Evolving Opportunities for People Living with a Disability and the Need to Prepare Physiotherapists for Community-based Rehabilitation

AM HAMZA
Center for Population Health, Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, 50603 Kuala Lumpur, Malaysia

AS NABILLA
Center for Population Health, Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, 50603 Kuala Lumpur, Malaysia.

SY LOH
Department of Rehabilitation Medicine, Faculty of Medicine Building, University of Malaya, 50603 Kuala Lumpur, Malaysia.

YA MISAU
Center for Population Health, Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, 50603 Kuala Lumpur, Malaysia.

Correspondence: Ashiru Hamza Mohammad (PT, MMedPH, MNSP), Centre for Population Health, Department of Social and Preventive Medicine, University of Malaya, 50603 Kuala Lumpur, Malaysia •Email: physioash@yahoo.com

ABSTRACT
This paper discusses the relevant issues regarding the role of physical therapists in a community-based rehabilitation (CBR) model that seeks to improve the quality of life of persons with disabilities and their families by meeting their basic needs. CBR focuses on the needs of the individual and the wider population, and extends beyond purely medical interpretation. The traditional institutional-based medical model approach to rehabilitation—which is frequently driven by health care professionals rather than the needs of people with disabilities, their care givers and communities—is often inappropriate, inefficient. Moreover, recognizing the global significant shortfalls in the number of physiotherapists available to provide services, coupled with the increasing global economic constraints, there is an urgent need to develop innovative ways to utilize physiotherapists in the community. In addition to the need for reorganization and reconceptualization of the philosophies underpinning therapy, preparing physiotherapists to change practice from traditional institutional services to community services requires a major change in attitude to both service delivery models and to their roles as therapists under these different models, especially in developing countries.

Key words: Physiotherapy, disability, people living with disabilities, community-based rehabilitation (CBR)

INTRODUCTION
Public health policy has shifted from institutional to community care as a consequence of the Ottawa Charter in 1986 and the earlier introduction of community-based rehabilitation (CBR) by the World Health Organization (WHO) in the 1980s, as a strategy to accomplish ‘health for all’ by the year 2000¹. The Alma Ata Declaration in 1978 on Primary Health Care (PHC) created a new vision for providing
promotive, preventive, curative and rehabilitative services for the main health problems in the community.\textsuperscript{2} This concept led to the development of the first CBR models.\textsuperscript{3} The traditional institutional-based medical model approach to rehabilitation is expensive, often inappropriate, inefficient and does not meet the needs of most people with disabilities.\textsuperscript{2} Because the care is frequently driven by health care professionals rather than people with disabilities, their care givers and communities, it fails to address the priorities and needs from the patient’s point of view.\textsuperscript{2}

Additionally, the increasing global economic constraints, necessitates a persuasive need to develop innovative ways of utilizing the available scarce physiotherapists and resources in the community and this requires special management. A motion was passed at the 14th General Meeting of the World Confederation for Physical Therapy (WCPT) in May 1999 that WCPT develop a plan to recognize and promote the role of physiotherapists in community-based rehabilitation (CBR). The motion was the result of a workshop, research, and discussion in the African region to develop a regional profile for CBR, and in particular, to document the role, involvement, and opinion of physical therapists in CBR in Africa.\textsuperscript{3} There were many calls to increase the number of health care professionals available to provide services, including physiotherapists recognizing the significant shortfalls worldwide. However, there has been limited progress in maximizing the potential of that which is available for the benefit of the majority of people in need. Preparing physiotherapists to change practice from traditional institutional services to community services is a professional imperative, especially in developing countries. This is necessary because, the most vital factor to consider is that the therapists must adopt a major change in attitude to both service delivery models and to their roles as therapists under these different models.

