Example of mass casualty care research paper

Business, Management



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Introduction

Mass Casualty care is the combination of the number of patients and the requirements of care that exceed or challenge the ability of the community to provide adequate care to the patients by utilizing day-to day operations. Moreover, a Mass Causality Incident has the potential of quickly exhausting the resources in any community that are available for a response. The capability of the hospital response is dependent on the comprehensive contingency management plan that include worst scenarios such as mass causality incidence in order to enhance the readiness level that is required for a prompt response in the health care needs of the community. Further, the rapid arrival of the patient's surge presents a challenge in order to rapidly process the causalities via the system.

The response to the mass casualty, however, poses exceptional demands and stress on the medical community. This is because they are required for confronting several casualties with the surgical and bodily problems. In this paper Mass Casualty Care is discussed, the role of the medical operations

during casualty disasters, problems associated with such disasters, the improvements in casualty care and suggestions for making such programs more successful are discussed in detail.

Explanation

The medical operations take and perform several important roles during the mass casualty disasters. The doctors who are well trained and qualified apply their exceptional practices and principles of the medical management of the disaster as well as of the huge inflow of the victims in order to play a major role in this area. The medical teams are effective in this regard for offering their services because they offer services after having appropriate infrastructure of logistics that is based on the knowledge of epidemiology of disaster. They also consider the demographic, health indicators and the public heath of that area where the problematic situation arises, and then according to the conditions prevailing, they try to offer their best service. The maintenance of the effectual structure in order to take actions in an emergency or disaster situations is even difficult for those countries that are developed economically. So, foreign aid should be made when the detailed assessment of needs is done for properly quantifying the international response. In this regard, the World Health Organization i. e., WHO and the Department for Humanitarian Actions is playing a central role, by connecting with the harmonization of intervention elements, during the post-disaster and the pre-disaster phases.

Further, in the case of any incident, these organizations immediately sent complete and complex teams of the experts in order to do an assessment.

The teams are in the form of the UNDAC teams that are backed by the

medical experts, at the phase of post-disaster for providing special support to the local authorities for choosing the best implementing and managing ways to cope with the health problems that require instant medical intervention. Additionally, there are several governments that are offering help to the affected areas and countries, but WHO and DHA are the major bodies of the United Nations that is providing unconditional help, advice, and experts to the sovereign states that are struck by the disasters.

The medical operations also play their role by ensuring communication among the effectively in a timely manner. They use resilient networks and advance technology in order to ensure communication. Furthermore, the doctors also help the victims and reduce their anger and fear by communicating with them in an effective and polite way, so that they do not feel themselves alone as shown in the following photo.

In order to deal with the casualty disasters it is necessary that the surgeons are educated enough so that they can do better management in a disaster. However, if we compare this approach with the routine practice then the triage principle in case of disaster requires a quite different approach for evaluating and caring, and they also contradict the ethical values and the necessary training. So, mass casualty events and an effectual response to the disaster should emphasize on the hazard approach, which is defined as the capability to adopt and to apply the fundamental principles of the disaster management to the mass casualty incident of any nature. Moreover, the organizational tools such as Hospital Incident Command and the Incident Command System also provide help for coordinating a rapid

response to particular situations. This can be illustrated with the help of an

example that the federal government of the United States is responsible to effectively and quickly respond to the disastrous incidents in order to ensure the critical assistance for saving life via the National Response Plan. The International Medical Surgical response are, however, capable enough to provide the surgical, medical and the intensive care services in the austere and serious places anywhere in this world.

The physicians that are trained for such disasters provide leadership at the national and regional community level such as a prompt response to the special emergency, management of the medical healthcare, and the special care to the people that are physically injured. According to the American College of Surgeons, the surgeons should participate actively in the multi-disciplinary selection, planning and the medical management of mass inflow of the victims at the time of disaster as shown below.

The problems associated with the mass casualty are the lack of communication, lack of coordination, command and control, and improper management of the surge. Because of the improper communication, people remain deprive of the urgent help and they fail to get the proper treatment. Proper communication should be ensured in order to ensure proper care during the emergency situations. The community delivering information should also remember the isolated groups and should try to distribute the information in multiple languages as well as in sign language so that the information can be broadcast on the television. Further, the structure of message should be concise and clear enough so that it can be understood easily, but the message should not cause undue panic. Clear points of

contact and the communication lines should be established with the calls logging and communication.

Furthermore, it should be ensured that there are limited spans of control and a clear command and communication lines within the organizations.

However, failure to ensure this may pave the way to the difficulties causing omission or duplication of the task. In the case of the Mass Casualty Care, following communication plan is effective.

