# Concept Changes and Standardizing Tools in Community-Based Rehabilitation

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**KEYWORDS**

• Community-based rehabilitation • Community-based inclusive development
• Primary health care • Capacity building • Standards

**KEY POINTS**

- Community-based rehabilitation is changing from basic service delivery in rehabilitation to a rights-based approach holding local authorities accountable for inclusive measures in all aspects of life.
- For low- and middle-income countries, medical rehabilitation at the community level needs to be defined regarding its workforce, relation to primary health care, and institutionalized rehabilitation.
- Meanwhile, the evidence base for community-based rehabilitation is growing as a guide for implementation. A process of standardization to scale up is proposed.

## INTRODUCTION

Community-based rehabilitation (CBR) was introduced by the World Health Organization (WHO) in 1976.

The primary concept of CBR at that time was that rehabilitation should be home based, given to the person with a disability, with their family and caregivers supported by local community members who were typically health workers. CBR programs focused primarily on bringing practical rehabilitation techniques to the community level when these skills were unavailable at hospitals or health centers in low- and middle-income countries.

Over the next 3 to 4 decades, CBR has changed considerably at the level of concepts and practice, mostly influenced by the development sector. The Twin Track approach was introduced in CBR practice, enabling an individual with independent living skills (through service provision) and addressing equalization of opportunities resulting in inclusion (through advocacy).

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In 2004, the Joint Position Paper issued by the International Labour Organization (ILO), United Nations Educational, Scientific and Cultural Organization (UNESCO), and WHO defined CBR as "a general strategy within community development for the rehabilitation, poverty reduction, equalization of opportunities and social inclusion of all people with disabilities."[1]

## COMMUNITY-BASED REHABILITATION AND REHABILITATION

The same Joint Position Paper describes CBR as having a multisectoral approach, which operates at a community level to promote people with disabilities accessing services available to all other community members and focuses on their social, community, and economic inclusion.

Although rehabilitation techniques remain a component of CBR, one now addresses 5 key pillars: health, education, livelihood, social, and empowerment.[2] The multisectoral approach is represented in the 5 components of the WHO CBR matrix (**Fig. 1**). CBR programs work for the benefit and development of the whole community, encouraging inclusive development, postering empowerment, and emphasizing the realization for human rights for all.[3] As such, CBR is the strategy to achieve community-based inclusive development (CBID). The CBR strategy can set up an ideal framework to implement the provisions of the UN Convention on the Rights of Persons with a Disability.[1]

Until now, the term "CBR" has stood the test of time, but in 2011, Maya Thomas[4] mentions the remaining interest groups in the disability sector who object to the term "CBR" on the grounds that including the word "rehabilitation" makes it medical as opposed to rights based, and therefore, not "politically correct."

Today, it seems that the name of CBR is actually being changed into a name that reflects the rights-based approach. With the name change comes a definition change as well: "Community Based Inclusive Development is a rights-based approach within community development for the equalization of opportunities, empowerment and social inclusion of all people with disabilities."[5] CBID builds further on the momentum of the UN Convention for the Rights of People with a Disability, which emphasizes "the

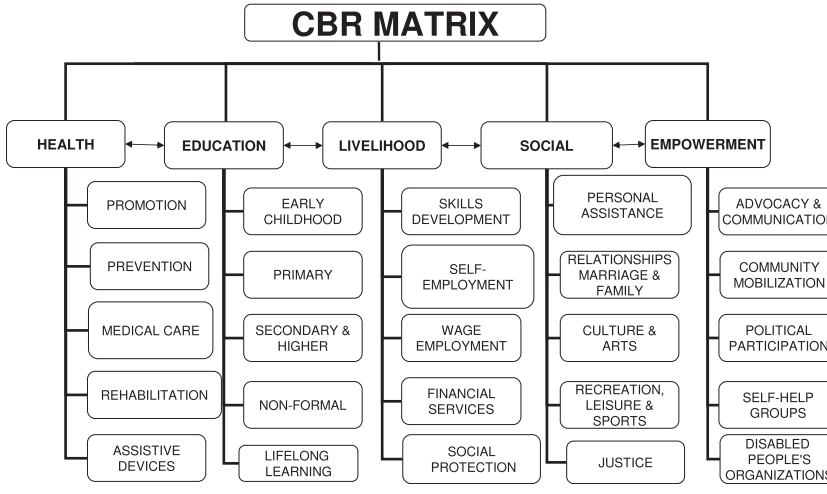


**Fig. 1.** WHO CBR matrix. (*From* World Health Organization. CBR matrix. Available at: https://www.who.int/disabilities/cbr/cbr_matrix_11.10.pdf; with permission.)