THE CONCEPT OF IMPAIRMENT, DISABILITY AND HANDICAP (IDH)

The International Classification of Functioning, Disability and Health (ICF) is a WHO\textsuperscript{4} framework for health and disability that provides the conceptual basis for measurement and policy formulations for disability and health.\textsuperscript{5} The ICF is based on a biopsychosocial model and encompasses the whole range of the health status including the personal and societal experiences of vulnerable populations.\textsuperscript{6} It tends to incorporate different perspectives of health into one integrated and consistent view.\textsuperscript{7} Although the ICF presents an essential theoretical framework for the selection and classification of outcome measures, it ignores the broader QoL (quality of life) issues which are believed to lie beyond the disease-handicap continuum. It may be more appropriate to assess QoL issues from the point of view of the patient.\textsuperscript{3,4} It illustrates how disease can engender impairment, disability and handicap.\textsuperscript{8}

The ICF includes an extensive conceptual framework of disability and functioning from different health perspectives: biological, individual and social.\textsuperscript{9} The model compares six components of health: the health condition, body functions and structures, activity, participation, environmental factors, and personal factors. It is divided into two parts namely:\textsuperscript{6} 1) body functions and structures; and 2) activities and participation. Body functions and structures are the physiological functions as well as the anatomical parts of the body, i.e., organs and limbs. Activities on the other hand are the individual’s execution of tasks or actions.\textsuperscript{6} The second part of the ICF includes environmental and personal factors, which influence an individual’s health state and functioning.\textsuperscript{6} Environmental factors are external to the person and make up the physical, social and attitudinal environment in which people live and participate in society.\textsuperscript{9}

Impairment is defined as any loss or abnormality of physiological or anatomical structure. Disability on the other hand is any restriction or lack of ability (due to impairment) in performing an activity in a manner or range considered normal for a human being. A handicap is a disadvantage for a given individual, resulting from a disability or impairment that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.\textsuperscript{10} A given disability may be the result of a variety of impairments, for example, the disability of blindness may be due to corneal
opacity, cataract, retinal abnormality, optic nerve lesion, or cortical damage. These structural abnormalities are the impairments. A handicap may arise either directly owing to an impairment or from an interaction with the physical or social environment. Recently, WHO redefined these concepts. The modern terminology introduced still encompasses the term impairment but now replaces ‘disability’ with ‘activity’ and ‘handicap’ with ‘participation’. This is not simply a sign of political correctness but serves to emphasize the positive aspects of a disability rather than the negative connotations. According to the ICF model, activities and participation are affected by environmental and personal factors (referred to as contextual factors within the ICF).

Disability/People Living with Disabilities

The World Health Organization estimates that about 500 million people live with some form of disability worldwide; about 75 per cent of these are in developing countries. Disabilities occur as a result of physical, mental and sensory impairments. The severity of the disability associated with any given impairment for any given person is a complex function of the impact of the impairment on the person’s functional capabilities, and the combined impact of many other social and environmental factors on the person’s ability to gain access to his or her family, community and society. Disability does not define people, society does. How disability is viewed, often reflects the extent to which society embraces disability and diversity, rather than how an individual’s ability to participate to socially accepted norms might be limited. Therefore what is perceived as a disability in one society or culture may not be viewed as such in another. Findings reveal that the problems of persons with disabilities are quite similar, with poverty, unemployment and lack of social acceptance, being the most common.

The number of disabled people is increasing steadily with only a minority receiving accessible and appropriate rehabilitation services. There is a strong relationship between disability and poverty with a cyclical tendency—poverty makes people more vulnerable to disability and disability reinforces and deepens poverty. In addition, disability incurs both economic and social costs for society which can be reduced by effective rehabilitation and support programmes. It is increasingly being recognized that bringing people with disabilities into the mainstream of development will have a significant effect in any plan to cut down poverty in the developing world. Disability is no longer viewed as merely the result of impairment. The social model of disability has increased awareness that environmental barriers to participation are major causes of disability. People with disability are often excluded from the mainstream of society, and hence, may not contribute to the development of the society at all. How disability and disabled people are viewed affects the extent to which they are integrated into society. In many poor communities, disabled people are not seen as a priority for development and investment, an awareness of this and other cultural issues is paramount to any process designed to integrate disabled people more fully in society.

