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SPECIAL ARTICLE

Understanding community-based rehabilitation and the role of physical and rehabilitation medicine

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ABSTRACT

Community-based rehabilitation (CBR) is an accepted model to improve the delivery of rehabilitation in the community. It includes the access to health care, education, labor and accessible environments. The role of Specialists in Physical and Rehabilitation Medicine in this strategy (SPRM) is not very well defined. On the occasion of the international consultation for the WHO Action Plan for persons with disabilities, a discussion about the meaning of CBR and the role of SPRM on CBR has occurred among the International Society of Physical and Rehabilitation Medicine (ISPRM) members. The following major questions were identified; what is CBR? What is the role of Specialists in Physical and Rehabilitation Medicine (SPMR) in CBR? A review of the literature and a discussion among experts was held to answer these questions. It is of major importance to distinguish between the two concepts of CBR: The first one is the policy or management strategy of CBR that was developed by WHO about 30 years ago. The second one is the provision of basic rehabilitation services offered at the community level. CBR strategy must also addresses the need for optimal access to specialized rehabilitation services and will have a key role in the design and building of so-called "Basic Rehabilitation Services." The authors proposed a scheme, which integrates all relevant aspects surrounding the concept of CBR; levels of care rehabilitation services and the roles proposed for SPRM. In addition, the convention for the rights of persons with disabilities and the conceptual framework of the ICF was taken into account.

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Key words: Community medicine - Community health services - Community health centers - Physical and rehabilitation medicine.

Community-based rehabilitation (CBR) seems to be a widely-accepted model to improve the delivery of rehabilitation in the community, especially in countries with low income. It includes among others the access to health care, education, labor and accessible environments. CBR is often seen as an alternative to specialized rehabilitation services and it is seen as a problem that within CBR rehabilitation services will be delivered by professionals not specialized in rehabilitation or even by non-professionals and that these services may replace specialized rehabilitation services. It is stressed that such a strategy might lead to a decrease of quality levels and thus on the long run may harm health and functioning of persons with disabilities.

In order to discuss these issues and to develop solutions and concepts for CBR within the ISPRM-WHO-Liaison committee in early 2013 a subcommittee for CBR has been established. This subcommittee had its first Workshop at the occasion of the 7th World Congress of the ISPRM in June 2013. Luz Helena Lugo (Medellin, Colombia) and Peni Kusumastuti (Jakarta, Indonesia) chair the subcommittee.

In May 2013, on the 66th World Health Assembly (WHA) adopted the resolution WHA 66.9 entitled *Disability*.[1] This resolution recalls the recommendations of the World Report on Disability [2] and among others, requests the Director-General to prepare a WHO action plan for persons with disabilities. As first step towards the development process of this global action plan, WHO wrote a first draft [3] which made available for all people interested in improving health outcomes for people with disabilities. In addition, WHO has conducted an online consultation process.

On the occasion of this international consultation, a discussion about the meaning of CBR and the role of SPRM in CBR has occurred among the ISPRM members. After analyzing and extracting all of the comments that were received, the following major questions were identified:

— What is CBR?
  − Is it a strategy for inclusive development based in the community?
  − Does it mean rehabilitation services delivered in the community?
  − Or does it include both aspects?
— Is CBR a strategy based on the best scientific evidence?
— What is the role of SPRM in CBR?
  − Are PRM providers of treatments?
  − Are they rehabilitation managers?
  − Are they part of the whole strategy?

This discussion paper aims at answering these questions on the basis of the analysis of the history and contents of CBR and to develop a strategy how to contribute to the development of CBR-concept from the point of view of PRM. The authors welcome further comments and discussion and hope to contribute to a conceptualization of service delivery for persons with disabilities worldwide.