importance of mainstreaming disability issues as an integral part of relevant strategies of sustainable development" (UNCRPD [UN Convention on the Rights of Persons with Disabilities], preamble g, 2007). CBID aims at supporting people with disabilities, their family, and organizations, ensuring equal participation in their community and equal access to services.

At this point, health-related rehabilitation is no longer part of the definition. Rehabilitation at a community level is no longer a component as such and has become a service like any other. The goal of CBID is to improve access to services, not to deliver services. The key words of CBID are capacity building, community mobilization, peer support, Disabled People's Organization, and nondiscrimination, which are all elements in the "social" and "empowerment" components of the former WHO CBR matrix (see **Fig. 1**).

When looking at the shift made over the past 4 decades, CBR was addressing basic rehabilitation techniques to an individual with a disability to develop independent living skills at first, whereas CBID's interventions aim for inclusive policies and inclusive service delivery. The WHO CBR Matrix is reduced to its social and empowerment pillars. Service delivery in rehabilitation as an integral part of the intervention's scope has been left out, whereas interventions now work toward empowerment. People with disabilities should be able to exercise their rights by giving them the tools and peer support, while local government or other duty bearers are held accountable.

Together with this name and definition change, a disappearance of an indirect link with people with a disability is also noted because CBID is a general concept that applies for every minority group (**Box 1**).

For the believers of CBR, it is argued that conceptually, there is a need for more clarity about the positioning of CBID related to CBR. Will CBR remain an integral part of CBID, because it is the strategy to achieve the goal of CBID, meaning that the UNCRPD is the overarching principle of CBR? Or will the opposite happen, with CBID becoming an integral part of CBR? According to current findings, CBID is addressing 2 out of 5 CBR components. In this case, the rights-based approach could become the driving force for CBR. Or is CBR actually being replaced by a name and concept that better reflects the rights-based approach? In these matters, Maya Thomas already warned us about confusion among field-level practitioners and, in the long run, a danger of diluting the only approach that is still seen as the most appropriate one for developing countries.[3]

In a rights-based model, mainly consisting of capacity building, advocacy, and sensitization activities, people with a disability will ask for their right to receive individualized medical rehabilitation! In the area of health, CBR was able to make a particular contribution in providing these health services as close as possible to people's own communities, including in rural areas (UNCRPD, article 25c).

In low- and middle-income countries, at this point, primary care level service delivery mainly aims at providing services in the promotion, prevention, and treatment of health conditions. Although CBID wants to provide a person with a disability with the necessary tools to advocate for inclusive rehabilitation, it is appealing for

**Box 1**
**Conceptual change of community-based rehabilitation to community-based inclusive development**

| | | | | | | |
|---|---|---|---|---|---|---|
| CBR (1976): | Individualized | Rehabilitation | Single sector | Service delivery | Disability | WHO |
| CBID (2019): | Mainstreaming | Inclusion | Multisectoral | Advocacy | Minority group | UN agencies |

autonomy and responsibility of the group of persons with a disability, in the context of local authorities with reduced implementing power and poorly available rehabilitation services. A similar concern is shared by the CBR Africa Network pointing out that the continent is not ready for a conceptual change. Still much work must be done in terms of leveling the ground necessary for the change to be effective, mostly with regards to inherent negative attitudes in the community and among government stakeholders.[6]

## WHAT ABOUT "REHABILITATION"?

Although CBID is being promoted among different UN agencies, there is a strong momentum going on for rehabilitation at WHO: "Rehabilitation 2030: A Call for Action" asks for coordinated and concerted action to scale up rehabilitation services and address the profound unmet needs by integrating rehabilitation in national health strategic planning, at all layers (tertiary to primary and community level). When moving toward integrated person-centered care especially, it is imperative that quality rehabilitation is embedded in service delivery models.[7]

The WHO describes rehabilitation as "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment." It is important to know that "rehabilitation may be needed by anyone with a health condition who experiences some form of limitation in functioning," which means that the target group for rehabilitation becomes much larger than the group of "persons with disabilities."