Having access to health and rehabilitation services is a precondition to equal opportunities. The United Nations (UN) standard rules on the equalization of opportunities for people with disability encourages countries to develop strategies to address disability in the process of overall development strategies. Notable areas include prevention, health care, rehabilitation and research. Among some people with disabilities, there is a belief that the emphasis in health care has been directed at the primary prevention of disability rather than at prevention or reduction of secondary health conditions in people who have a disability. Recent developments, including the International Classification of Functioning, Disability and Health (ICF), are attempting to redress the negative way in which disability has been perceived. Rather than focus on the disability, the shift is to focus on the abilities of disabled people. The Millennium Development Goals cannot be reached unless all poor people are included. Since the majority of disabled people live in poverty, strategies must be clearly mapped out to enable them not just to survive but to develop. Changing perceptions about disability should be done without undermining the person’s sense of identity.
Conceptualization of Community-Based Rehabilitation

Community-based rehabilitation (CBR) has been defined as a strategy within general community development for rehabilitation, equalization of opportunities and the social inclusion of all people with disabilities, and is implemented through the combined efforts of the people with disabilities themselves, their families and communities, and the appropriate health, education, vocational, and social services. Community-based rehabilitation was designed as a cost-effective community/home-based rehabilitation model for developing countries. The impact of CBR on the quality of life of persons with disabilities could promote positive attitudes in the society towards persons with disabilities by establishing a rehabilitation network in the community which could provide emotional support for persons with disabilities and their families.

The CBR model comprises 5 key components for community development. They are health, education, livelihood, social, and empowerment. The CBR model presents guidelines, rather than a prescriptive programme. In its purest sense it implies a well-structured, smoothly functioning, coherent community that is capable of assessing its own needs, deciding its own priorities, identifying its own resources, and achieving its own goals by community management. It involves:

1. Partnerships with disabled people, adults and children, their families and care givers
2. Capacity building of disabled people and their families, in the context of their community and culture
3. A holistic approach encompassing physical, social, employment, educational, economic and other needs
4. Promoting the social inclusion of disabled people in existing mainstream services
5. A system based in the community, using district and national level services for referral.

Researchers have identified that CBR is multidimensional and involves different social domains, not just health. And, having interviewed disabled people/parents, the researchers found that there were a number of initiatives that were perceived to be most useful. These included:

1. Social counselling
2. Training in mobility and daily living skills
3. Providing or facilitating access to loans
4. Community-awareness raising
5. Providing or facilitating vocational training/apprenticeships
6. Facilitating information for local self-help groups, parents' groups and DPOs
7. Facilitating contacts with different authorities
8. Facilitating school enrolment (school fees and contact with teachers)

The Need/Framework for Preparing Physiotherapists for Community-based Rehabilitation as a Model

The World Confederation of Physical Therapy (WCPT) in 1999 stated that physiotherapy as a profession is concerned with identifying and maximizing the quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation. Recognizing the need to support CBR within the profession, WCPT also supports the development of CBR as a means of empowering people with disabilities to maximize their physical, mental and social abilities. It recognizes that community change is often necessary to promote and fulfil the human rights of people with disabilities to become active participating members of their communities. To date, physiotherapy education has tended to focus on institution-based learning environments, which may not necessarily identify students with the potential for working in rural and community settings once qualified. Therefore, preparing physiotherapists for community-orientated services requires philosophical, organizational, conceptual and structural changes in education provision. Through empowering persons with disabilities to be active participants and decision-
makers in CBR, physiotherapists have acknowledged that persons with disabilities are not passive recipients of perceived professional wisdom, knowledge and skills. The contributions of physiotherapists in CBR may include:

1. Provision of interventions aimed at health promotion, disease prevention, treatment and rehabilitation
2. Educating and transferring skills to other staff, care givers and the community to achieve the fulfilment of physical therapy and patient/client goals
3. Preventing disability and deformity
4. Through consultancy, advice, support and supervision to other health, education and social care/service personnel
5. As initiators and managers of programmes
6. Promoting self-care
8. Advocates for disabled people, local communities as well as the profession.
9. Advisers to governments, NGOs and local communities on establishing CBR programmes in other places of need

Entry levels in physiotherapy education and continuing professional development opportunities need to adequately prepare and equip physiotherapists to work in a variety of settings, both urban and rural. Physiotherapists should be recognized as facilitators and educators of other health personnel, necessary for the attainment of physiotherapy and patient/client goals. It is important for physiotherapists to understand that rehabilitation in the context of CBR focuses on the needs of individuals and the wider population and extends beyond a purely medical interpretation. Traditionally, the major sources of employment and opportunity for physiotherapists have been medical institutions such as hospitals and rehabilitation centres and these institutions provide specialized services for the few disabled people who have access to the institution, while those in rural communities are often denied access to any rehabilitation service. According to the CBR concept, it seems that the community participation is an important driving force to ensure the success of a CBR programme. Researchers have identified considerations such as competencies necessary for both the education providers of CBR approaches in their teaching activities and the learning physiotherapists.