In order to find answers to the questions raised, it is important to analyze the concepts of CBR as they have been described and to describe the way the term CBR is used. This analysis will be done along the timeline of the major steps in the development CBR (Table I) sources.[4-7]

The concept of CBR in the CBR Guidelines of WHO, and other world organizations [4] is described as follows: "*In the beginning CBR was primarily a service delivery method making optimum use of primary health care and community resources, and was aimed at bringing primary health care and rehabilitation services closer to people with disabilities, especially in low-income countries. Ministries of Health in many countries started CBR programs using their primary health care personnel. Early programs were mainly focused on physiotherapy, assistive devices, and medical or surgical interventions. Some also introduced education activities and livelihood opportunities through skills-training or income-generating programs*."

In 1989, WHO published a manual entitled Training in the Community for People with Disabilities.[5] Its aim was to "*provide guidance and support for CBR programmers and stakeholders, including people with disabilities, family members, school teachers, local supervisors and community rehabilitation committee members*." It consists of a set of guidelines for local su-

TABLE I.—*History of community-based rehabilitation.*

1978	The Declaration of Alma-Ata in 1978. International Conference on Primary Health Care. The first international declaration advocating primary health care as the main strategy for achieving the WHO goal of "health for all."
1989	WHO published the manual Training in the Community for People With Disabilities to provide guidance and support for CBR programmers and stakeholders.
	The Hesperian Foundation also published Disabled Village Children, a guide for community health workers, rehabilitation workers and families made a significant contribution in developing CBR programs, especially in low-income countries.
1994	During the 1990s, along with the growth in number of CBR programs, there were changes in the way CBR was conceptualized. Then in 1994 ILO, UNESCO and WHO published the first CBR Joint Position Paper.
2003	International consultation to review Community Based Rehabilitation in Helsinki: The report that followed highlighted the need for CBR programs to focus on: reducing poverty, given that poverty, promoting community involvement and ownership, developing and, strengthening of multisectorial collaboration, involving disabled people's organizations in their programs, scaling up their programs, promoting evidenced-based practice.
2004	ILO + UNESCO + WHO: Updated the first CBR Joint Position Paper to accommodate the Helsinki Recommendations.
2005	World Health Assembly adopted a resolution (58.23) on disability prevention and rehabilitation, urging Member States "*to promote and strengthen community-based rehabilitation programs*."
2010	CBR Guidelines: Towards Community Based Inclusive Development.

pervisors, community rehabilitation committee, people with disabilities, school teachers, and training packages for children who have difficulties in seeing, and persons with difficulties in speaking, moving, lack of sensitivity in the hands or feet, behavioral problems, learning difficulties, and others.

CBR as a community development policy

In the 1990s the CBR concept was further developed, and other United Nations (UN) agencies were involved, such as the International Labor Organization (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Development Program (UNDP), and the United Nations Children's Fund (UNICEF), recognizing the need for a multi-sectorial approach. In 1994, the first CBR Joint Position Paper was published by ILO, UNESCO and WHO.[4] In order to accommodate the Helsinki recommendations, the CBR Joint Position Paper was updated in 2004.[8] This paper redefines CBR as "*a strategy within general community development for the rehabilitation, poverty reduction, equalization of opportunities and social inclusion of all people with disabilities and promotes the implementation of CBR programs through combined efforts of people with disabilities themselves, their families, organizations and communities, and the relevant governmental and non-governmental health, education, vocational, social and other services*." The paper also "*recognizes that people with disabilities should have access to all services which are available to people in the community, such as community health services, and child health, social welfare and education programs*." [4] Later in 2004 a matrix was developed to provide a common framework for CBR programs "*in light of the evolution of CBR into a broader multi-sectorial development strategy*" [4] (Figure 1).