The good thing is that WHO now stands for rehabilitation at a community level, among others, as an integrated part of the mainstream health care system, whereas it is advocating for ministries of health to take up a responsible role. However, it is still unclear what community-delivered rehabilitation will look like, and how it will relate to the primary health care level, or even merge with it. Community-delivered rehabilitation at least should be integrated within the health care system, complementing institution-based services. For the strengthening of rehabilitation in low-resources countries, there is no time to lose, because the recent changes are leaving an important gap behind. In 1993, Helander stated that CBR was initiated in the early 1980s because of a failure of the conventional system of rehabilitation then prevalent in many developing countries. Today, (increasing) unmet needs are still being faced. When CBID does not focus on rehabilitation service delivery as a core intervention, community-delivered rehabilitation needs to come from a top-down approach by the Ministry of Health. Meanwhile, the major problem of outpatient institution-based rehabilitation in low-resource settings remains unchanged. It is a set of interventions that often needs to be repeated frequently; although the people that are in need of rehabilitation usually have transport issues, they are not able to access services that are centralized. In Malawi, the uptake of referral services for children with a disability has been demonstrated to be very low with transport difficulties, lack of information, and financial constraints being the most common reasons for nonuptake.[8] For rehabilitation services in the late postacute setting and in chronic conditions, it does not make sense to organize it in a centralized manner. There seems to be only 1 solution: bring services closer to homes. Of course, some rehabilitation services can only be organized at a central level (eg, mobility aids provision), but very frequent visits to a rehabilitation center at least should be avoided to reduce out-of-pocket expenditure for transport in a population that is generally poor.

The takeaway message for community health workers as concluded from the 73rd UN General Assembly about noncommunicable diseases also accounts for community rehabilitation workers: "improved training and education are needed, and there

is an opportunity to re-design health systems to revolutionize health care." For low-resource settings or any country with access issues related to transport, a new cadre in the rehabilitation workforce will need to be conceived, which delivers basic rehabilitation skills at home. This new cadre needs to be defined as per its relation to the other members of the rehabilitation team that are institutionalized. The main characteristic of the community rehabilitation worker's intervention will be the sharing of information and basic techniques that are safe to be executed by the client or caregiver, without the supervision of an expert. These interventions mostly relate to the International Classification of Functioning, Disability, and Health (ICF) components of participation, environment, and personal factors (**Box 2**).

## FINDING CONSENSUS IN COMMUNITY-BASED REHABILITATION

Meanwhile, CBR continues to evolve,[6] and the current conceptual debate does not stop the call for strengthening the evidence base for CBR as a guide for implementation. A certain challenge is being presented here as, with the development of the CBR guidelines, it is understood that a single model for CBR does not exist. Building evidence is challenging when an important variety is the rule. CBR nowadays is too diverse to market and still too undefined to rely on in an overall strategic plan. Whenever a CBR program is (partially) state funded, it is probably a local service provider using state money for community activities. Rarely, CBR activities result from national strategic planning. A lack of awareness and recognition of proven added value at the level of policymakers are being faced owing to an absence of consistency. Nevertheless, as an answer to public health issues related to disability and the diversity of needs expressed by a person with a disability, many people are still believers of the CBR strategy.

