



RESPONDING TO THE WORLD HEALTH ORGANIZATION GLOBAL DISABILITY ACTION PLAN IN EGYPT: A TECHNICAL CONSULTATION TO DEVELOP A NATIONAL DISABILITY, HEALTH AND REHABILITATION PLAN

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Objective: A technical consultation to develop a National Disability, Health and Rehabilitation Plan (NDHRP) for Egypt was carried out in 2015. Its overall goal was to improve health, functioning, well-being, quality of life, and participation of persons with disability in Egypt by supporting the Ministry of Health and Population and other stakeholders to improve access to health services and strengthen health-related rehabilitation services for all persons in need.

Methods: The methodological steps of the technical consultation were as follows: collecting and reviewing accessible documents and data; site visits to state institutions, health and rehabilitation services; discussions with relevant stakeholders in rehabilitation, including persons with disability; drafting recommendations based on the principles of the World Report on Disability and the World Health Organization Global Disability Action Plan and the information collected; discussion with stakeholders in a workshop; and preparation of a final report.

Results and discussion: The development of a NDHRP was successful and led to recommendations with a good level of consensus among stakeholders in Egypt. The authors hope that the NDHRP will lead to improved rehabilitation service provision, and health and quality of life of persons with disability and chronic health conditions living in Egypt.

Key words: rehabilitation service situation analysis; rehabilitation advisory teams; National Disability, Health and Rehabilitation Plan; rehabilitation services; rehabilitation professions; Egypt.

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Egypt has a rapidly growing population. The estimated population in 2009 was 84 million, and in 2013 it exceeded 90 million. Approximately 31% of the population is under 15 years old and only 9% is over 60 years old (1). Life expectancy at birth is 70 years for males and 74 years for females. Healthy life expectancy is 59 and 74 years in males and in females, respectively. Egypt is classified by World Bank as a lower-middle income country. Health expenditure is 5.6% of gross domestic product (GDP) (2).

In 2015, a technical consultation was carried out to develop a National Disability, Health and Rehabilitation Plan (NDHRP) for Egypt. The overall goal of the technical consultation was to improve health, functioning, well-being, quality of life, and participation of persons with disability in Egypt by supporting the Ministry of Health and Population (MOHP) and other stakeholders to improve access to health services and to strengthen health-related rehabilitation services for all persons in need.

The NDHRP should be based on an analysis of the present life situation of persons with disability, existing services, and international standards. It should help the government of Egypt to respond to proposed action for World Health Organization (WHO) member states set out in the Global Disability Action Plan 2014–2021: Better Health for all People with Disability (GDAP; 3). The plan should analyse the existing situation, including epidemiological data, policies, health services, challenges, opportunities, gaps and other factors.

METHODS

The technical consultation was performed as described by Gutenbrunner et al. (4). The stages of the consultation (5) were:

- Review accessible documents and data about population, health and disability, health systems, policies and services in Egypt.
- Make site visits to state institutions, health and rehabilitation services, and hold discussions with relevant stakeholders in rehabilitation, including persons with disability.
- Develop draft recommendation on the basis of the principles of the World Report on Disability (WRD) and the GDAP and the information collected.
- Summarize the discussion of the draft recommendations in a workshop with stakeholders, including voting on priority level for each recommendation.
- Prepare the final report, with a long- and short-list of recommendations and an executive summary.

RESULTS

Health system information

The highest cause of mortality in Egypt is cardiovascular diseases (46%), followed by non-communicable diseases (NCDs) (11% communicable maternal, perinatal, and nutritional conditions and 19% other communicable diseases), cancer (14%) and injuries (5%) (6). The burden of disease in terms of disability-adjusted life

years (DALYs) is highest in cardiovascular diseases and diabetes, followed by other NCDs, neuro-psychiatric conditions, cancer and unintended injuries (1).

Disability rates in Egypt are reported to be very low (0.7% of the total population). This is the second lowest value reported in the Arab region (range 0.6–4.9%) (7), are much lower than the average from international comparative data (8). Thus, the figures seem unrealistic and the method of data collection should be further elucidated. The employment rate of persons with disabilities is half that of the healthy population (21% vs. 40%) (7). According to these statistics, the major causes of disability are congenital abnormalities (51.9%), followed by injuries/accidents (13.9%), old age (9.4%), epidemic and other diseases (6.9% and 6.8%), and birth-related conditions (5.4%). The disabilities related to neurological and mental health conditions are not mentioned in this survey.