GENERAL CONSIDERATIONS TOWARDS DEVELOPING CONCEPTUAL REASONING AND ATTITUDINAL CHANGE

Physiotherapy provision is insufficient for the needs of most countries, therefore service delivery models need to be developed that will result in the skills and knowledge of physiotherapists meeting the needs of a higher proportion of those in need. To improve the quality of life of persons with disabilities through the CBR strategy, researchers suggest that physiotherapists should play a role as programme facilitators rather than programme leaders. WCPT’s new Declaration of Principle on primary health care and Position Statement on CBR, as well as the revised Declaration of Principle on education should assist the profession, and therefore client care, in developing these areas of practice. There is a need for physiotherapists and their educators to understand the stronger orientation towards rehabilitation in primary health care services, balanced with the current emphasis on health promotion and disease prevention. As a manager, a physiotherapist desires to have knowledge of protocols, systems and how to procure resources to accomplish care goals. They also had to be problem solvers and overcome hurdles and obstacles coupled with the ability to be creative and innovative. Physiotherapists should be aware of the current international review of CBR and be ready to assess and act on its implications. Other general considerations may include the following.

Educational considerations

Educators must provide learning experiences which establish knowledge-seeking behaviour in physiotherapists who routinely view the client’s and his or her family’s problems. The ‘client’s stories’ cannot simply be incorporated into lectures and tutorials, but a variety of methods should be established across the curricula.
Knowledge Acquisition
Physiotherapists should also prepare to assimilate all available sources of knowledge and validate the information with current accepted practices. This is necessary because in CBR, there are other important sources of information such as local CBR workers, cultural informants or brokers, as well as the clients, family members and other community members.²

Development of Reasoning Skills
Developing reasoning skills here simply requires the consideration of CBR as a vital dimension in effecting a positive outcome in a therapy intervention. Reasoning in a CBR context is no different from clinical reasoning.² Physiotherapy professional education needs to equip physiotherapists with the appropriate knowledge and skills to work in a variety of settings as well as promote the value of working in these settings.³

Development of Reasoning Ability
Physiotherapists should identify major principles when acquiring local knowledge and exploring local issues relevant to individual patients and the community as well as when developing policy for the management of clients from diverse backgrounds. Such guidelines are useful tools with which the physiotherapist should become familiar, to facilitate the transition from one therapy environment to another.²

Effective CBR delivery needs to take account of feasibility, accessibility and acceptability of issues. None of these can be done without consideration of resource constraints, finance, facilities/equipment, education, transport, and manpower, including the level of skills and competency required to deliver what is necessary.³

Problem Sensing
In CBR, the ability to notice and attend to cues appropriately in the therapy situation cannot be overemphasized. In addition, physiotherapists should be sensitive and courteous to new information from the client.³

Cultural Considerations
Health care delivery involves the interaction of the service providers (in this case, physiotherapists) and those in need (patients/clients). This interaction may highlight the differences between what the therapist believes in terms of interpretation, views, perception and needs and the point of view of the client. Moreover, therapy interaction may also be affected by the overlap of knowledge and influence between participants.³ In some cases, the amount of overlap or sharing will be great; in others, especially if one or more of the participants comes from another culture with a very different medical system, the overlap will be much less.²

Using Local Knowledge Appropriately /Problem Validation
Physiotherapists should be prepared to use local knowledge in determining the form of the assessment of the patients/client through observation of their performance of functional activities and the physical examination. A familiarization with local beliefs can allow physiotherapists develop working hypotheses, validate assessment findings, select and implement a management programme, having considered the implications, assessed the risks and determined the expected outcomes.²

MAJOR CONSIDERATIONS AND STRATEGIES FOR ACTION
Physiotherapists are required to understand that the concept of CBR means different things to different people in different parts of the world. They are also required to orient themselves with different models of service delivery and their associated strengths and weaknesses. As reported by Twible and Henley (2000), there are four major areas that need consideration for an effective CBR delivery:²

- CBR, community development and disability
- Therapy, teaching and management skills
- Generic professional principles
- Context specific information and issues
CBR, community development and disability
The concept of CBR requires a thorough understanding of and an affinity for community development philosophies and strategies, where the focus of attention lies with the community and the individual client. Thus, therapy practice will be community-based rather than simply transferring practice from the institution to the community. Physiotherapists should have a thorough understanding of disability, how it is understood and the impact it has in the context of the environment in which they may be working. The influence of disability on the caregivers, families and communities and the associated constraints imposed on them in the context of the environment should be understood. The desired approach should be client/family centred, as this allows all aspects of the therapy to be directed towards meeting the needs of the families, caregivers, and communities.