Building evidence could begin with basic multistakeholder consensus as a start for implementation research. When the CBR guidelines provide an overview of all possible intervention areas, which may be used with a "pick-and-mix" approach, there is a need to find consensus about the minimal standards that involve content, implementation methodology, human resources, training curricula, support system, and so forth. To scale up means to set a reproducible standard, which, in the case of CBR, should perfectly be able to provide an answer to the gap identified by a needs-based approach for a person with a disability in his or her living environment. A standardization process would facilitate the development of international standards

**Box 2**
**Relationship institution-based rehabilitation and community-delivered rehabilitation**

| | Institution-Based Rehabilitation | Community-Delivered Rehabilitation |
|---|---|---|
| ICF components | Body function and structure, activity | Participation, environment, personal factors |
| Pathway | Acute and postacute setting | Chronic conditions |
| Guidance | Expert supervision | Autorehabilitation |
| Therapy type | Passive and active therapy | Active therapy |
| Therapy frequency | Repetition | Single context-based intervention |
| Mean | Applied technology | Transfer of knowledge |
| Timeframe | Time-bound intervention | Continuous monitoring |
| Infrastructure | Equipment | Home setting |
| Work out | Diagnosis and treatment | Detection and referral |
| Competencies | Technical support | Task shifting |

and recognition of CBR professionals, because it will enable policymakers to position CBR activities within their strategic planning.

An example is the CBR field worker as the core human resource. At the CBR Global Network conference in Kuala Lumpur in 2016, it was concluded that "we are still facing a lack of recognition of the CBR field worker, left without accountability and certificates, mainly due to a variety of duties…" Indeed, recognition of the CBR field worker depends on a clear job description and well-defined training curriculum. Nowadays, training programs are all different in terms of their content and duration and offered by a variety of providers. For example, in some countries, tertiary institutions offer a diploma course for CBR personnel, whereas, in other countries, training programs may not be accredited and may only last for a few weeks or months.[2] As a result of this diversity in training approaches and different inputs of CBR program planners, CBR programs also differ at the level of content, quality, and methodology.

The global CBR community therefore should promote research about the standards of the CBR building blocks and facilitate its systematic application and evaluation.

## THE PROCESS OF STANDARDIZING

Finkenflügel and colleagues[3] mention that many classification models for CBR have been developed to create conceptual order, but none of the models appears to be widely accepted (**Box 3**). They have found 16 documents describing 11 different models. None of the classification models directs strongly to a certain type of program that is seen as superior to the others. All models are framing realities and not advocating a specific type of "rehabilitation in the community."

**Box 3**
**Standardization of building blocks in community-based rehabilitation**

| Building Block | Standardizing Document |
|---|---|
| Concept | CBR guidelines and WHO CBR Matrix, INCLUDE |
| M&E | 3 Domains (Wirz and Thomas, 2002) |
| | Monitoring Manual and Menu (University of Sydney, 2014) |
| | CBR Indicators Manual (WHO, 2015) |
| | Participatory Inclusion Evaluation or PIE (Post et al, 2016) |
| HR skills | Toward a core set of clinical skills for Health-Related CBR (O'Dowd et al, 2015) |
| | Recommendations for Guidelines for the Rehabilitation Workforce (MacLachlan et al, 2013) |
| | Development of essential standards for field worker training in disability inclusion (CBR/CBID) |
| HR entry profile | Development of essential standards for field worker training in disability inclusion (CBR/CBID) |
| Supportive environment | Development of essential standards for field worker training in disability inclusion (CBR/CBID) |
| Training | CBR matrix and perceived training needs of CBR workers (Deepak et al, 2011) |
| | Recommendations for Guidelines for the Rehabilitation Workforce (MacLachlan et al, 2013) |
| | Development of essential standards for field worker training in disability inclusion (CBR/CBID) |
| Financing | ? |
| Management tools | ? |
| Information system | ? |

M&E, Monitoring and Evaluation; HR, Human Resources

The CBR Guidelines by WHO, ILO, UNESCO, and International Disability and Development Consortium in 2010 served as the first step to provide a unified understanding of the *concepts* and principles of CBR.[9] The core of these guidelines is the WHO CBR matrix, reflecting the multisectoral approach and providing a structure for CBR planners and practitioners. The guidelines suggest possible goals, desirable outcomes and activities for the different elements, and components of the matrix. It also provides guidance for program management: generally accepted tools that are used in program cycle management are applied to the CBR context. These tools include Strengths, Weaknesses, Opportunities and Threads (SWOT) analysis, problem tree, logical framework, Specific Measurable Realistic Acceptable and Timebound (SMART) principle for indicators, Gantt Chart, and Data collection methods. However, setting a conceptual standard, the CBR guidelines are lacking specified applications because no tools were specifically developed for CBR. Also, the guidelines are not prescriptive and may be used with a "pick-and-mix" approach.