The CBR guidelines that have been published by WHO in 2010 [4] were "*a response to the many requests from CBR stakeholders around the world for direction in how CBR programs can move forward in line with the developments outlined above. In addition, the guidelines provide, after 30 years of practice, a common understanding and approach for CBR; they bring together all that is currently known about CBR from around the world and provide a new framework for action as well as practical suggestions for implementation*." Within this context it is important to emphasize that the primary target group of the CBR guidelines are CBR managers.[4] Furthermore, in the guidelines it is stated that the main focus is "*to provide a basic overview of key concepts, identify goals and outcomes that CBR programs should be working towards, and provide suggested activities to achieve these goals*" and that the guidelines "*do not intend to be prescriptive, and are not designed to answer specific questions related to any particular impairment, or to provide recommendations for medical/technical interventions*." [4]

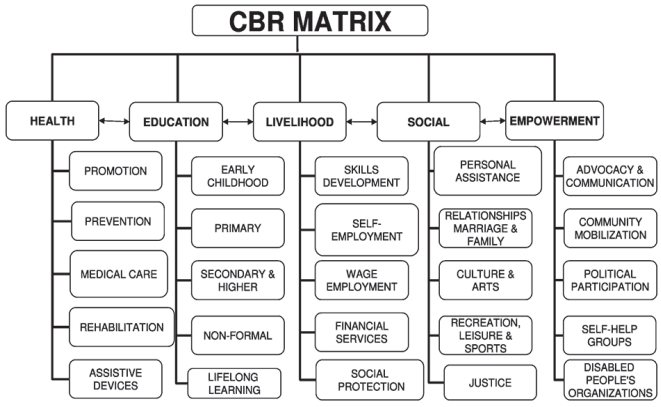

Figure 1.—CBR matrix.

All in all, it shows that the concept of CBR more and more became a strategy or policy for community managers and stakeholders for their activities for persons with disabilities and includes a wide range of areas for activities. This not only includes health care, but also education, livelihood, social systems and the empowerment of persons with disabilities. In the health component, the access to health services seems to play a major role, however, (medical) rehabilitation services and assistive devices are included, too. From the point of view of terminology, it may be a problem that the term "rehabilitation" is used here in two different ways: the first way is the use of rehabilitation as an umbrella term for the whole strategy and concept (rehabilitation as a global strategy to overcome disability). The second way is the use of the term for an intervention or service (*e.g.* medical and/or social rehabilitation). This is why the concept of inclusive development begins to be mentioned linked to CBR strategy.

Definitions and conceptual descriptions are tools in rehabilitation that influence the perception of problems by different stakeholders, they are also instrumental in achieving important health-related policy goals, such

as those outlined in the United Nations Convention on the Rights of Persons with Disabilities [9] and the World Health Assembly resolution on disability and rehabilitation.[1] A proposal for a conceptual description of rehabilitation was made in 2007 based on the International Classification of Functioning, Disability and Health. This conceptual description should foster the development of a common understanding of rehabilitation, the rehabilitation professions and the professional discipline of physical and rehabilitation medicine. In this paper rehabilitation is understood from a public health perspective as one of 4 general health strategies, *i.e.* preventive, curative, rehabilitative and supportive strategies. The primary goal of rehabilitation as a health strategy is the achievement of functioning.[10]

One major change to the conceptual description of rehabilitation is the explicit integration of the perspective of the persons with disability. This is an emerging model of "shared decision-making" that has even been called a model for physician–patient relationship in the 21st century, this relationship between person and provider is characterized as a partnership.[11]

From a health perspective, rehabilitation can be regarded as a general health strategy with the aim of enabling persons with health conditions experiencing or likely to experience disability to achieve and maintain optimal functioning.[12]

The health component of CBR

Regarding the health component of CBR, the rehabilitation guidelines [6] define as main goal that "*CBR programs support people with disabilities in attaining their highest possible level of health, working across five key areas: health promotion, prevention, medical care, rehabilitation and assistive devices*." And thus, "*CBR facilitates inclusive health by working with the health sector to ensure access for all people with disabilities, advocating for health services to accommodate the rights of people with disabilities and be responsive, community-based and participatory*." The role of the health sector therefore is "*to ensure that the needs of people with disabilities and their family members are addressed in the areas of health promotion, prevention, medical care, rehabilitation and assistive devices. CBR also needs to work with individuals and their families to facilitate their access to health services and to work with other sectors to ensure that all aspects of health are addressed*." [6]

Within this context it is important to stress the CBR guidelines clearly state the role of CBR, too. It is "*to promote, support and implement rehabilitation activities at the community level and facilitate referrals to access more specialized rehabilitation services*." [6] This shows that two important aspects of rehabilitation service delivery are covered:

— the delivery of rehabilitation in the community and

— the access to referral to specialized rehabilitation if needed.