The healthcare system in Egypt has been called “pluralistic”, as it includes many different public and private providers (9). The main service provider is the MOHP; however, some public health services are provided by private institutions, the armed forces and n-governmental organizations (NGOs).

The health insurance system in Egypt is also highly segmented. As determined through site visits, health insurance in Egypt is based on 7 different laws, and covers women with responsibility for their family, farmers, pre-school children, school children (approximately 60% of all children), governmental workers (some non-governmental workers are insured by their companies), pensioners and widows. The overall coverage of public health insurance in 2015 amounts to 58% of the total population. However, 72% of total health spending is still paid by individuals (10). New law on health insurance drafted by MOHP states that coverage should reach 100%; however, due to the political situation, this law has not yet been adopted by the national parliament.

The workforce of rehabilitation professionals consists mainly of physical medicine, rheumatology and rehabilitation doctors, and physiotherapists. In addition, some speech and language therapists are available. Other rehabilitation professionals, such as occupational therapists, prosthetists and orthotists, are not regularly trained in Egypt.

There is scarce information about existing rehabilitation services. There are 2 main reasons for this: first, there is no clear definition of a rehabilitation service; and, secondly, there is no systematic statistical approach. Shafshak (11) reports that 195 MOHP hospitals and 18 university hospitals have special departments for Physical and Rehabilitation Medicine (PRM). In addition, it is mentioned that PRM departments exist

in internal security and armed forces hospitals. However, their role in healthcare and its structure are not described in detail. Furthermore, the paper mentioned 60 physiotherapy and rehabilitation centres run by the Ministry of Social Affairs. These centres have at least one MD and a physiotherapist. Overall, these data are not sufficient to estimate whether the needs of persons with chronic health conditions experiencing disability are sufficiently covered.

Recently, a Health Sector Reform Program has been started by Egyptian government, with the aims of expanding the social insurance coverage from 47% in 2003 up to universal coverage, reorganizing services aiming at service provision through a holistic family health approach to strengthen management systems, and developing a domestic pharmaceutical industry (10).

The new constitution of the Arab Republic of Egypt places health at a high level of priority on the national agenda (10). In Article 18 of the constitution the right to health, among others, is guaranteed as follows:

- “Every citizen has the right to health and integrated healthcare according to good quality standards, and the state guarantees the preservation of public health services, and works to raise efficiency and geographical spread of fair facilities.
- The state is committed to the establishment of comprehensive health insurance for all Egyptians. The system covers all diseases, and the contribution, or exemption from contribution, of citizens is regulated by law according to their income levels (...)
- The state is committed to improving the doctors, nursing staff and workers in the health sector.”

In order to achieve these goals, health expenditure should be doubled and increase to 3% of GDP.

The rights of persons with disability are guaranteed in Article 81 of the constitution: “The state is committed to ensuring the rights of persons with disabilities and dwarves [sic], in all aspects; health, economic, social, cultural, entertainment, sports and education, and provide job opportunities for them, with the allocation of a percentage of jobs to persons with disability, and also is committed to the creation of enabling public facilities and environment surrounding them (...).”

Main findings from site visits

In summary, the main findings from site visits were:

- Data on the prevalence of disability are inconclusive. Such data do not agree with international data-sets (8). This may be due to the method of data collection, starting with the understanding or definition of disability (the survey appears to concentrate on congenital disability and neglect acquired disabili-

lity), the method of data collection (interviews in family homes) and/or cultural or societal attitudes (e.g. the trend to hide disability in public). Data on the prevalence and incidence of diseases frequently causing disabilities is very scarce; however, the few available data suggest a high and unmet need for health-related rehabilitation.