Furthermore, another challenge associated with the mass casualty care is the improper management of the surge. The health care systems should expand their ability for the management of the response of disaster. This can be done in terms of the proper space, staff, stuff and system. Health systems need to be able to expand their capability as part of disaster response. This can be thought of in terms of "space", "staff", "stuff" and the "system" (Kaji, Koeing & Bey, 2006). It makes the determination of the problem and provision of a potential solution possible. The concerns and challenges faced by the hospitals in order to deal with the mass casualty events are receiving the casualties, capacity of hospital space, decompression of hospital, identification of patient, tracking of victim. The hospitals can deal with this situation in a way that the additional patient should be diverted to the less crowded places; discharge the emergency department patients who can take care and medical facility at their home.

The availability of the operating rooms should be determined, the elective procedures and surgeries should be cancelled, and multiple operating rooms should be prepared in order to deal with such a situation. Alternative sites should be used in order to increase the capacity of space and to add the

beds as well as additional equipments. A space should be established in order to store the bodies of the injured people who die during the treatment. The space, however, should be in the hospital or near the hospital. The field hospitals also play a significant role in the management of such casualty disasters. However, they should be in the operational mode within 24 hours any casualty disaster. They should be independent in terms of the energy, logistics, technical and the medical staff facilities. They should provide urgent medical services in order to cover the medical needs; they should permit the local personnel associated with health to operate within their technical framework. They should be in place even after the control over disaster in order to ensure proper treatment and monitoring of the injured people, and for their routine health care.

Examples

Considering an example that In Indonesia, following Tsunami, several hospitals were shifted to the Banda Aceh. However, low care standards; delay in the setting of new standards, lack of assessment of needs, lack of the coordination has paved the way to the poor performance of these structures (James, 2006). However, after Tsunami, the government of Australia has given 8 teams of 124 people on the request of 4 governments (Jacobs, Goody & Sinclair, 1983). However, the first team comprised of 28 members arrived in the Banda Aceh, was grouped by the New South Wales authorities, it was a multidisciplinary team intended for the surgical and medical care. Many other teams were sent for the purpose of primary care, the population health, and for surgery.

Further, the review of the injuries and illness in the disaster i. e., Tsunami in

Papua New Guinea in the year 1988, has identified various needs and required clinical skills (Klein & Weigelt, 1999). The teams were also sent to Thailand for forensic purpose, Sri Lanka for health of population,, and Maldives for the purpose of primary care and population health, and they were sent on the request of the countries affected by tsunami disaster.

Another example of the mass casualty disaster is the collision of a passenger train with truck in Rebadim, a place in Israel. The collision took place on 21st June 2005. This collision has resulted in the mass casualty incident that is characterized by the long distance from the trauma centre and complex accessibility to the medical care.

A major response to the disaster was, however, initiated by the military and the civilian forces that include Israeli Air Force i. e., IAF Search and Rescue Teams. In this disaster the air medical evacuation and airborne medical teams have played a significant role from the site of an accident to the trauma centre. About 289 passengers got injured in this accident and seven were killed (Assa, landau, Barenboim & Goldstein, 2009). Six helicopters participated and they evacuated the victims of trauma, provided aid in transporting the air medical teams to the collision site. A total of 35 victims of the trauma, among them ten were urgent were evacuated by the air to the trauma centers for the medical treatment. However, the length of the time between the lading of helicopter and the completion of the evacuation process was about 83 minutes (Assa, landau, Barenboim & Goldstein, 2009). The operation of the air medical evacuation was, however, controlled by the IAF Search and Rescue Commander. Different composition of the crew was set in the real time.

The noted improvements are that the mass casualties care is promptly made available now in order to save maximum possible lives. Air medical evacuation has enabled rapid transportation of the casualties from the site to the trauma centers, and helped in reasonably distributing the patents to different centers in the region. Further, this operation has highlighted the need for the flexibility in the decision making regarding medical treatment, air medical should be regarded as a fraction of the responses to the mass casualty incidents particularly when the site is isolated and is characterized by the difficulties such as difficulty of approaching the site.

Recommendations

In order to make the mass casualty care more effective and successful it should be ensured that there are clear line of the authority and responsibly, the plans should define the responsibilities, roles and the probable activities. Risks should be assessed because they are necessary to identify the hazards that pave the way to the mass casualty incident in a particular community. Further, the community should prepare response in a way that the prepared arrangements are effective in all the events, whether it is a hurricane, a pandemic, or an airplane crash. Furthermore, the scalability should be considered, in this case preparedness should be addressed for knowing about various scales of the incident as well as the surge in demand for the health care.

The activities such as the treatment, triage, and the transportation are general in order to manage the mass casualty incidents, efforts should be made in order to introduce those measures that help in the evacuation of more and more people in case of such accidents. Considering the fact that in

the case of Tsunami in Asia, in the year 2004, the condition become out of control, because the planners fail to think about the evacuation management. So, the plans should allow for the scale up in such situations. Lastly, ethical principles should be considered during such disasters. the human life should be given value, human dignity of every individual should be preserved, it should be tried that best is done for the majority of people this is especially true for the operation and the medical team. The local standards and the values of the community should be given respect. All these will help in the effectual provision of the mass casualty care.

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