

Organizing the general disaster drill of Tohoku University Hospital (2014/12/19)

Venue: Tohoku University Hospital, Sendai, JAPAN

Topics: Mission oriented action plan of the University Hospital located in the middle of disaster affected area

On Dec. 19 (Fri), Prof. Egawa organized and assisted the general disaster drill of Tohoku University Hospital (TUH) as a core member of organizers and controller of the drill. Even though TUH is located in the center of the Great East Japan Earthquake affected area, the faculties are continuously changed and unexperienced staffs have to deal with disaster situation. TUH has a mission oriented action plan for disaster and this is a good opportunity to validate its efficacy.

This year's drill assumed that large inland earthquake attacked the down town area of Sendai City and number of injured people are supposed to visit hospitals. Under the leadership of Hospital Director, the headquarter was established within 20min and the level 3 of disaster was declared, which means the regular service is quitted and the hospital should be ready to accept mass casualties. The building itself was safe for use and the situation of lifeline was postulated to emergency power supply, water way temporal shortage, stopped gas line. All the elevators stopped immediately, but only one cargo for the heliport was rapidly resumed to be able to accept the helicopter transportation.

The player doctors and nurses gathered astronomically to the emergency room and build teams in each Green, Yellow, Red and Black area. Within 30 min, number of medical students of Fourth Grade visited the hospital as simulated patients, as well as ambulance cars and a helicopter from Osaki City. The headquarter dealt with the incoming information and contacted with the University HQ, Ministries and Miyagi Prefectural HQ. Various requests from every part of the hospital was gathered to the HQ including foods for patients and the situation of other hospitals in the affected area. TUH acted as the central university hospital and the disaster base hospital to help the local health care providers.

ICT is a strong tool to organize the information. A comprehensive database was developed two years ago to display the information of the whole buildings. Monthly training is regularly performed to use this system to report the audibility of the alert-assuming music. Another attempt was first made to utilize Emergency Medical Information System (EMIS) that was developed and managed by the Ministry of Health, Labor and Welfare of JAPAN after Great Hanshin Awaji Earthquake. At the time of GEJE, EMIS had limited users and recognition among the general health providers. The interface was renewed in Aug. 2014 and geographical information system was integrated. Geographical location of the health care facilities and evacuation centers and its lifeline, number of patients (affected people), outbreaks, the activities and

chronology of DMAT and centers can be easily summarized and shared.

After the drill, every player, controller and evaluator gathered in the plenary session and clarified the best practice and gaps. Business continuity plan (BCP) requires the strong leadership of Director or President to be successful. Director of TUH, Dr. Shimosegawa actively organized the HQ and leded the response with strong support by the staffs of whole hospital, suggesting the strength TUH.

Even though the experience of GEJE is deep in our mind, it is very important to continue this type of practical drill. We will continuously train ourselves for effective response remembering that nothing is possible in disaster that is not possible at the ordinary time.



Prof. Shimosegawa, Director of TUH as the Director of HQ



Database indicating the latest condition of the TUH buildings



The HQ conference 90 min later after the onset



Number of injured people (simulated patients by medical school students) visiting the entrance of ER



Gate control triage at the ER entrance



Red area dealing with severely injured patients



Green area full of people

病院名称	東北大学病院
受付時間	2014/12/19 13:43:26
状況が必要な状態です。	
様子配:	
緊急時入力 (震災直後情報) 更新日時: 2014/12/19 13:23:49	
避難状況	
人員確保の状況、または避難の恐れ	無
ライフライン・サブライフライン	不可
電気の通電の状況	不可
水の確保の状況	可
医療力への不足	不足
医薬品・衛生資材への不足	充足

Lifeline information of TUH in EMIS

Shinichi Egawa, Photo: Hiroyuki Sasaki (Disaster Medical Science)