LETTER TO EDITOR

An Approach whose Importance is More Understood in Natural Disasters Experienced in Turkey: Telerehabilitation

Türkiye'de Yaşanan Doğal Afetlerde Önemi Daha Çok Anlaşılan Bir Yaklaşım: Telerehabilitasyon



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Dear Editor,

Disaster refers to a significant disruption of the routine functioning of a society by causing widespread human, material, economic, or environmental losses that exceed the limits of that society's ability to utilize its resources (1). Increasing disasters in recent years have necessitated changes in countries' health services and policies. With the strategic goals established, activities to improve disaster management have gained momentum. It has become a priority to prepare for possible disasters with a proactive approach by learning from past natural disasters. It is emphasized that necessary medical rehabilitation initiatives should be a part of disaster management to minimize the devastating effects of possible natural disasters that may occur in the future (2).

The coronavirus disease (COVID-19) that has affected the world and the Kahramanmaraş (Pazarcık and Elbistan) earthquakes that have had devastating effects on many cities in Turkey have left deep traces in the lives of millions of people. These natural disasters have negatively affected not only the financial, psychological, and social lives of many people with various chronic diseases but also the management of their illnesses (3). These natural disasters have made it necessary to change the daily functioning of health systems. Because both the isolation process and the process caused by the destruction have disrupted patients' routine hospital visits. The difficulties experienced in providing health services have made it necessary to implement alternative strategies. Digital health technologies are one of these strategies and have potential contributions to the effective management of health systems in many parameters such as access, efficiency, cost, and transfer of patient information in health services (4).

After disasters, it is essential to make the rehabilitation of previously disabled individuals as well as individuals with new disabilities due to disaster sustainable (5). In such cases, telerehabilitation, which is evaluated within the scope of telehealth strategies, can be used as an effective way of applying medical resources. The benefits of telerehabilitation in this regard have been proven, but the studies on this subject are still minimal (6-8).

During disasters, it can be very difficult for disabled individuals with limited resources to access health services, especially in rural areas. These limited opportunities can further increase the illness and disability of individuals with disasters. It is known that disasters increase the rates of disability before the disaster and cause an increase in the demand for rehabilitation. In the context of meeting and managing this demand, the limited opportunities caused by the disaster can be managed more easily within the scope of telerehabilitation and can provide an opportunity for better health outcomes (9). In these cases that limit access to the hospital, early sustainable rehabilitative approaches can be implemented without delay with telerehabilitation. The benefits of this early rehabilitation include (a) fewer acute and long-term complications, (b) reduced length of hospital stay in the acute phase, (c) better functional outcomes, and (d) better integration of individuals participating in rehabilitative interventions into society (10). These benefits aimed at early rehabilitation can be achieved by addressing individuals from a physical, psychological, and social perspective.

It is possible to evaluate the physical, psychological, and social effects of both the individuals who became disabled after the disaster and the individuals who were disabled before, in a holistic manner with the biopsychosocial model (Figure 1) (11). Individuals who need post-disaster rehabilitation experience restrictions in activity and participation due to their physical effects during this process. Reducing these problems can be achieved by implementing the necessary rehabilitative interventions at an early stage by considering individual and environmental factors together (12). Online consultation,

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evaluation, treatment, rehabilitation approaches, and 24-hour monitoring can be managed with telerehabilitation, coordinated by the multidisciplinary team (13). However, when the limitations caused by the disaster are reduced, necessary hospital-based rehabilitation interventions

should be continued. Because the limitations of the telerehabilitation approach, which cannot provide objective results as much as face-to-face evaluation, can be overcome in this way.

Post-Disaster Health Status

Body Structure and Functions

- -Physical and functional capacity
- -Sleep status
- -Pain
- -Muscle strength and tone
- -Respiratory functions
- -Digestive, urinary, metabolic and endocrine functions
- -Sexual function
- -Skin integrity
- -Cognitive functions
- -Sensory functions

Activity and Participation

- -Daily routines
- -Walking and transfers
- -Hand and arm use
- -Toilet, bathe, dress
- -Eating
- -Communicating
- -Leisure activities
- -Educational activities
- -Family relations
- -Employment

Personal Factors

- -Age
- -Gender
- -Language
- -Education level
- -Motivation status

Environmental factors

- -Food and medicine
- -Vehicles that provide mobility inside and outside the home
- -Financial situation
- -Society living together
- -Noise-sound
- -Weather
- -Family and environmental support
- -Attitude and support of healthcare personnel
- -Social security services, systems and policies

Figüre 1: Assessment of Post-Disaster Health Status in the Context of the International Classification of Functioning, Disability and Health (ICF) (11)

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