- In the MOHP, a single person is responsible for disability issues. She works in the integrated care and nursing sector and is responsible only for children with special needs. No cross-sectional strategy to deal with disability issues and promote rehabilitation was seen. A strong sector with the power to make decisions appears to be lacking.
- Some rehabilitation services (e.g. assistive devices) are delivered under the responsibility of the Ministry of Social Solidarity. Coordination with rehabilitation professionals is weak and technical standards are lacking. This leads to insufficient use of such devices, which may impact on the activities and participation of persons with disability.
- Health-related rehabilitation services under the direction of the MOHP exist in hospitals and primary healthcare centres. In addition, there are some health-related rehabilitation services outside MOHP responsibility. Many of these services do not reach international standards in terms of human resources and technical equipment. Also, there appears to be no comprehensive plan on the need for rehabilitation services along the continuum of care and across levels of healthcare and for all ages (e.g. no post-acute rehabilitation services exist and highly specialized rehabilitation services do not belong to the MOHP).
- Strong fragmentation of the health system is also very obvious in health-related rehabilitation services. This is an important factor causing inequities and gaps in health-related rehabilitation services.
- In Egypt, there is an existing workforce of rehabilitation professionals (MDs with specialization in physical medicine, rheumatology, and rehabilitation, physiotherapists, and speech and language therapists). However, other professions either do not exist (e.g. occupational therapists, prosthetist and orthotists), or do not have accreditation according to international standards. Some community workers have been trained by NGOs; however, there is no systematic nationwide training programme. Another important issue is the lack of collaboration between existing rehabilitation professions. A synergistic team-oriented philosophy of collaboration of rehabilitation professionals at international standard is lacking in Egypt.
- Egypt has a health insurance system; however, it is highly segmented and does not cover all popula-

tion groups. Gaps in health insurance, in particular, concern children who are not going to school and other vulnerable groups. It can be assumed that large groups of persons with disability are not included in the health insurance system.

Recommendations

Preliminary recommendations were developed following evaluation of the information collected. These recommendations were discussed in a stakeholder dialogue (12) with 20 representatives of the following organizations: Hannover Medical School (technical advisor), Ministry of Public Health, Ministry of Social Solidarity, the Health Insurance Head Office, the National Council of Disability Affairs, National Society of Rheumatology and Ain Shams University, Physiotherapy Faculty of Cairo University, Speech Faculty of Medicine of Cairo University, Physiotherapy Department of Cairo Governate, Caritas Egypt, as well as specialists in Neurology and Disability and Physiotherapy, and the mother of an autistic child. After a consensus-oriented discussion of each recommendation the participants could vote on the relevance of each recommendation.

The resulting recommendations are summarized in Box 1.

DISCUSSION

Although this was the first time a technical consultation for the development of a National Disability, Health and Rehabilitation Plan had been carried out, overall the consultation was successful and led to recommendations with a good level of consensus among stakeholders in the country.

Methodologically, the consultant (CG) used open source data on Egypt, its health system, epidemiology, and other factors. During the site visits he held open discussions with stakeholders, including ministries, external experts, service providers, rehabilitation professionals, the National Council of Disability Affairs, and others. As a framework, the consultant used the recommendations of the World Report on Disability, bearing in mind the more extensive list of actions from the GDAP. In parallel, the consultant developed a comprehensive list of relevant information to be assessed beforehand (e.g. by using a Rehabilitation Service Assessment Tool (RSAT)) (5).

An important aspect of the site visits was discussion of the draft recommendations with the most relevant stakeholders. During the single meetings and site visits, some points of controversy among stakeholders

Box 1. Guiding principles and recommendations of the National Disability, Health and Rehabilitation Plan for Egypt**A. Guiding principles to improve health, functioning and quality of life for all persons with disability in Egypt, include:**

1. The Ministry of Health and Population (MOHP) should take a central role in promoting health (*including all areas of health-related rehabilitation*) for persons with disabilities in Egypt.
2. Health-related rehabilitation and health policies and services should be coordinated with other aspects of an inclusive development policy including Ministries of Social Solidarity, Education, Labor, Justice and others.
3. Rehabilitation for persons with congenital and acquired disabling health conditions (*including trauma, chronic non-communicable diseases, musculoskeletal pain, neurological and mental health conditions*) should be given a high priority in healthcare planning and service provision, and must be seen as universal health coverage. This must include early detection at the primary healthcare level.
4. Rehabilitation as a health strategy (*which is equal to prevention, health promotion and curative care*) must be implemented in all phases (*acute, post-acute, long-term care, including community-based rehabilitation*) and levels of medical care (*primary, secondary, and tertiary care*), and should include early detection and intervention.
5. Establish regular consultations among ministries and authorities about disability and rehabilitation topics (*mainly the Ministry of Health and Population, Ministry of Social Solidarity, Ministry of Education Ministry of Justice, and maybe other Ministries that are responsible for related activities, such as labor, community planning, transport, etc.*)

