Inter-Sector Partnership in Tabletop Exercises: A Low-Cost but Effective Approach to Increase Hospital Preparedness

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ARTICLE INFO ABSTRACT

LESSON LEARNED

Performing exercises is of utmost importance for hospital preparedness. Tabletop exercises are more straightforward and less expensive comparing to operation-based exercises. Iran University of Medical Sciences, using public and private sector partnerships in the field of health, held a joint tabletop exercise. This exercise aimed to enhance the ability to respond efficiently to disasters. Findings of this study revealed that not only performing continuous training and partnership through both public and private sectors is essential for hospitals’ preparedness, but also promoting the training level can provide a ground for integration and trust among all private and public centers. Consequently, these endeavors can be beneficial in preparing for disasters and emergencies. This article aims to describe the experience of holding a joint tabletop exercise.

Keywords: Inter-sector partnership, Tabletop exercises, Hospital preparedness, Private sector, Disasters

Unexpected and unforeseen emergencies and disasters occur regardless of borders. These unexpected events severely disrupt the infrastructures of society so that conventional resources and procedures cannot be used to control the conditions and deal with their consequences (1). Health care services are one of the critical components of disaster management. Thus, it is necessary to have effective evidence-based arrangements for providing health services in times of disaster. In particular, health care facilities have their unique features and complexities which distinguish them from other organizations. These services are provided in various types, and many specialized sectors with different levels of management complexities are also involved (2). Iran is a developing country, and based on UNISDR, the level of disaster risk is 8 out of 10 and 31 hazards out of the 42 known hazards that have been identified in this country. During the past four decades, Iran has lost about 110,000 people only due to natural disasters, and another 53 million people have been directly and indirectly affected (3). These losses are in addition to the losses due to human-made disasters such as eight years of sacred defence, road accidents, and building fires. However, the results of surveys indicate the inappropriateness
of providing health care services at the time of disasters in this country (4).

Preparedness for disasters consists of many parts, including planning, equipment, training, exercise, and upgrading. Among these, the preparatory exercise is considered as the most crucial component of disaster preparedness. Exercise is a simulation of the disasters, which is a suitable way to prepare and evaluate the preparedness of individuals and organizations.

These preparations are generally classified in the form of two topics of discussion-based exercises and operation-based exercises. Discussion-based exercises are generally aimed at familiarizing people with plans, processes, and roles. Nevertheless, operation-based exercises are conducted in line with people’s operational responses to practical scenarios in which disaster situations and conditions are simulated as closely as possible to actual conditions. Operational exercises can include partial operations (such as triage or evacuation operations) or extensive operations in the form of field-based exercises that are much closer to the actual conditions of disasters (5). As disasters usually do not occur continuously, and there may be significant time intervals between them, health care facilities and their staff need to operationally repeat the necessary skills and processes required to deal with disasters.

In this regard, Iran University of Medical Sciences conducts new exercises to increase preparedness. One of these exercises was launched in one of the private hospitals in October 2019. This private hospital voluntarily invited all 64 private and public hospitals affiliated to Iran University of Medical Sciences. The main goal of this program was to integrate public and private local capabilities to save lives in probable disasters. These capabilities brought a wide range of advantages, one of which is the ability to provide health care services. In this tabletop exercise, all participants were categorized in the form of six main groups based on disaster command system charts. The exercise evaluation checklist for all groups was extracted according to the considered scenario. On the day of the exercise, representatives from other related organizations (such as EMS, Municipal Crisis Management, Fire Department, and Disaster and Accident Management Committee) were also present. Meanwhile, seven evaluators (including Ph.D. students of Health in Disasters and the staff of the university’s medical deputy) completed the evaluation checklists. Finally, at the end of the exercise, its strengths and weaknesses were discussed through conducting a critical review of the exercise (HOTWASH).

The mentioned case is just one example of a variety of programs designed and implemented at Iran University of Medical Sciences to respond appropriately to disasters. These programs familiarize people with the quality and quantity of their tasks and roles at the time of disasters. Besides, they provide an opportunity in which the strengths and weaknesses of the current status and the predicted plans will be identified appropriately. They can also be done based on evidence so that attempts will be made continually to improve programs according to the conditions.

Public and private sector partnerships and the presence of all hospitals in a joint exercise in the field of health will lead to increased identification of the strengths and weaknesses, training, accountability, capabilities, cooperation and coordination of support organizations. Moreover, since these exercises can provide a ground for integration and trust between all public and private sectors, they can be beneficial in responding to disasters and emergencies. Therefore, it is suggested that all medical universities of the country could prioritize these programs.

The present experience showed that inter-sector partnerships in tabletop exercises are a low-cost but effective approach in increasing hospital preparedness. Hence, it is recommended that designers and implementers of such exercises involve the private sector as well to increase their scientific and skill competencies. In this regard, national programs will be developed accordingly.
It is also worth noting that tabletop exercises should not be neglected because they are considered as an essential prerequisite of preparedness.

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References
1. Suneja A, Chandler TE, Schlegelmilch J, et al. Chronic Disease After Natural Disasters: Public Health, Policy, and Provider Perspectives. 2018.
2. Ahmad J, Ahmad MM, Ahmad N. Natural disasters and public health in the era of Sustainable Development Goals: a retrospective study of the October 2015 Hindu Kush earthquake in Pakistan. Procedia engineering. 2018; 212:855-62.
3. Ardalan A, Saberinia A. IR Iran National Health Disaster and Emergency Response Operation Plan. Tehran: Azarbarzin. 2015.
4. Salmani I, Seyedin H, Ardalan A, et al. Conceptual model of managing health care volunteers in disasters: a mixed method study. BMC health services research. 2019;19(1):241.
5. Skryabina E, Reedy G, Amlôt R, et al. What is the value of health emergency preparedness exercises? A scoping review study. International journal of disaster risk reduction. 2017;21:274-83.