This is underlined in the chapter about the "desirable outcomes" of CBR:

— "*People with disabilities receive individual assessments and are involved in the development of rehabilitation plans outlining the services they will receive*";

— "*People with disabilities and their family members understand the role and purpose of rehabilitation and receive accurate information about the services available within the health sector*";

— "*People with disabilities are referred to specialized rehabilitation services and are provided with follow-up to ensure that these services are received and meet their needs*";

— "*Basic rehabilitation services are available at the community level*";

— "*Resource materials to support rehabilitation activities undertaken in the community are available for CBR personnel, people with disabilities and families*";

— "*CBR personnel receive appropriate training, education and support to enable them to undertake rehabilitation activities*." [6]

CBR services

Rehabilitation, as a key health strategy to address disability, is essential to health systems. Lack of available services has been pinpointed as a major barrier to rehabilitation, especially in low-income countries or rural areas. Rehabilitation needs may be present along the continuum of care, from the acute or initial phase immediately following recognition of a health condition, through to post-acute and maintenance phases, and long-term care.[13] Thus, rehabilitation involves hospitals, rehabilitation facilities and community institutions.

It should start as early as possible, be multidisciplinary and based on individual needs and strengths, be voluntary, and access to services should be in close proximity to a person's place of residence in the community. These diverse systems of care and services need to be integrated in order to meet the needs of the person.[12]

Rehabilitation services in the CBR guidelines are described as follows:

— "*Services are provided by a broad range of personnel including medical professionals (*e.g. *nurses, physiatrists), therapy professionals (*e.g. *occupational therapists, physiotherapists, and speech therapists), technology specialists (*e.g. *orthotists, prosthetists) and rehabilitation workers (*e.g. *rehabilitation assistants, community rehabilitation workers)*";[6]

— "*Rehabilitation services can be offered in a wide range of settings, including hospitals, clinics, specialist centers or units, community facilities and homes; the phase during which rehabilitation occurs (*e.g. *the acute phase following an accident/injury) and the type of interventions required usually determine which setting is appropriate*." [6]

This shows that the CBR guidelines include Physical and Rehabilitation Medicine in the service provision and also stress that rehabilitation services must include those that are delivered in specialized settings such as hospitals and rehabilitation centers. It also adopts the concept that rehabilitation must be delivered in all phases of a health condition, disease or after trauma. However, the guidelines also try to set realistic goals and priorities. Such a priority is to implement rehabilitation services at the community level. Such services necessarily are less specialized, in particular if resources are limited: "*While the concept of CBR has evolved into a broader development strategy, involvement in the provision of rehabilitation services at community level remains a realistic and necessary activity for CBR programs. Rehabilitation at specialized centers may not be necessary or practical for many people, particularly those living in rural areas and many rehabilitation activities can be initiated in the community*." [6] And more in detail, the WHO manual on training in the community for people with disabilities focuses "*rehabilitation activities that can be carried out in the community using local resources*." However, it also states that "*community-based services may also be required following rehabilitation at specialized centers*." [6]

Aspects of scientific evidence

With regard to research and scientific evidence, the CBR guidelines state that "*only limited evidence is available about the efficiency and effectiveness of CBR. However, a body of evidence has accumulated over time, from formal research studies, diverse experiences of disability and CBR, evaluations of CBR programs, and the use of best practices drawn from similar approaches in the field of international development*." [4] Regarding this matter, in the document, a number of items are listed in that CBR has been proven to be effective, especially referring to positive social outcomes and cost-effectiveness. A systematic search for evidence is not aim of this discussion paper. However, there is a need for future research about effects and cost-effectiveness of the different parts of CBR and the concept as a whole.[14]

The concept of CBR

CBR was developed after the Alma-Ata Declaration [14] that states that strengthening primary care is the most effective measure to achieve the WHO goal of "Health for All". According to this statement, the WHO created the strategy that now known as CBR. It was meant to be a community strategy to improve access for people with disabilities to rehabilitation services in low- and middle-income countries, making optimal use of the local resources.

