among the people affected by the disaster. Participation of the community to disaster response does not only help to determine priority needs of and culturally appropriate interventions for the affected community, but also helps to actively engage people to work for their community`s own rehabilitation and development.

Hussein (2010) argues that dependence on foreign aid, directing financial resources to NGO`s rather than the local health infrastructure, shift of the local health-care workers to international NGOs, where they are better paid and inappropriate division of labour, where similar health services are delivered by different relief organizations delay the development process in the affected community. Therefore, starting with the earliest possible time in disaster response, efforts should be made to build the infrastructure of the healthcare system, with the community`s own human resources for health.

IV. SRI LANKAN SCENARIO

The author had the privilege to treat patients in biggest two disasters that our country faced, the Asian Tsunami and humanitarian war. During the Tsunami Author worked disaster and post disaster situations. Humanitarian war the author worked in all three phases of disaster. Although both situations are unique on its' own context similarities too observed. In disaster phase the amount and extent of injuries in casualties needed triage and rapid evacuation gave no opportunity for informed consent. But there were no evidence for breach of confidentiality or ill treatment. Since military is a well-organized institution usually they were the first responders in any disaster that the country faced. They utilized scarce resources including man power and available meagre air assets for aids and aid group transportation, medical team transportation, and casualty/ medical evacuation extremely well.

During the Asian Tsunami with the influx of medical aids we observed some expired drugs some luxuries items and military type equipment such as dismantled helicopters too came with medical aids. Different medical teams from different countries had their own agendas and protocols. Lack of command and control over different teams caused problems of accumulation of medical aids to some places and some affected area were neglected. There were some allegations of collection of blood samples from patients without informing them the reasons for collection of blood and also giving injections without informing reasons for giving injections against their wish in post tsunami rehabilitation period.

Some aids organizations were more sympathetic towards some ethnic groups caused immense damage to ethnic harmony of the country.

V. CONCLUSION

Disasters vary considerably with respect to their time, place and extent; therefore, ethical questions in these situations may not always have `one-size-fits-all` answers. On the other hand, embedding ethical values and principles in every aspect of health-care is of vital importance in disasters. For the very reason; reviewing legal and organizational regulations, developing health-care related guidelines, protocols and disaster recovery plans by taking potential ethical dilemmas into account, establishing on-call ethics committees as well as adequate in-service training of health-care workers for ethical competence are among the most critical steps to take in pre-disaster phase. These measures should be taken both at the local level as well as the country level. In conclusion, it is only by making great efforts before disasters, that ethical challenges can be minimized in disaster responses.

LIST OF REFERENCES

United Nations Development Programme . Disaster Management Training Programme. In: Jenson E, editor.Disaster Management Ethics. 1st ed. UNDP; 1997.

Mercan-Irgil E. Ethics and public health. T Klin J Med Ethics. 2000 Oct;8(2):111–15.

Halpern P, Larkin GL. Ethical Issues in the Provision of Emergency Medical Care in Multiple Casualty Incidents and Disasters. In: Ciottone GR, editor. Disaster Medicine. 3rd ed. Philedelphia: Elsevier Mosby; 2006.

Harris CE. Explaining disasters: the case for preventive ethics. IEEE Technology and Society. 1995;14(2):22–27.
.

Soliman HH, Rogge ME. Ethical considerations in disaster services: a social work perspective. Journal of Social Work. 2002;1(1):1–21.

World Medical Association . WMA General Assembly. Pilanesberg: South Africa; Oct, 2006. Statement on Medical Ethics in the Event of Disasters. Updated version. Available from:http://www.wma.net/en/30publications /10policies/d7/index.html.Accessed on 18 Apr 2014.

Public Health Leadership Society. Principles of the Ethical Practice of Public Health. Version 2.2. USA: Public Health Leadership Society; 2002.

Demirhan EA. The ethical and deontological problems in emergency treatment and care in Turkey. The Turkish Annual of the Studies on Medical Ethics and Law 2009. 2010;2-3(2-3):199–221.

Ornek Buken N. Ethics in Health Management of Disasters. In: Altintas H, editor. Health

Management in Emergency and Disaster Situations (In Turkish). Ankara: In Press; 2011.

Sztajnkrycer MD, Madsen BE, Ba'ez AA. Unstable ethical plateaus and disaster triage. Emerg Med Clin N Am. 2006 Aug;24(3):749–68.

Domres B, Kock M, Manger A, Becker HD. Ethics and triage. Prehosp Disast Med. 2001 Jan-Mar;16(1):53–8.

World Medical Association . Medical Ethics Manual. 2nd ed. Ferney-Voltaire Cedex: Ethics Unit of the World Medical Association; 2009.

WMA Declaration of Lisbon on the Rights of the Patient. (amended in 1995, revised in 2005). Available from: http://www.wma.net/en/30publications /10policies/l4.Accessed on 18 Apr 2014.

World Medical Association. 3rd General Assembly of the World Medical Association. London, England: Oct, 1949. [2011 May 10]. WMA International Code of Medical Ethics. (amended in 1968, 1983 and 2006).

Last JM. Public Health Ethics; IX. National Public Health Congress; 2004 Nov 3-6; Ankara. Turkey. Ankara: Palme Publications; 2004. pp. 8–15.

Lin JY, Anderson-Shaw L. Rationing of resources: ethical issues in disasters and epidemic situations. Prehosp Disast Med. 2009 May-Jun;24(3):215–21.

Hussein GMA. When ethics survive where people do not. Public Health Ethics. 2010 Apr;3(1):72–77.

Civaner M. Physician`s duty to provide care to the infected patient: where is the limit? T Klin J Med Ethics.2007;15(3):166–75.

World Health Organization. Ethical considerations in developing a public health response to pandemic influenza. Geneva: WHO; 2007. pp. 13–17.

Jago E. Flood disaster experience: a six-months perspective. Aust Soc Work. 1991;44(4):43–52.

World Medical Association. Helsinki, Finland: Sep, 2003. [cited 2011 May 10]. WMA Resolution on the Responsibility of Physicians in the Documentation and Denunciation of Acts of Torture or Cruel or Inhuman or Degrading Treatment. 54th WMA General Assembly. (amended in 2007). Available from:http://www.wma.net/en/30publications /10policies/t1 Accessed on 18 Apr 2014.

Robinson P. The policy-media interaction model: measuring media power during humanitarian crisis. J Peace Res. 2000;37(5):613–33.

BIOGRAPHY OF AUTHOR

Author is a Wing Commander from the Air Force, PhD student and presently works as Base Dental Officer at Air Force Base Ratmalana. His research interest includes aviation dentistry, tactical casualty care, ethics & disaster medicine. He is a disaster reliance leadership fellow and has produced over 12 publications in local and international publications to his credit. He is involved in teaching disaster medicine to post graduate students in his leisure time.