Based on the CBR guidelines, an online program was established in 2016. Guiding users through different information modules, INCLUDE aims to support and inform CBR managers and interested stakeholders. A unified understanding of CBR implementation is the result.[10]

Looking at the systematic outcome and impact *evaluation*, Wirz and Thomas[11] provided a systematic evaluation framework focusing on 3 domains: maximizing the potential of a person with a disability, service delivery, and the environment. They have demonstrated that many indicators are being used and that grouping them is a valuable exercise in order to move beyond evaluations that are merely descriptions of activities.

Finkenflügel and colleagues[12] found 17 articles on the evaluation of projects. They show that programs develop program-specific evaluation instruments that might very well address the needs of the people involved in that project but make a comparison between programs and arduous exercise.

In April 2014, the "Monitoring Manual and Menu (MM&M) for CBR and other community-based disability inclusive development programs" provided a comprehensive overview of the monitoring of CBR programs, looking at preparation, information design, monitoring plan, and review.[13] This manual was conceived for 2 main reasons: (1) to build evidence about the efficacy of CBR; (2) to create internal and external consistency among the variety of monitoring tools for CBR programs, respectively, between the stages of the monitoring plan and across the studies.

Then, the CBR indicators manual appeared containing quantitative indicators capable of capturing the difference CBR makes in the lives of people with disabilities, between adults, youth, and children, and those without disabilities, in the areas of health, education, social life, livelihood, and empowerment.[14] As the WHO CBR matrix is used as the theoretic framework, the CBR indicators manual is considered a comprehensive evaluation instrument, not being program specific and still enabling comparison.

Because CBR/CBID is thriving for inclusive development and the CBR indicators manual does not include persons with a disability in the decision-making process, there was a need for another evaluation tool measuring impact in CBR. Participatory inclusion evaluation (PIE) is a flexible approach developed as an answer to the need for a more structured approach to impact evaluations of CBR programs that are inclusive and participatory. PIE is conceptualized in an evaluation framework, using both quantitative and qualitative evaluation methods. It involves the participation of 3 types of stakeholders: people with disabilities, the CBR core team, and the network of strategic partners. The impact is defined as changes in inclusion, empowerment, and living conditions. Summarizing findings and reporting are still promoted to be linked with the

CBR matrix.[15] The use of PIE is supported by an expert panel that reached consensus on key features of best evaluative practices in CBR.[16]

At the level of *human resources*, Deepak and colleagues[17] describe the most pressing perceived learning needs for the different domains of the CBR matrix, and for different kinds of disabilities. They selected the 3 most important overall learning needs per CBR worker. This exercise resulted in a list of 14 topics. According to the CBR workers, the most common learning needs are those related to the area of empowerment mostly, and livelihood and health (medical rehabilitation). This study gives us an interesting insight into the development of training programs. On the other hand, it is not clear whether the perceived training needs reflected the CBR program content or CBR field worker educational background. Many field workers have different profiles, which result in different training needs. In order to describe a standardized training curriculum, these confounding factors will need to be eliminated.

"Recommendations for Guidelines for the Rehabilitation Workforce: A Realist Synthesis" (2013) describes the interaction between the health sector and CBR, and thus, the community rehabilitation workforce. Research questions are designed to investigate competencies, training, capacity building, minimum requirements for service delivery, and so forth. It is mentioned here that health-related aspects of rehabilitation should not exist in isolation from broader aspects of the rights of people with disabilities. Except for health-related rehabilitation skills, the CBR worker is also required to have skills in at least some of the other areas of the CBR matrix.[18] Derived from a systemic literature review, the investigators could not identify specific clinical skills for health-related rehabilitation.

In 2015, O'Dowd and colleagues[19] describe a core set of work activities relating to the health component of CBR. Notably, they discovered that, still, 8 out of 10 most frequently used skills are of a generalized nature and less discipline specific (eg, referrals, advocacy, psychosocial support), independent of the educational background of the CBR worker. This finding demonstrates the need of a client in the community context. According to the investigators, it shows that CBR is mainly targeting the ICF components of "environment" and "personal factors." Nevertheless, a discrepancy between the skills used most frequently and those that are ranked as most important by the CBR worker is noted. This finding is specifically the case for home-based rehabilitation, which is consistently ranked as very important but does not appear in the top 10 list of the most frequently used skills.