As in some countries a lack of sufficient rehabilitation services in the community is obvious, the delivery of rehabilitation services in the community was put in the focus of CBR. Thus, the strategy (or policy) was transformed to a concept to supply the needs for rehabilitation by delivering services. In fact, according to Madden and Col with regard to an analysis prepare for a discussion paper on an initial exploration of the rehabilitation workforce in member countries of the Pacific Island Forum, "*There was little contact between community level services and those services offered in hospital settings for people with disabilities. Key informants in each country described difficulties with the referral pathways, from health services to the rehabilitation services, that are available within health care systems and in the community*." [15]

This change was published by the WHO in the handbook Training in the Community for People With Dis-

abilities [5] and by The Hesperian Foundation with Disabled Village Children,[7] with the aim of helping to establish general parameters for these services. With time the strategy evolves into a comprehensive model including all aspects to be taken into account to improve the quality of life of people with disabilities and ensuring their inclusion and participation into society. Thus, the recent concepts of CBR were developed in the context of joint position papers, designing the CBR matrix and finally were transformed into guidelines. However, it should be noted that these training manuals mainly deal with health education and are not dedicated to evidence based clinical practice.

Summarizing, it is of major importance to distinguish between the two concepts of CBR (Figure 2):[16] the former is the policy or management strategy of CBR that was developed by WHO about 30 years ago; the latter is the provision of basic rehabilitation services offered at the community level. Such services may be well offered within the primary care system or as independent programs in the absence of the first. Both fulfill the objective of the CBR strategy for strengthen the access of people with disabilities to basic rehabilitation services at the community level.

However, the strategy of CBR in the health component includes not only these basic rehabilitation services, but also the strategy which aims to strengthen the access to primary care and to specialized rehabilitation services depending on the patient's needs. It is important to stress that the CBR cannot be raised as a strategy to replace the primary health care or specialized rehabilitation services. The WHA58.23 resolution [1] and the WHO global disability action plan 2014-2021 [17] make clear that both kind of services are obligations of states due to the right of people with disabilities. This is also clearly stated in the UN Convention of the Rights of Persons with Disabilities.[9] Consequently, CBR must also strengthen the provision of primary health care and ensure the access of persons with disabilities to such care and inclusive health as well as to specialized rehabilitation, if needed. It is extremely important to guarantee an effective remission system among community services and specialized services, in concordance with attention level and the pathologies generating disability.

In the authors' opinion, CBR can help persons with disabilities to overcome barriers for access to health services, to train workers in these early levels of care in disability issues, to educate and empower family members and include persons with disabilities and family members to actively participate in the society. Additionally, it can keep vigil the rights of persons with disabilities. It can conduct research on factors determining the health status of persons with disabilities, assessing care barriers and finding ways to overcome met and unmet needs. CBR can link to the different levels of care, linking health component with other components of the strategies, linking primary care with the family, and empower people with disabilities to overcome barriers to access. In cases where this is not possible, it can also provide basic rehabilitation services. However, this should not be the main focus of the strategy, as it runs the risk that the countries do not fund these basic rehabilitation services and do not assume the responsibility of an inclusive and comprehensive health.

