

DISABILITY AND NON COMMUNICABLE DISEASES

Context

An estimated 1 billion people, or 15% of the world's population, have a disability¹, and the increase in diabetes, cardiovascular diseases (heart disease and stroke), mental disorders, cancer, and chronic respiratory illnesses, will have a profound affect on this population. According to the [World Report on Disability](#), these diseases are estimated to account for 66.5% of all years lived with a disability in low and medium resource countries².

A large number of people living with NCDs are likely to develop impairments as the disease progresses. According to studies, 13% to 65% of the persons living with diabetes will develop neuropathy, leading to chronic ulcerations and amputations in 1% to 17% of them; 10 to 47% of persons living with diabetes will develop a retinopathy leading to visual impairment³. In 2004, there were 30.7 millions of people in the world, living with impairments due to stroke, one of the conditions caused by cardiovascular risk factors⁴. They may be considered to have a disability when social, economic, political or other barriers hinder their full and effective participation in society on an equal basis with others. Furthermore, many individuals with pre-existing impairments are at higher risk of developing NCDs.

This brief discusses the actions urgently needed to ensure that people with impairments due to NCDs have access to treatment and appropriate, timely, affordable, and high-quality rehabilitation interventions for all those who need them. These actions are in line with the Proposed Outcomes Document for the Prevention and Control of NCDs⁵, recommendations of the World Report on Disability and the principles and standards of international human rights law, in particular the *Convention on the Rights of Persons with Disabilities*.⁶

NCDs and Definitions of Disability under international and national laws

The [Convention on the Rights of Persons with Disabilities](#) states that:

“Persons with disabilities include those who have long term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others” (Article 1)

The Convention does not explicitly refer to NCD in the definition of disability. However, States are required to recognise that where persons with NCDs (asymptomatic or symptomatic) have impairments which, in interaction with the environment, limit their participation, they can fall under the protection of the Convention. Environment can limit participation of people living with NCDs in case of physical barriers to access services, information barriers to communicate, economic barriers and/or discrimination among others.

States parties to the Convention are required to ensure that national legislation complies with this understanding of disability. Ideally, such laws should offer a means of redress against NCD-related environmental barriers in a number of areas, such as accessibility to services, employment and education.

Rehabilitation for people with impairments and disability due to NCDs

The NCD Alliance Proposed Outcomes Document gives important emphasis to prevention and treatment, targeting access to medications as a priority action. In spite of rallied political will and resources to prevent NCD deaths, a large number of these people experience activity limitations or participation restriction as a result of the progress of the disease or the side effects of treatment.

“The [World Report on Disability](#)¹ examines a number of topics, including Rehabilitation and Disability, which is addressed in Chapter 4. For many individuals with disabilities, rehabilitation is central to ensuring active participation in their community. [Article 26](#)⁷ of the [Convention on the Rights of Persons with Disabilities](#)⁸ on Habilitation and Rehabilitation calls for “*appropriate measures, including through peer support, to enable persons with disabilities to attain and maintain their maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life.*”⁹

Functional rehabilitation is increasingly important in the continuum of NCD care and can slow deterioration of the individual’s functioning and enable the person to achieve and maintain independence. Rehabilitation services, whether targeting physical, sensorial or mental impairments, can have a huge impact in the quality of life and functioning of a person living with an NCD.

- It is estimated that people with diabetes are 40 times more likely to have a lower limb amputation as those without the condition¹⁰. Without the skills of podiatrists, orthotists and prosthetists, functional recovery is likely to be extremely limited, though indeed many diabetic foot problems can be avoided with specialist care such as podiatry and orthotics.
- A number of Cochrane reviews have also shown the importance of rehabilitation therapy input in regaining function following stroke^{11 12 13}. For example, physiotherapy, occupational therapy, speech therapy and assistive technology may be very useful to help the participation of the people living with impairments due to stroke.
- In cancer care, rehabilitation has been demonstrated to have a significant role from preventative and restorative to supportive and palliative management^{14, 15}.
- In the health systems of many high income countries, chronic obstructive respiratory diseases are regularly supported by allied rehabilitation health services¹⁶.
- Finally, Mental Health, though not one of the four diseases classified as NCDs also has major implications for disability prevalence and can be well supported by rehabilitation professionals such as psychologists and occupational therapists.