Therapy (treatment), teaching and management skills
The shift from institution-based to community-based therapy generally demands a major change in reasoning, and should be based on a problem-solving approach that is functional in orientation and is driven by the environment, cultural, social and other contextual factors. Moreover, given the demands that are made on the patients/clients and the caregivers in carrying out their normal daily activities, it is important for the physiotherapists to set goals that are realistic and achievable. Emphasis should be on the management of the disability and building on the client’s abilities in order to maximize their potential in contributing to their community.

Of the needed skills, physiotherapists need to sharpen their observation skills as this will allow them to effectively determine problems and look for necessary solutions. In addition, the physiotherapist should observe the life roles as well as the constraints and benefits of the physical environment in which the patient/client lives.

It is important to keep accurate records with regular baseline measurements so reviews of progress or decline can be assessed by the attending health worker or therapist and the therapy adjusted if necessary. Management plans must be simple, readable and easily accessible by all health workers involved. This requires a careful design of an assessment protocol that is functional, easily recorded, and meaningful to the worker and the patient. Physiotherapists should also seek for the necessary human and material resources that may be needed in future planning of therapy: locally and easily available material resources (e.g., sandbags for strength training or support for positioning), local craftsmen such as carpenters and shoemakers to make and adapt equipment (e.g. walking frames and adapted footwear).

As part of their professional roles, physiotherapists can teach patients/clients and their families how to carry out home programmes, which is one of the primary objectives in community practice.Physiotherapists and their educators must expand their knowledge of educational psychology to include such topic areas as learning theories, learning styles and different models of teaching and facilitating learning. They should adopt experiential teaching modes as an effective means of skill delivery and ‘train the trainer’ approach with health care workers in teaching therapy skills.

Teaching packages should be developed so that they can stand alone and be used by others, and the newly-acquired knowledge and skills in teaching and learning theory can then be applied to developing teaching packages as a basis for conducting formal and informal educational sessions.

A community physiotherapist requires diverse managerial skills to practice in the community as compared to practising institutionally. In CBR practice, knowledge of the available medical and rehabilitation facilities, referral system/pattern, funding access as well as the existing established system in operation is essential. In addition, communication, negotiation and conflict resolution, organization, time management, including teamwork and leadership skills, will prove valuable.

Generic professional principles
Working in the community requires physiotherapists to be creative and innovative in their efforts to get things accomplished, as she/he will be met
continuously with unique challenges. And these will require the physiotherapist to be patient, steadfast and diplomatic. Working in a community also requires psychological preparation, good reasoning skills, ability to easily assess situations, awareness of responsibility as well as recognition of one’s own strengths and weaknesses.

Context specific information and issues
Information regarding the incidence and prevalence of different disabilities in the community and having easy access to such information is paramount to the community physiotherapist. Additional information can be sought from the potential host or employer, government agencies, non-government agencies, and from colleagues who have worked in such environments.

If the physiotherapist is moving from one country to another, familiarity with the background to the new country, understanding the local traditions, customs and culture of the areas to be visited, including its history, politics, geography etc., is important prior to departure. However, detailed information will need to be acquired on arrival, through consultation with the agencies involved in the provision of health and rehabilitation services. As you may be exposed to different cultural, social experiences and possibly medical practices, you also need to respect the views of local health care professionals. At the end of the therapist’s time in the host country it is important for the physiotherapist to actively seek a debriefing session with colleagues and senior management; to evaluate the experience, their contributions to the service and recommendations for change for the future.

CONCLUSION
Community-based rehabilitation is a professional imperative, especially in developing countries. Moreover, to ensure a smooth transition from institutional care to community care, a thorough understanding of and an affinity for community development philosophies and strategies are paramount. Physiotherapists must adopt a major change in attitude to both service delivery models and to their roles under these different models.

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