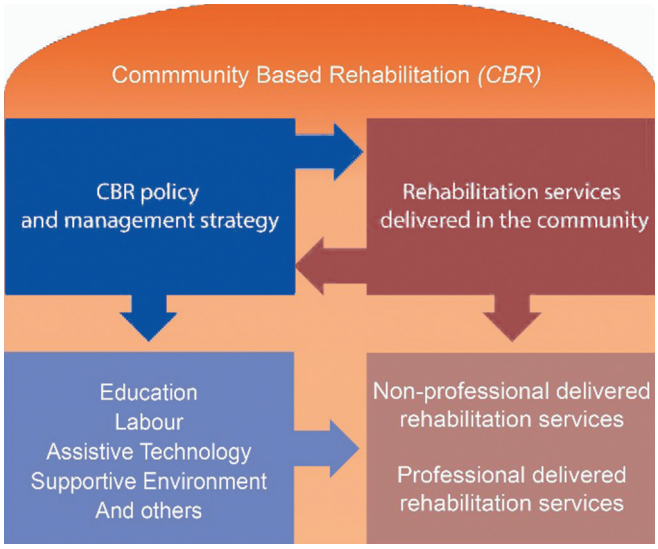

Figure 2.—CBR as a policy and management strategy and as a rehabilitation service delivery (common applications of the term "CBR") (from Gutenbrunner *et al*.).[16]

CBR and PRM

Regarding the role of SPRM in CBR there are four possibilities:

— PRM doctors contribute to the design and management of CBR strategies;

— to manage CBR programs including the necessary referrals in between services;

— to deliver rehabilitation services in the community;

— to act as trainer for persons (professionals and non-professionals) who deliver rehabilitation interventions.

On the one hand, the CBR strategy must also addresses the need for optimal access to specialized rehabilitation services. On the other hand, and expanding the discussion, will have a key role in the design and building of the so-called "basic rehabilitation services." Further discussion must clarify what such basic rehabilitation services are, which are essential and which are specialized, and which healthcare professionals should provide these services (nurses, therapists, general practitioners, PRM physicians, or others).

PRM is called not only to answer these questions, but also to help establish such services, carry out activities such as staff training, designing and implementing these programs, researching in techniques and interventions in rehabilitation to be used in community centers.

Another major aspect to be taken into account is the need for CBR strategies to be part of physical medicine and rehabilitation curriculums, including theoretical aspects and practical aspects.

The WHO Global disability action plan (GDAP) 2014-2021

Coming back to the starting point of the discussion the question raised if the final version of the WHO action plan is consistent with the CBR strategy or not and will it allow strengthening access to rehabilitation services either basic or specialized? Will it allow to strengthen basic rehabilitation services whether they are carried out as one of the activities of the CBR or within primary care services?

In the GDAP,[17] the following are mentioned:

— "*Objective 1: To remove barriers and improve access to health services and programs*";

— "*Objective 2: To strengthen and extend rehabilitation, habilitation, assistive technology, assistance and support services, and community-based rehabilitation*."

Furthermore, on the point "*2.4 - Expand and strengthen rehabilitation and habilitation services ensuring integration, across the continuum of care, into primary (including community), secondary and tertiary levels of the health care system, and equitable access, including timely early intervention services for children with disabilities,*" proposed inputs for member states are:

— "*review existing rehabilitation and habilitation programs and services and make necessary changes to improve coverage, effectiveness and efficiency*";

— "*integrate rehabilitation and habilitation services within existing health, social and educational infrastructure*";

— "*use community-based rehabilitation as a strategy to complement and strengthen existing rehabilitation and habilitation service provision, particularly in countries where few services are available*";

— "*establish mechanisms for effective coordination between different rehabilitation and habilitation service providers and levels of the health care system*";

— "*work with a range of stakeholders to ensure services for children with disability are available and coordinated between the responsible agencies*."

In our opinion, these general guidelines are sufficient to achieve the goal of effective access of persons with disabilities to health services that can meet all their needs. It is important to notice that in the Objective 2 the word "services" used in the draft [3] was removed when referring to the CBR, this is good and emphasize that CBR is a "strategy." Regarding the proposed inputs for member state, the Global Action Plan emphasize that member states should integrate rehabilitation and habilitation services within existing health, social and educational infrastructure, however we think that for the future it is important to recognize the basic rehabilitation services as part of primary health care and finance them within their health systems.

