# The Presence of International Relief Teams in the 2023 Turkish Earthquake: Challenges, Strengths, and Lessons Learned

Pirhossein Kolivand;<sup>1</sup> Hamid Karimi Kivi;<sup>2</sup><sup>®</sup> Seyed Fattolah Hasheminezhad;<sup>3</sup> Peyman Saberian;<sup>4</sup> Navab Shamspour<sup>2</sup>

- Department of Health Economics, School of Medicine, Shahed University, Tehran, Iran
- Research Center for Emergency and Disaster Resilience, Red Crescent Society of the Islamic Republic of Iran, Tehran, Iran
- Research Center for Health Management in Mass Gathering, Red Crescent Society of the Islamic Republic of Iran, Tehran, Iran
- 4. Department of Anesthesiology, Tehran University of Medical Sciences, Tehran, Iran

Correspondence:

Pirhossein Kolivand Department of Health Economics School of Medicine Shahed University, Tehran, Iran E-mail: Kolivand@neuroscience.ir

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### Abbreviation:

AFAD: Disaster and Emergency Management Presidency [Afet ve Acil Durum Yönetimi Başkanlığı]

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## Dear Editor,

On February 6, 2023, an earthquake with a magnitude of 7.8 Richter scale shook the southeast of Turkey in the Pazarcık region of the Kahramanmaras province at 4:17AM. This earthquake affected 13 thousand square kilometers, which included the provinces of Kahramanmaras, Adıyaman, Kilis, Osmaniye, Gaziantep, Malatya, as well as Şanlıurfa, Diyarbakır, Adana, Hatay, and Elâzığ. This earthquake affected approximately 13.5 million people, among which approximately two million were Syrian refugees. Almost after nine hours, the second earthquake occurred with a magnitude of 7.5 in Ekinözü City, which destroyed the damaged buildings. The latest statistics published until March 4, 2023 declared that around 45,900 people lost their lives and 114,990 people were injured. In addition, approximately 55,000 houses were collapsed or severely destroyed in 11 provinces.<sup>1–3</sup>

# Actions Taken

The actions taken to respond to the earthquake and reduce its effects included: rapid initial assessment by Disaster and Emergency Management Presidency (AFAD [Afet ve Acil Durum Yönetimi Başkanlığı]; Ankara, Turkey), calling operational forces and volunteers, conducting search and rescue operations in destroyed areas, evacuating people from disaster areas, establishing emergency accommodation camps in nearby villages and cities, preparing hot food in the disaster area and distributing it, requesting for international humanitarian aid, distributing sanitary, food, and heating items, using the capacity of mosques, shopping malls, stadiums, hotels, and accommodation centers for temporary accommodation of victims of accidents, setting up mobile kitchens in affected areas, and drinking water chlorination in around 1,500 points.

# International Humanitarian Aid

On February 10, 2023, the Turkish government requested international humanitarian aid due to the high amount of damage and the acceleration of search and rescue operations.

More than 105 countries and 16 international organizations sent operational forces and humanitarian aid to Turkey.<sup>4</sup> Eleven countries also sent teams with search and rescue dogs to find victims under the debris.<sup>5</sup> Most of the international teams sent to Turkey were in charge of helping with the search and rescue activities from the debris and medical aid. They returned to their country seven to ten days after the earthquake after completing the search and rescue. In addition to helping in search and rescue and medical assistance during the emergency settlement stages, some countries assisted the Turkish teams by distributing relief items in villages and remote areas. Despite facilitating the actions, the large number of troops sent from different countries to help search and rescue the victims also had challenges. This article's purpose is to express the challenges and strengths that existed in the management of this earthquake, which can teach the useful lesson for improving cooperation and international assistance in future disasters.

# Strengths

The AFAD planned the management of these teams and has the following strengths points: (1) a representative was in contact with each foreign team and made the necessary plans regarding cooperation with these teams; (2) held morning assessment meetings to plan and specify daily activities; (3) established zoning in the disaster areas for setting up an



emergency camp and distributing items; (4) specified the route and the target areas and providing the vehicle and local guide; (5) specified the optimal location of operational teams to facilitate access to their protected areas; (6) established the existence of strong logistics stationed at the airport for unloading, loading, and transportation of goods sent from donor countries; (7) guided the teams arriving at the airport to facilitate access to the disaster areas; (8) coordinated support for the transportation and movement of foreign operational forces and relief items; (9) attracted the participation of foreigners residing in Turkey to cooperate with the operational teams of their country; and (10) established proper feeding of operational forces and easy access to the distribution site.

## Challenges

There were also challenges in the cooperation of foreign forces in search and rescue operations: (1) arrival of operational forces to the accident area was often delayed; (2) the most important challenge was the lack of coordination with countries sending relief goods regarding the time, type, and manner of sending the goods. In some cases, the goods lacked proper packaging and were sent in bulk (without box pallets). It made unloading and loading difficult and operational forces had to be involved in the unloading and loading process, which took a lot of time; (3) in some cases, the disaster victims were not interested in the sent goods due to the lack of compatibility with the existing conditions in the disaster area; and (4) providing security and safety to carry out operations in some areas had encountered problems. Some countries' aid items were stolen in the accommodation place of the international aid forces. In addition, on February 11, 2023, the German and Austrian aid workers stationed in Hatay suspended the operation for the deterioration of the security situation due to the late arrival of aid or sporadic clashes between armed groups.

### Lessons Learned

The challenges created and the strengths of this accident management can have valuable lessons in the optimal management of disasters with similar severity in the future. The lessons learned from this accident are the following: (1) checking the type of skills and goods needed by representatives from the destination country before sending troops and sending relief items; (2) establishing the unit command structure by determining the role and duties of foreign forces; (3) planning to ensure the safety and security of foreign forces to facilitate relief operations; (4) defining a liaison with full authority from the organization in charge of disaster management in the affected country to establish communication, guidance, and management of foreign teams; (5) bringing vehicles to move operational forces from the country of origin delays the arrival time to the accident area. Therefore, the affected country must provide powerful logistics for the transportation of troops before requesting international aid; and (6) organizing volunteer forces and nongovernmental organizations to participate in guiding foreign forces.

# Conclusion

Considering the almost similar geological and seismic characteristics of Iran and Turkey, it can be beneficial to take advantage of the above cases for the policymakers, managers, and decision makers of disaster management in Iran. Therefore, it is recommended to use the lessons from this accident to make a comprehensive plan for how to request help, cooperate with foreign forces in possible future disasters, foreseen equipment and facilities, and create a powerful logistics system to facilitate the relief of foreign operational forces. It has been late to take measures in the phase of prevention and mitigation of the disaster effects. Therefore, it should be tried to focus more on the preparation phase to train the people and increase the hardware and software readiness of the organizations in charge of the country's disaster management to compensate for the existing deficiencies. In addition, it should plan on the potential of external forces to overcome weaknesses during disasters by identifying them.

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