B. Recommended actions and projects that should be taken in order to improve health, functioning and quality of life for all persons with disability in Egypt, include:

1. Define disability as a priority of health policies, and rehabilitation as a major health strategy to be implemented in all sectors of healthcare (rehabilitation as universal health coverage), and establish a sector for disability and rehabilitation (equal to prevention, health promotion and curative care) within the MOHP with competencies to implementation disability and rehabilitation policies and services within the health system and in collaboration with other ministries.
2. Include detection of the prevalence of disability in all health surveys, including the need for rehabilitation, assistance and support, and possible barriers for patients with disabilities to access health services.
3. Ensure that all persons with disability have access to rehabilitation and health services and are included in the health insurance.
4. Implement training programs for missing rehabilitation professions (*occupational therapists, prosthetists and orthotists, speech and language therapists, visual and auditory trainers*) as well as primary healthcare rehabilitation workers, and ensure that every health professional receives basic training on disability and rehabilitation issues.
5. Apply the comprehensive rehabilitation implementation matrix to develop and implement health-related rehabilitation services in acute, post-acute and long-term care, including all primary healthcare centers and including people with all ages and all types of disability.
6. Translate relevant international documents on disability and rehabilitation into Arabic language (*using the most understood Arab dialect*) and make culturally adapted explanations (*of definitions*).
7. Develop feasible and culturally accepted tools to use the ICF in health reporting and clinical assessment of disability and functioning (*including cultural and language adaptation, intuitive descriptions of domains, development of patient questionnaires*) by a team of experts (*eventually including international expertise*).
8. Establish a registry of (*existing and planned*) rehabilitation service implementation projects (*including different stakeholders*), evaluate the projects and ensure that they will be implemented if evaluated successfully.
9. Perform a model survey on functioning and disability in children with cerebral palsy using the ICF Core Set for children and youth with cerebral palsy.
10. Develop a curriculum for Primary Health Care Rehabilitation Workers and start the training as soon as possible.
11. Set up a database of health professionals and services working with/for persons with disability (*in order to identify gaps and to facilitate transfers*).
12. Develop descriptions of roles of all rehabilitation professions (*PMR, PT, OT, SLT, nurses and others*) in rehabilitation teams (*with participation of the syndicates of all professions*) and possibly with an external moderator.

ICF: International Classification of Functioning, Disability and Health; PMR: Physical and Rehabilitation Medicine; PT: physiotherapist; OT: occupational therapist; SLT: speech and language therapist.

became obvious, e.g. the role of health professionals in rehabilitation services. There was a high level of agreement following careful examination of each point of the recommendations and projects list. Critical points were discussed openly and additional proposals were integrated into the final version. Agreement was documented according to each participant's scores. The overall scores were high; however, they were also useful for identifying difficult points, e.g. implementation of the International Classification of Functioning, Disability and Health (ICF) in health reporting and rehabilitation quality management.

The results of this technical consultation show that many factors need to be considered in order to achieve the goal of implementing rehabilitation services for all persons in need. This includes governance and (political) leadership, financing, service delivery, rehabilitation workforce, access to essential services, and health information which is coincidence with health system building blocks (reference: World Health Organization. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010). Ex-

perience of such activity is available from the Ukraine (13). However, a more systematic approach to service implementation strategies is needed (including description of prototype rehabilitation services) (see also (4)).

Although the recommendations and projects reached a high level of agreement among stakeholders, including ministries, persons with disabilities, health professionals and service providers, the success of the mission is difficult to predict. Some barriers may come from the political situation in a country (e.g. changes in ministries, parliamentary elections, etc.) and the huge effort needed towards implementation of rehabilitation as universal health coverage. The authors hope that the NDHRP leads to improvements in rehabilitation service provision and in the health and quality of life of persons with disability and chronic health conditions living in Egypt.

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