Finally, we have some inputs for the Secretariat:

— define together with international partners the meaning of Basic Rehabilitation Services;

— determine what health professionals should provide these rehabilitation treatments;

— promote research to know what therapies are effective at the community level.

How to proceed within PRM professional communities?

The above paper clearly shows that the term of CBR today is used in two different ways.

Firstly, CBR is a policy and management strategy for the administration and other stakeholders in the community to improve the daily life situation of persons with disabilities. It deals with the question how a supportive

and integrative environment can be established and includes the management of many sectors (labor, education, transportation, social services). The health sector is included in this management strategy in principle) ("the policy and management component of CBR").

Secondly, CBR are rehabilitation services delivered in the community, mainly delivered by families, peers, and professionals not primarily specialized in rehabilitation ("the service component of CBR").

PRM professional communities should discuss both components focusing on the following aspects.

With regard to the policy and management component of CBR the following questions should be discussed:

— what are the needs of persons with disabilities including patients with chronic conditions and elderly people with regard to an inclusive and assistive (supportive) environment?;

— what is the need for health care for these groups and how access to appropriate health care can be ensured? (this question also includes the need training of all health professionals);

— what is the need for rehabilitation services and interventions for the abovementioned groups?;

— what is an appropriate and feasible model to provide rehabilitation services in the community? (Figure 3) [18] (such a model must include different stakeholders: professional and non-professional delivered community based rehabilitation services; services with different levels of specialization; and models for different countries or societies);

— which should be the correlation between the health component of RBC and the education, work and social welfare sectors?;

— and, in particular, what can (must) be the role of ISPRM in such a strategy (advice, management, education and training, etc.).

For the service component of CBR, the most important questions are:

— what are the best models of delivery of rehabilitation services for persons with disabilities, especially focusing on their lives in the community? (based on a more level model: *e.g.* first level: services provided by families and peers; second level: services provided by non-rehabilitation professionals — *e.g.* primary care physicians, physiotherapists and other health professionals —; third level: services provided by SPRM and other rehabilitation professionals; fourth level: services provided by (specialized) multi-professional rehabilitation teams; fifth level: highly specialized, acute rehabilitation services);

— how can such models be implemented in countries with different levels of income, infrastructure and epidemiology of disability?;

— what are the indications for the referral to the different levels of such a system?;

— what is the contribution of PRM physicians in such a service delivery model (service organization and delivery, health care, referral, education and training etc.)?;

— how can we monitor the results obtained with the strategies used? Initiatives like the Monitoring Manual and Menu for CBR and other community-based disability inclusive development programs could help to assess the achievements in a quantitative manner.[19]

Of course, all these questions should be subject of systematic approaches and scientific evaluation.

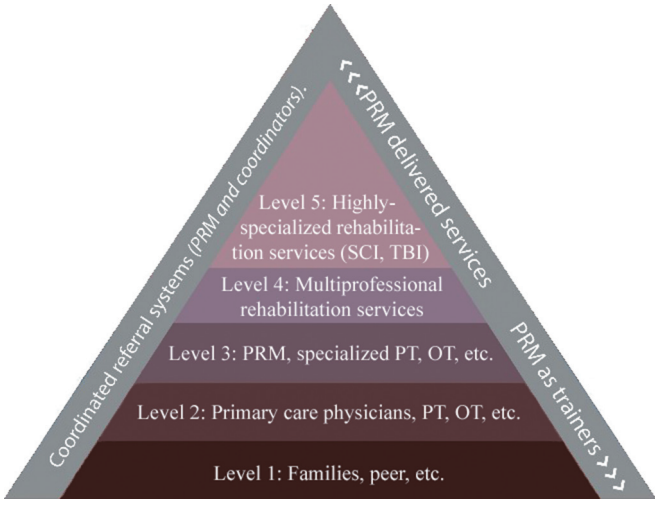

Figure 3.—Rehabilitation care pyramid (model of rehabilitation services at different levels of specialization (from Gutenbrunner *et al.*).[18]

