

## Monitoring human resources for health-related rehabilitation services

### Overview

With an estimated 650 million people worldwide experiencing some form of disability and in need of health and rehabilitation services, it is clearly important to have an adequate supply of health workers who can provide those services. Nevertheless, many national health sector plans and reviews or human resources for health (HRH) development strategies fail to mention human resources for rehabilitation.

In many countries and at the global level, information and evidence on human resources for rehabilitation is inadequate and fragmented. This is partly related to lack of common definitions and classifications, partly to poor availability and use of standard statistical sources for workforce monitoring, and partly to lack of political will to place monitoring of HRH for rehabilitation high on the health agenda – the latter itself related to the way societies often interpret and react to disability.

### Measuring the rehabilitation health workforce

In any health system, different categories of health workers are required to provide different kinds of rehabilitation services. The specific mix of personnel needed in local contexts will vary depending on the circumstances of the area. For example, a country with large numbers of motor vehicle accidents may need more workers specialized to deal with cognitive and musculoskeletal impairments, whereas another country may need more workers skilled in providing service for disabilities associated with HIV/AIDS and other communicable diseases.

Depending on the organization of national health systems and means of monitoring, different types of data sources may be used to assess the situation of HRH for rehabilitation in a given country. These include standard statistical sources such as health facility staffing records, civil service payroll records, registries of health professional regulatory bodies and other kinds of administrative

data, as well as population-based censuses and surveys with questions on labour force activity and occupation. However, in many contexts these data sources are underused in health systems research, and the availability of rehabilitation personnel is often only an estimate (for example, based on reports from nongovernmental professional associations of their voluntary memberships). Strengthening the global information base on the different health occupations based on timely, comprehensive and reliable data is prerequisite for evidence-informed workforce development strategies in rehabilitation.

### Enhancing comparability of workforce statistics

One challenge in ensuring comparability of information on the rehabilitation workforce within and across countries and over time is the setting of common definitions and classifications of who are rehabilitation health workers. For instance, in the *WHO Global Atlas of the Health Workforce* – the main international source of HRH statistics worldwide for public, research and policy use – a special analysis revealed wide disparities across countries in the numbers of health occupations related to rehabilitation for which data were collected and disseminated. In the case of Australia, three types of allied rehabilitative personnel (occupational therapists, physiotherapists and speech pathologists) could be distinguished according to the national occupational classification applied to the microdata release of the 2001 population census. In another example, in South Africa, data were available and reported by the national health professional regulatory body on 16 different categories of personnel (including audiologists, medical orthotists and prosthetists, occupational therapists, occupational therapy technicians, orthopaedic footwear technicians, physiotherapists and others).

Differences in the nature of national economies, health systems and information systems often make it difficult to obtain comparable data. Other discrepancies may be attributed to whether

the source of data covers health workers in all sectors: public, private for-profit, private not-for-profit, research, training and others. One means of enhancing comparability of statistical information is through the collection, processing and dissemination of data following internationally standardized classifications, notably the International Standard Classification of Occupations (ISCO): a system for classifying and aggregating occupational information according to assumed differences in skill level and skill specialization required to fulfil the tasks and duties of jobs.

The latest revision to ISCO, known as ISCO-08, identifies the following categories of personnel likely to be a vital part of teams working in rehabilitation health services:

- generalist medical practitioners
- specialist medical practitioners (including specialists in physical and rehabilitative medicine)
- physiotherapists
- audiologists and speech therapists

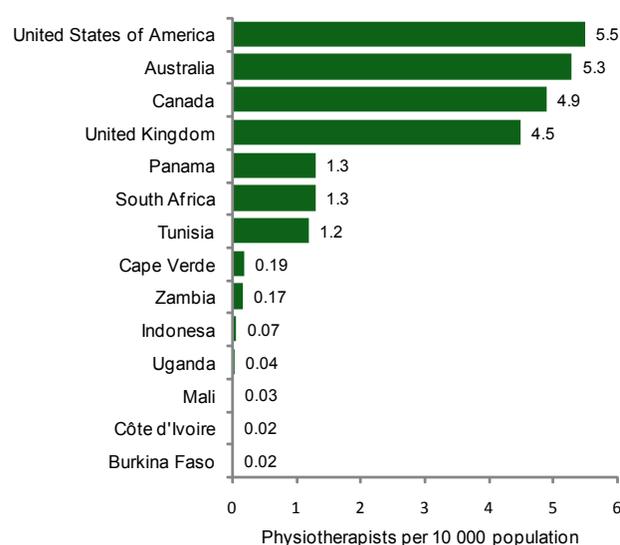
- medical and dental prosthetic and related technicians (including orthotists and prosthetists)
- physiotherapy technicians and assistants
- other health care professionals such as occupational therapists and recreational therapists
- other support personnel such as patient care assistants, orthopaedic appliance makers and wheelchair repairers.

While there is no single operational boundary of what constitutes the rehabilitation health workforce, the mapping of data and information to ISCO (or its national equivalent) provides a coherent framework for workforce categorization. For example, although physicians with post-graduate specialized training in physical and rehabilitative medicine may have a wider repertoire of knowledge and diagnostic and therapeutic skills for persons needing rehabilitation, some physicians in general practice and family medicine have pragmatic knowledge of rehabilitation environments.

## Selected statistics

The World Health Organization does not recommend any "gold standard" or norm for a minimum density of HRH for rehabilitation in any given country or region. Indeed, as illustrated here, wide differences exist across countries and regions in the numbers of physiotherapists across different contexts. However, lower densities tend to be more common in low- and middle-income countries, notably many located in sub-Saharan Africa, home to millions of people with disabilities experiencing great challenges in attaining and maintaining maximum independence and health. The ongoing collection, analysis and dissemination of data and statistics on the range of human resources for rehabilitation at the national and international levels is critical for understanding and strengthening health systems capacity to meet population health-care needs.

**Density of physiotherapists, selected countries (around 2004)**



Source: *Global Atlas of the Health Workforce* (custom extract, June 2009)

## References and related resources

- Gupta N., *Human resources for health-related rehabilitation services*. Presented at the 5th World Congress of the International Society of Physical and Rehabilitation Medicine, Istanbul, Turkey, 13–17 June 2009.
- *Disability and Rehabilitation*. World Health Organization [[www.who.int/disabilities/en/](http://www.who.int/disabilities/en/)].
- *Global Atlas of the Health Workforce*. World Health Organization [[www.who.int/globalatlas/autologin/hrh\\_login.asp](http://www.who.int/globalatlas/autologin/hrh_login.asp)].
- *International Standard Classification of Occupations*. International Labour Organization [[www.ilo.org/public/english/bureau/stat/isco/index.htm](http://www.ilo.org/public/english/bureau/stat/isco/index.htm)].