

PERSPECTIVES IN REHABILITATION

## Post-earthquake Haiti: the critical role for rehabilitation services following a humanitarian crisis

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### Abstract

The earthquake that occurred in Haiti on 12 January 2010 resulted in massive infrastructure damage, and created one of the largest single-day loss of life events in modern history. Despite the tragic mortality rates, many people with catastrophic injuries including spinal cord injuries and amputations survived due to swift emergency responses by local and international non-governmental organisations (NGOs). The outcome however is that Haiti now has a considerable cohort of people who live with important disabilities. In this 'perspectives in rehabilitation' we share our experiences of working in post-earthquake Haiti, and highlight that this event has raised awareness of the critical importance of providing rehabilitation services during and after a humanitarian crisis of this magnitude.

**Keywords:** Rehabilitation, humanitarian crisis, Haiti

Haiti was forever changed on 12 January 2010. Just before 5 pm, a 7.0 magnitude earthquake unleashed massive destruction on an already fragile and developing infrastructure. The densely populated capital city of Port-au-Prince and nearby coastal communities were devastated because homes, hospitals, businesses and many government buildings were simply not built to withstand the destructive force of an earthquake of this magnitude. The estimates are that 220,000 people died and over 300,000 were injured, and there are now more than 1.3 Million people living in temporary shelters in Port-au-Prince [1]. Although the initial earthquake lasted only seconds, the impact is likely to endure for decades. Before the earthquake, Haiti was often cited as 'the poorest country in the Western hemisphere,' and ranked 140 out of 182 countries on the 2009 Human Development Index [2]: its post-earthquake status remains to be determined.

During the initial hours and days following the earthquake, international organisations poured into Haiti to provide food, security, shelter and life-saving

health care. This international response was in addition to the efforts of other local and international non-governmental organisations (NGOs) already working in Haiti. While the outcome of this collaborative response is difficult to objectively measure, it must be acknowledged that despite the tragic loss of many lives, these combined emergency efforts greatly reduced the mortality rate that could have resulted from the earthquake. Live-saving interventions represent the first critical step following a natural disaster, and once a life has been preserved, attention must immediately turn towards achieving medical stability, addressing impairments and disability, and facilitating discharge and reintegration into the community. A recent editorial by Merin et al. [3], recounts their experience just after the earthquake and notes that it was impossible to treat everyone who needed care, and that the 'potential for rehabilitation was a consideration during the triage phase.' They go on to assert that 'people with head injuries, spinal injuries, or a low Glasgow Coma score were triaged [and that they] believed that it

would be incorrect to use our limited resources to treat patients with such a minimal chance of ultimate rehabilitation at the expense of others whom we could help.' While it is not our intent to comment on the good work of others in very difficult circumstances, it is clear that many people with such serious injuries survived. The initial estimates were that approximately 1500 people with amputations, hundreds of thousand with fractures, and close to 200 people with spinal cord injuries survived the ordeal [4]. In Haiti, the prompt and impressive extent of initial life saving interventions resulted in thousands of people who survived their catastrophic injuries, but this has also significantly increased the proportion of Haitians now living with permanent impairments thereby highlighting the tremendous need for rehabilitation services.

The earthquake in Haiti may represent an important inflection point for international humanitarian efforts that target rehabilitation. As the situation in Haiti continues to transition away from emergency response, the supply of rehabilitation services will increasingly be central to restoring function and maximising quality of life for the many Haitians who were directly or indirectly injured in the earthquake. However, even pre-earthquake, the supply of rehabilitations services did not meet the needs of the country. A small number of local and international NGOs provided rehabilitation services, but the exponential increase in complex rehabilitation needs in post-earthquake Haiti has outstretched much of the existing capacity and resources. Hence, there currently exists a critical imbalance between the need for rehabilitation, and the capacity of the country to supply these services from financial and human resource capacity.

In the weeks and months following the earthquake, organisations from around the globe sought ways to contribute to relief efforts, including the provision of rehabilitation services. Many organisations were determined to address the extreme need and supply imbalance for rehabilitation by partnering and strengthening established organisations in Haiti. As an example, the Toronto Rehabilitation Institute (Toronto, Canada) has been working with Healing Hands for Haiti to specifically address rehabilitation needs of individuals who sustained spinal cord injuries in the earthquake. Based on our collective experiences since the earthquake, the current and future need for rehabilitation services is driven by two main factors.

First, the initial success of the international response has led to the survival of a population of people who sustained complex injuries such as amputations and spinal cord injuries, among others. Prior to the earthquake, the long-term survival of individuals with spinal cord injuries, as an example,

was dubious at best, and there was little to no existing expertise for addressing such needs. Now that initial life saving efforts have created a population of individuals with significant impairments and long-term needs, the question arises regarding how can the international community, in partnership with the Haitian government and health professionals, address and meet its ongoing obligation to these individuals. The provision of rehabilitation services is central to answering this question.

Second, in the days following the earthquake, the existing Haitian healthcare system, which has a large international NGO component, was called upon to provide care to an unprecedented volume of patients. For many injured individuals, hospital discharge and community re-integration has been elusive, which has resulted in bottlenecks and ongoing stress to an already overstretched healthcare infrastructure. Common challenges to community reintegration include the functional status of many patients, and the lack of appropriate and accessible housing. Even before the earthquake Haiti was largely inaccessible and hostile to the non-ambulatory individual. This current situation is compounded by an absence of available support from family members who died in the earthquake. Rehabilitation holds the key to solving this dilemma by improving function and restoring independence. During a recent visit to a hospital located in northern Haiti, the medical director suggested to the authors that one of their greatest needs is for rehabilitation clinicians who can help their patients regain function as a way to facilitate discharge from their hospital that is severely over capacity.

The events in Haiti have raised awareness of the importance of rehabilitation services, and highlighted the need to incorporate rehabilitation into response planning for future humanitarian catastrophes. In the emerging global context of reduced mortality following such events, the need for rehabilitation will only increase. There are many questions left unanswered relating to the future medical and rehabilitation needs of those injured on 12 January 2010. What happens in months and years ahead will depend on many factors, including the willingness of the international community to provide meaningful and sustainable support. The earthquake has brought the attention of the world to the needs of persons with disability in Haiti. We must continue to disseminate our expertise and knowledge by supporting and partnering with the Haitian government and existing organisations, and establish sustainable models of rehabilitation care and training that will support the many Haitians adapting to a new reality. To do anything less would be to once again turn our backs on our responsibilities as global citizens, and as rehabilitation providers.

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