Applying Telemedicine during Disasters

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Introduction

Disaster has two characteristics of low probability but high impact. In these circumstances a large number of wounded and injured go to the hospitals for benefiting from health facilities.

Telemedicine is one of the latest developments in information technology and communications. Change is an efficient tool in providing quality health care to individuals, especially in critical situations. British Association of the Telemedicine announced that the Telemedicine is delivering health services, where distance and time is an important factor by professionals using information and communication technology for accurate information regarding diagnosis, treatment and prevention of disease and research, using the latest achievements in the field of health services in order to provide more health [1].

The Telemedicine can encourage appropriate measures to respond to three major events, including before the incident, the incident and rehabilitation [2].

Using new technologies to manage and organize events and disaster can be very useful by using the Telemedicine management rules. Crisis management in disaster in a planned program of preparation and mobilization design to reduce the harmful effects of accidents, reduced deaths and damaged caused by accident and will consider rescue operation and resuscitation and life-reactive daily programs of accident victims. Despite a decade of experience in crisis management, is limited using of the Telemedicine in disaster. The Telemedicine in disaster management is the main issue to save lives of accident victims. According to the devastation created in the health services infrastructure has become an important point, the existence and utilization of the Telemedicine technology and according to continuously improvement in electronic technology, communication to deliver health services in remote areas [3].

A study by Burk et al. the Pediatric specialists have successfully provided remote triage and treatment consults of victims via the robot. The robot proved to be a useful means to extend resources and provide expert consulting if paediatric specialists were unable to physically be at the site [4].

Another study of Nigossian et al. showed that that the Telemedicine is a useful medical and public health technology that continues to be underutilized due to the lack of inclusion in the preparedness planning, training, availability of networks, and connectivity costs [5].

Doarn and Merrell said that in 1988, an earthquake destroyed a significant portion of the Spitak Region of Soviet Armenia. The destruction resulted in significant death toll, building and infrastructure destroyed, and the displacement of hundreds of thousands of people. The entire local medical infrastructure was significantly damaged. Before the disaster, the space medical leadership of the United States and the Union of Soviet Socialist Republics were collaborating on joint activities in medicine and biology. The leaders of this collaborative effort devised an approach to support a disaster recovery utilizing telecommunications assets. This effort was focused on health care in a post-disaster event and became known as the Spacebridge to Armenia. This spacebridge was put in place 5 months after the calamity and operated for several months in the spring-summer of 1989. The spacebridge was extended to Ufa, Russia, in response to a second disaster. The influence of the Spacebridge to Armenia in the 20 years since has been significant [6].

Conclusion

The Telemedicine can be used in disasters and the delayed treatment areas as well as for training first receivers to collaborate with specialists in remote locations to triage and treat seriously injured victims. Research shows that one of the best solutions to help victims in disaster and remote areas and where the shortage of specialist, is telemedicine and should advertise and pro Telemedicine mote telemedicine services in crisis management to be a broad and detailed program in levels of various social organizations and we expect that this study will enhance the level of understanding and meaning of telemedicine and use of this technology among stakeholders, new entrants, and researchers, eventually enabling a better quality of life.

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