Finally, the "Development of essential standards for field worker training in disability inclusion (CBR/CBID)" is a document to be submitted for publication. It uses empirical evidence for the identification of standards for the profile, training curriculum, and support system of a CBR/CBID field worker. Data are collected across many settings, which help to build consensus about minimal findings that are cross cutting. The investigators plead for a consensus and due respect to the CBR/CBID field workers, about their entry level recommendations, competency framework, and supportive environment.

## INTRODUCTION OF AN INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY, AND HEALTH–BASED ASSESSMENT AND INTERVENTION MODEL IN COMMUNITY-BASED REHABILITATION

The author would like to contribute to the standardizing process in CBR with an assessment and intervention model. As a CBR program planner, the author considers CBR and its interventions to be a first entry or primary care level of support to a person with a disability. Based on the CBR Guidelines, a possible advantage of CBR is its

holistic approach, looking at all aspects that need to be fulfilled to have a full participative life. However, the danger of a comprehensive approach is that it is not applied completely, and especially not providing a tailor-made answer to the need of every person within the same zone of action, because a tremendous diversity of possible interventions might result in less appropriate measures at the individual level. In order to individualize a needs-based intervention, one should visit the home of every person to understand the complexity of the needs.

When a CBR field worker visits a new client at home, he or she has to be equipped with a standardized model of assessment. This assessment tool should consist of a comprehensive evaluation method covering the multifaceted needs of a person living with a disability in relation to the environment. In addition, within the same assessment, there should be a way to prioritize. Most CBR field workers say they are overwhelmed by the amount and diversity of needs. They often do not know the answer to all questions, and they do not know where to start. Defining a priority need therefore is crucial: it is an important step in case management that facilitates a successful outcome of the intervention.

In 2011, it has been demonstrated that the ICF is a relevant and potentially useful framework and classification, providing building blocks for the systematic recording of information in CBR monitoring and evaluation.[20] The ICF model fits the requirements to serve as a framework for overall assessment in CBR because it describes well the different components that influence and compose a disability experience. As such, an ICF-based assessment model is proposed, which will enable the assessor to map all major issues within the different components of the ICF model (**Box 4**).

**Box 4**
**International Classification of Functioning, Disability, and Health–based assessment for community-based rehabilitation**

1. Body function and structure — VAS 1:
   - Describe functional deficits (sensory, motor, mental, mixed, and so forth):
   - Other functional issues (eg, incontinence, seizures, pain, contractures):
2. Activity — VAS 1:
   - Mobility at home (transfer, moving around):
   - Activities of daily living (ADL: dress, bath, eat, drink):
   - Household activities (cooking, gardening, cleaning, washing clothes):
3. Participation — VAS 1:
   - Mobility in community (transport, accessibility of infrastructure):
   - Education/professional activity:
   - Inclusion in the community (attitudes, discrimination, inclusive policies applied):
   - Sexuality:
4. Environment — VAS 1:
   - At home (accessibility, lack of home adaptations for ADL):
   - Caregivers and family (attitude, compliance, and burden of care):
5. Personal factors — VAS 1:
   - Psychology (emotions, depression, and isolation) of the client:
   - Compliance of the client toward proposed interventions:

In the "body function and structure" component, the CBR field worker wants to get an idea of a motor, sensory, mental, or mixed disability. There is no use of medical diagnosis at this level; a description of the type of disability is sufficient. He or she might also evaluate any related problem or comorbidity (eg, communication, joint

**Box 5**
**International Classification of Functioning, Disability, and Health–based interventions for community-based rehabilitation**

*Body function and structure*

- Provision of home-based rehabilitation (M)
- Referral to medical rehabilitation service provider (M)
- Referral to medical service provider (M)
- Encourage person with disability to have health insurance (M)

*Activity*

- Referral for assistive devices (mobility and other) (M)
- Home-based rehabilitation about activities of daily living (M)
- Encourage family life participation (S)