Conclusions and future perspectives

The consultations about the draft of the Action Plan for Better Health for Persons with Disabilities induced a fruitful debate about the concept of CBR and its relation to Physical and Rehabilitation Medicine. The systematic work of the CBR Subcommittee of the ISPRM-WHO-Liaison Committee showed that the term CBR is used and two different ways:

— as a policy or management strategy for communities to improve the live situation of people with disabilities including the component health, education, livelihood, social systems and the empowerment;

— as the delivery of rehabilitation services in the community (independent from the service provider who can be professional or non-professional).

For ISPRM, it is important to distinguish between both aspects of CBR, however, it is clear that both components are linked. The contribution of ISPRM to the first aspect should be the development of community strategies for different types of countries and in particular for world regions with lack of sufficient rehabilitation services. Secondly, it is important to develop concepts for comprehensive rehabilitation services covering the different levels of specialization (from peers to highly specialized rehabilitation services). Within this context, the role of PRM is as not only the service provider, but also the coordinator and trainer for other types of rehabilitation services or interventions.

The authors propose the following scheme, which integrates all relevant aspects surrounding the concept of CBR. In the first column, the matrix of CBR with emphasis on health component but without forgetting that it is framed within the overall strategy. In the central part of the scheme there is a proposed level of care of rehabilitation services. In the last column, the roles proposed for PRM physicians within the strategy. In addition, encompassing all, the convention for the rights of persons with disabilities and the conceptual framework of the ICF (Figure 4).

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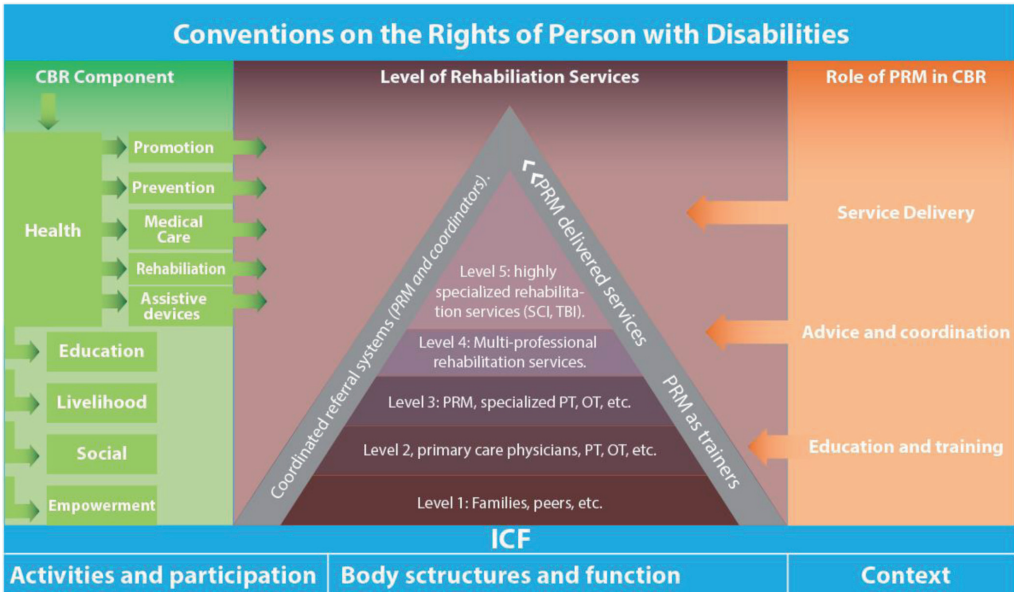

Figure 4.—Summary of the proposal.
SCI: spinal cord injury; TBI: traumatic brain injury; PT: physical therapist; OT: occupational therapist; PMR: physical medicine and rehabilitation doctors; ICF: International Classification of Functioning Disability and Health.

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