

Lessons Learned; Hospital Emergency Evacuation in Ilam, Iran

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Dear Editor

Hospitals are considered to be the most important infrastructure of any society. It is necessary to continue their activities both in normal and disastrous situations in order to respond to the situation and provide services to the injured (1). In hospitals, due to the use of electrical equipment, medical gases, and flammable liquids, there is a high risk of fire. The occurrence of fire in hospitals is a serious threat as it can be extremely dangerous to other buildings along with the fact that most hospital residents are not capable of saving themselves in such situations. Studies in Iran have shown that the fire safety status in Iran's hospitals is weak and the risk of fire is high (2-4). Hospital emergency evacuation is a difficult process and requires a strong strategy and rigorous implementation, as the hospital emergency evacuation varies with the evacuation of other buildings and the displacement of the sick patients is very dangerous. Moving patients to alternative care centers is considered to be vital for their own safety (5, 6). When a hospital is on fire, timely response, evacuation of patients, effective communication and a command center are required (7). The incidence of a hospital fire is not easily controlled as most patients cannot leave the hospital. Therefore, the emergency evacuation plan and fire extinguishing equipment should be readily available (8). Fire response plan, personnel training and emergency evacuation exercises are important factors in hospital preparedness for a fire accident (9). In emergency evacuation exercises, personnel are familiarized with evacuation plans and its gaps are also identified (10). On April 22, 2019, at 11:15 AM a fire incident occurred at the Shahid Mostafa Khomeini Hospital in Ilam, Iran. Welding in the upper floors and the passing of welding pile from a false ceiling and collapsing objects and cartons caused a fire in the emergency department storeroom. Due to the lack of timely operation of the fire detection system and the existence of a false ceiling, the fire

extinguishing was delayed. When the smoke was detected in the emergency department, the crisis code was announced and at the same time had contacted the fire department. All patients and emergency equipment were transferred to a safe place in order to prevent any possible damage, and fire extinguishing operations were carried out. There was no death or injury in the incident. All the patients and the equipment were transferred to the emergency department after the firefight. The learned lessons are as follows:

- Training personnel and hospital managers in the field of fire safety, hospital emergency evacuation and the implementation of these training through exercises.
- In hospital emergency evacuation, special attention should be paid to various factors, including timely response and evacuation of patients based on their physical conditions.
- Installing a hospital fire detection system to prevent the progress of fire and smoke in the other sections of it.
- The availability of essential medical equipment for the emergency evacuation of patients
- Improving coordination and communication of intra-organizational and inter-organizational in hospital emergency evacuation

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