*Participation*

- Collaborate with health service providers to make services accessible (M)
- Advise on mobility in the community and lobby for community facilities to be accessible (S)
- Raise community awareness about UNCRPD and stigmatization (S)
- Education: awareness raising at school, enroll and support children in school, school adaptations, motivate family to support children's education, advocate and build capacity of selected schools on inclusive education, home-based learning (Ed)
- Professional integration: referral to Direct Support Programs, facilitate vocational skills training, support to start up business and microcredit, assist trained persons to seek jobs, and advocate with employers to give opportunity for persons with disabilities (L)
- Referral to Social Protection Programs, encourage persons with disabilities to participate in cultural activity, organize inclusive sports and games (S)
- Support persons with disabilities and families to access legal assistance and justice (S)
- Encourage persons with disabilities to participate in the national election process (Em)
- Lobby for inclusive policies at local authorities (Em)
- Education about sexuality (M)

*Environment*

- Home adaptations (M)
- Training of family members on how to take care of persons with disabilities (M, Em)
- Behavioral change training for caregiver (M)

*Personal factors*

- Communication skills training (support materials for communication) (Em)
- Establish and train CBR Committees and self-help groups (Em)
- Encourage disabled people organization membership (Em)
- Psychosocial counseling to person with a disability (M, S)

WHO CBR matrix pillars: Ed, education; Em, empowerment; L, livelihood; M, medical; S, social.

stiffness, spasticity, paralysis, incontinence, epilepsy). Then, the component of "activity" is assessed with questions about mobility at home, activities of daily living, and household activities. For the "participation" component, it is suggested to ask about mobility in the community, educational and professional activities, inclusion in the community, and sexuality. The "environment" component is checked with home accessibility and adaptations, and the attitude of caregivers. Finally, for "personal factors," one evaluates psychological characteristics and the compliance of the client.

At this point, CBR field workers will have an overview of the disability experience consisting of a brief description of every ICF component. The next step is to get an idea of how these components relatively define the disability experience, evaluating the perceived burden for every ICF component separately, and to turn this evaluation into an expressed need, with a possibility to prioritize. A reversed visual analogue scale (VAS) with culturally neutral faces has been field tested several times by CBR International for these purposes. It is introduced to the person with a disability or caregiver right after the assessment of every ICF component.

Oppositely, a numeric score of 10 is used to have an idea of the subjective importance of this component. Zero corresponds with a very sad face, meaning that this aspect has a high negative impact on the person's life. A 10 corresponds with a smiling face, meaning that the client has no worries about it. As a result, the CBR field worker will have 5 scores on 10 (1 score for every ICF component) with the lowest score for the component with the most negative impact on the person's life. This component represents the prioritized need for which intervention should be suggested. Of course, the person with disabilities or caregiver should first be confronted with the findings, and the outcome is still open for discussion. In case of a tie especially, there should be a conversation about how to prioritize further. As such, the person with a disability will be able to express their most important problem, and the assessor will be able to get a comprehensive idea of the person's experience on his or her disabilities and still focus on 1 item at a time.

Once the person with a disability agrees with the outlined priority need, the CBR field worker will propose an intervention that answers to the need and fits within the same ICF component. In almost every case, the intervention will have a link with the WHO CBR matrix (**Box 5**). The intervention should have a starting and an ending date, which needs to be agreed on mutually by both the user and the CBR field worker. At the end of the intervention, the reversed VAS is again presented to the person with a disability to score the outcome of the intervention. An increase of 2 points is considered a success, and another intervention may then be proposed. In case of no success, it is possible to set another ending date for the same intervention when it is concluded that it is still realistic to improve in these matters.

## SUMMARY

CBR has considerably changed in the past 4 decades, resulting in a rights-based approach holding local authorities responsible for service delivery. For medical rehabilitation, there is a concern about how this gap will be covered. Meanwhile, the CBR community is still asking to strengthen the evidence base for CBR implementation, recognizing its extensiveness and variety on the ground. The creation of standardizing tools will favor this process because it provides the building blocks to scale up and sets a standard for implementation research. Finally, an ICF-based assessment and intervention model for CBR is proposed.

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