## LETTER TO THE EDITOR

# EARLY REHABILITATION PREVENTS DISABILITY AFTER EARTHQUAKE: A LETTER TO INTERNATIONAL REHABILITATION COLLEAGUES

On 20 April 2013, 3 weeks before the fifth anniversary of the devastating 2008 Wenchuan earthquake, another powerful earthquake (7.0 magnitude) stuck Sichuan province, this time in the city of Ya'an. Once again, our fellow countrymen are experiencing serious threats to their lives and health. As rehabilitation workers, we plead with all our colleagues to engage in early rehabilitation for the Ya'an earthquake victims and to use an organized early rehabilitation model, in order to minimize the suffering caused by the earthquake by treating the wounded early and thus limiting permanent physical disabilities.

#### TARGET

By implementing early rehabilitation, we should be able to improve the clinical curative effect of earthquake victims, shorten treatment times, prevent complications (and better treat those that do arise), prevent disuse syndrome in bedridden patients, prevent and better control disabilities, improve or restore injured body structures and functions, enhance or restore ability to engage in physical activities, implement secondary and tertiary prevention of disabilities, improve the degree of independence and quality of life for those who are injured, and thus allow the wounded to return earlier to society and to recover harmony. These measures have very important and realistic effects and are of profound social significance.

#### PRINCIPLES

The most basic and most important principle is to prevent disability. For wounded patients who have survived an earthquake, the damage has already occurred. The first principle is to prevent secondary and tertiary disability with the help of rehabilitation therapists and rehabilitation physicians. First, the patient should take active secondary prevention measures to prevent the occurrence of disability; as for disabled and limited-activity patients, tertiary prevention measures should be taken to prevent permanent disability or handicap to avoid effects on individual careers and social life.

#### KEY TOPICS

Rehabilitation treatment should focus on 3 key topics: function, activity and participation. At the beginning of the 21<sup>st</sup> century, the World Health Organization formally issued the International Classification of Function, Disability and Health (ICF), which emphasized function as the core, essential quality that will enable the injured body part to function at different levels of abnormality and in limited capacities, and which will lead to limited individual activities and social participation. Rehabilitation therapists and rehabilitation physicians in clinical treatment should therefore follow the ICF criteria; functions, activities, and participation should drive the fundamentals of clinical thinking and work content.

#### SPECIFICS

In clinical rehabilitation treatment, rehabilitation therapists and rehabilitation physicians must determine the following 3 details: (*i*) the injured body part and function, the region, degree of injury and the limited function; (*ii*) the limited degree and prognosis for individual activities (activities of daily living, housework and shopping, for instance); (*iii*) the limited degree and prognosis of the ability to participate in various aspects of an individual's life (professional, social, community activities, leisure, recreation, etc.).

### TREATMENT METHODS

The method of treatment will vary according to the specific dysfunction and the limited activities and participation of the wounded person. Physical therapy may include sound, light, electricity, magnetism, movement and pressure therapy. Occupational therapy may include functional occupational therapy, training in activities of daily living, sensory and motor occupational therapy, education and consulting, environmental interference, apparatus production and using training occupational therapy, cognitive therapy (including the evaluation of professional training), speech therapy, psychological rehabilitation and rehabilitation engineering, such as prostheses and orthoses, self-help aids, etc. These types of relevant methods should be comprehensively applied from the outset.

We hope that everyone in the earthquake-affected area continues to cooperate with governmental departments, who are carrying out good and necessary work, and that our colleagues will all engage in helping local wounded patients with rehabilitation therapy to enable them to survive with the best possible life function and quality of life. In the meantime, we must estimate the total disabilities, the classification of disabilities and rehabilitation needs after the earthquake. We should put forward suggestions for organizing and coordinating along professional guidelines, and we should comprehensively and accurately establish local files and a database of wounded survivors.

We must use our experience of rehabilitation after the Wenchuan earthquake to help us to start early rehabilitation training and minimize the dysfunction of wounded patients.

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