“The report acknowledges that rehabilitation services are provided in most regions in the world, but their availability varies. The planning of appropriate rehabilitation services for individuals with disabilities is complicated by the lack of data regarding the unmet need for care. Estimates from the International Society for Prosthetics and Orthotics and the World Health Organization indicate that individuals in need of a prosthetic or orthotic device or related services comprise 0.5 percent of the population in developing nations; and 30 million people in Africa, Asia, and Latin America require an estimated 180,000 rehabilitation service professionals. This overwhelming need for services is compounded

by the shortage of personnel available in these fields as well as a dire shortage of trained personnel, and lack of affordable assistive technology.”⁹

“The World Report on Disability provides a number of recommendations for ways to develop and deliver rehabilitation services effectively to individuals with disabilities due to NCDs. The overarching theme of these recommendations is that when considering rehabilitation services and their future development “the priority is to ensure access to appropriate, timely, affordable, and high-quality rehabilitation interventions, consistent with the *Convention on the Rights of Persons with Disabilities*, for all those who need them.” This may vary though from country to country depending on the availability of resources. For low-income countries, a focus on the introduction and gradual expansion of rehabilitation services is suggested, prioritizing cost-effective approaches.”⁹

Finally, vocational rehabilitation, income support and other benefits also help a person with an NCD related disability to maintain a healthy and productive lifestyle. Service models for people with disabilities such as community-based rehabilitation, personal assistance schemes and other independent living services are often appropriate or can be adapted for people living with NCD.

People with Disabilities and Risk of developing NCDs

According to the World Report on Disability, some peoples with disabilities may be more susceptible to developing chronic conditions because of the influence of behavioural risk factors such as lack of exercise and smoking, as well as higher rates of overweight, obesity and premature ageing. For example, some publications have already suggested that psychiatric disorders may be a risk factor of developing diabetes, through the disorder itself or through the intake of specific medicines necessary to control the condition (anti-psychotic for example).¹⁷ More research is needed to support these assumptions.

Lack of access to health promotion and prevention, including screening for breast and cervical cancer, cholesterol, high blood pressure and diabetes screening, is widespread and documented elsewhere¹. Finally even where knowledge of NCD *may be* high among persons with disabilities, this does not always translate into use of NCD testing and counselling services.

The 2006 *Convention on the Rights of Persons with Disabilities* commits State Parties to:

“provide persons with disabilities with the same range, quality and standard of free or affordable health care and programmes as provided to other people, including in the area of sexual and reproductive health and population based programmes”.(Article 25)

NCD policies and services themselves must therefore be inclusive of people with disabilities. Eliminating physical, information and communication, economic and attitudinal barriers not only increases access to NCD prevention, treatment and rehabilitation, but may assist in accessing broader health and social services and are essential to fulfilling the right of persons with disabilities to the highest attainable standard of physical and mental health.

Endorsement:

This policy brief has been endorsed by the following International Non Governmental Organisations:

- Handicap International.
- CBM international
- Motivation
- Rehabilitation International
- The speech therapist international society

References:

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- ⁴ WHO. Global Burden of Disease, 2004 update. WHO, Geneva; 160p.
- ⁵ <http://www.ncdalliance.org/zerodraft>
- ⁶ The Convention on the Rights of Persons with Disabilities entered into force on 3 May 2008
- ⁷ <http://www2.ohchr.org/english/law/disabilities-convention.htm#26>
- ⁸ <http://theidrm.wordpress.com/2011/05/10/convention-on-the-rights-of-persons-with-disabilities-articles-22-28/>
- ⁹ Keogh Mary, Jackson K, International Disability Rights Monitor (IDRM) blog. June 2011. Last consultation 12/07/2011 [<http://theidrm.wordpress.com/2011/06/28/world-report-on-disability-rehabilitation-and-disability/>]
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¹⁵ [Franklin D](#), [Delengowski AM](#), [Yeo TP](#). Facing forward: meeting the rehabilitation needs of cancer survivors. [Oncology \(Williston Park\)](#). 2010 Oct;24(10 Suppl):21-3, 29-32.

¹⁶ [Thomas MJ](#), [Simpson J](#), [Riley R](#), [Grant E](#). The impact of home-based physiotherapy interventions on breathlessness during activities of daily living in severe COPD: a systematic review. [Physiotherapy](#). 2010 Jun;96(2):108-19. Epub 2010 Jan 18.

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