

Rehabilitation and disability

Louis Lillywhite

Disability is said to affect approximately one billion people in the world (World Health Organization, WHO/World Bank, 2011). Disability has implications for the individual, family and the wider society. Disabled people are more prone to abuse, poverty, illness and early death. In a child, disability is associated with barriers to education and integration into society. For both the individual and family, there are the adverse economic consequences. In addition to the medical costs arising from the disability and consequent poorer health, disabled people are themselves less likely to be economically active, while those needing ongoing care often remove another family member from economic activity. Some 80 per cent of disabled people live in poor countries, and 20 per cent of those in poverty are disabled (UN Enable). Thus for low- and middle-income countries (LMICs) to 'achieve the ... development prospects ... of the 2015 Millennium Development Goals ... [they] must empower people living with disabilities and remove the barriers which prevent them [from] participating in their communities; getting a quality education, finding decent work and having their voices heard' (WHO/World Bank, 2011).

In addition, while the greater majority of the disabled live in developing countries, the number of disabled in developed countries is increasing, and there is thus a need for nations with advanced social security systems to reduce, and preferably reverse, the increasing social welfare cost of compensating or caring for the disabled. For example, in the UK, it is estimated that appropriate measures to rehabilitate just those who are in danger of leaving the workforce due to illness or injury would save employers up to £400 million annually and the state £300 million while increasing economic output by up to £1.4 billion (Black and Frost, 2011).

What causes disabilities?

Disability arises at all stages of life. Some are born with disabilities; some babies suffer disability as a complication of unskilled care during childbirth and medical mishaps such as the thalidomide tragedy. In early and middle life, disability arises from injuries sustained as a consequence of domestic accidents, in sport and on the roads, from accidents at work and violence from criminal activity. Non-communicable diseases (NCDs) lead to disabilities arising from heart attacks, stroke and osteoarthritis. War and its aftermath (for example, mines) causes injury and disability to all ages, as do major natural catastrophes such as earthquakes.

The most obvious impact of disability is on the individual disabled, but it also has implications for the family and wider society, with major and increasing consequences for low-, middle- and high-income countries alike.

Preventing disability

Clearly it is better to prevent disability in the first place. For example, demining operations in post-conflict areas will reduce the number of limbs lost. Better vehicle design and encouragement of seatbelt wearing will, as well as cutting the number of deaths from vehicle accidents, also reduce the severity of injury and subsequent disability due, for example, to head and spinal injuries. The promotion of safe working practices will similarly bring down accident rates and thus disability. Efforts to address NCDs will, if successful, reduce the future burden of disability arising from damage caused to blood vessels in the heart and brain and accelerated wearing away of joints leading to osteoarthritis.

Providing access to rehabilitation

However, prevention will only be partially successful, will do nothing for the current one billion disabled, and is unlikely to have an immediate impact on those at high risk of disability. Thus, notwithstanding the potential for prevention and a sub-element who will never improve regardless of access to rehabilitation services (for example, those with advanced dementia), much needs to be done to reduce or eliminate the degree of disability of those who are currently, or inevitably will become, disabled in the future. A major aspect of this is rehabilitation.

The World Bank/WHO 2011 report on disability defines rehabilitation as 'a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments'. In simpler terms, it is a process that maximises a disabled person's functioning with the intent to make him or her more mobile, more independent and better able to participate fully in society.

The predicted impact of rehabilitation in the work environment in the UK has already been referred to above. The need for rehabilitation is an essential element in 'early childhood interventions' (WHO and UNICEF, 2012) where it contributes to 'services and supports to ensure and enhance children's personal development and resilience'. The use of rehabilitation is extensively used by the world's armed forces to maximise the function of those in the military who are injured in conflict or in training. Rehabilitation is also an element of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities, which were adopted by the UN General Assembly in 1993, and which also made provision for the appointment of a Special Rapporteur to monitor the implementation of the rules. Disappointingly, in the report to the 51st Session of the UN Commission for Social Development (2013), there is no assessment on the extent to which these rules have been

adopted. Rule 3 addresses rehabilitation, stating that it 'is a fundamental concept in disability policy' and that:

- States should develop national rehabilitation programmes for all groups of persons with disabilities. Such programmes should be based on the actual individual needs of persons with disabilities and on the principles of full participation and equality. Such programmes should include a wide range of activities, such as basic skills training to improve or compensate for an affected function, counselling of persons with disabilities and their families, developing self-reliance, and occasional services such as assessment and guidance.
- All persons with disabilities, including those with severe and/or multiple disabilities, who require rehabilitation should have access to it.
- Persons with disabilities and their families should be able to participate in the design and organisation of rehabilitation services concerning themselves.
- All rehabilitation services should be available in the local community where the person with disabilities lives. However, in some instances, in order to attain a certain training objective, special time-limited rehabilitation courses may be organised, where appropriate, in residential form.
- Persons with disabilities and their families should be encouraged to involve themselves in rehabilitation – for instance, as trained teachers, instructors or counsellors.
- States should draw upon the expertise of organisations of persons with disabilities when formulating or evaluating rehabilitation programmes.

High-income countries (HICs) largely have such services, and for them the WHO/World Bank report recommends that the focus should be on efficiency and effectiveness, including expanding coverage and improving relevance, quality and affordability.

However, some 62 countries, mainly LMICs, provide no access to rehabilitation services for the disabled. Conventional rehabilitation delivered by healthcare professionals is likely to be unachievable owing to the shortage of physiotherapists, occupational therapists and other specialised professionals. For these countries, community-based rehabilitation (CBR) is advocated.

Dating from the mid-1980s, CBR is implemented through the combined efforts of people with disabilities, their families, organisations and communities, and relevant government and non-government health, education, vocational and social services. CBR guidelines have been developed by a collaboration that includes WHO, the International Labour Organization (ILO) and the United Nations Children's Fund (UNICEF), and which were launched in Abuja, Nigeria, in October 2010. The guidelines address more than just rehabilitation, with separate components for health, education, livelihood, social and empowerment dimensions, and are seen as potentially the main tool for the implementation of the UN Convention on the Rights of Persons with Disabilities. However, for them to effectively do so requires research into the validity of various approaches to CBR, as well as investment in such services. Unfortunately, there is inadequate evidence of the best approach: a recent review of some 235 articles on CBR found only six included an evaluative component.

Finding the right solution

So what is required going forward? First there needs to be the recognition of the role that rehabilitation will play in addressing the adverse consequences of being disabled, for the individual, the wider society and the state. This requires adoption of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities, which includes rehabilitation. It also requires that HICs review the balance of resources devoted to rehabilitation, and to reverse the rising trend of disability arising from NCDs and ageing that is placing an increasing burden on social welfare systems. For LMICs, the adoption of CBR is probably the only realistic way forward, but there needs to be more research into the various approaches and their effectiveness. Furthermore, these approaches need to be implemented concurrently with other initiatives, to prevent disability and to promote equality for the disabled.

References

- Black, C. and Frost, D. (2011). *Health at Work – an independent review of sickness absence*. London: UK Department for Work and Pensions.
- Mannan, H. et al. (2012). 'A Systematic Review of the Effectiveness of Alternative Cadres in Community Based Rehabilitation'. *Human Resources for Health* 2012, 10:20 doi:10.1186/1478-4491-10-20.
- Report of the Special Rapporteur to the 51st Session of the Commission for Social Development: Note by the Secretary-General on monitoring of the implementation of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities (E/CN.5/2013/10).
- Round Table discussion, 'Making International Development Inclusive for Disabled People'. Launching the WHO guidelines on community-based rehabilitation at the Royal Commonwealth Society, UNA-UK, 16th May 2011 (http://www.iddcconsortium.net/joomla/images/IDDCdocuments/may2011_lcd_national_event_roundtable_summary_report.pdf)
- United Nations (1993). The Standard Rules on the Equalization of Opportunities for Persons with Disabilities, adopted by the United Nations General Assembly, forty-eighth session, Resolution 48/96, annex, of 20 December 1993.
- UN Commission for Social Development (2013). *Special Rapporteur on Disability of the Commission for Social Development*. Accessed from: <http://www.un.org/disabilities/default.asp?id=183>
- UN Enable, quoted in *Guide to the UN Convention on the Rights of Persons with Disabilities*, London: Commonwealth Secretariat, 2010.
- World Health Organization (WHO) and United Nations Children's Fund (UNICEF) (2012). *Early Childhood Development and Disability: A discussion paper*.
- World Health Organization and World Bank (2011). *World Report on Disability*, 2011.

Louis Lillywhite is a Senior Research Consultant at the Chatham House Centre for Global Health Security, London, UK. He is an occupational physician and a former Surgeon General of the UK Armed Forces.