CBR MATRIX AND PERCEIVED TRAINING NEEDS OF CBR WORKERS: A MULTI-COUNTRY STUDY

Sunil Deepak*, Jayanth Kumar**, Francesca Ortali***, Enrico Pupulin****

ABSTRACT

CBR Matrix, proposed in the CBR Guidelines, provides a systematic framework for organising and analysing CBR activities. A sample of experienced CBR workers, active at community level in 7 countries, were asked for information about different activities they actually carry out, so as to understand the applicability of CBR Matrix framework in the field. The CBR workers were also asked to identify their most pressing learning needs in different areas of CBR Matrix.

This study shows that CBR Matrix can be a useful framework to understand field-level activities in CBR projects. The study has identified a number of priority learning needs, in terms of different domains of CBR Matrix, and in terms of different disabilities. It also shows that globally, areas related to advocacy, lobbying, legal protection and rights-based approach, are the most important learning needs identified by CBR workers.

Key words: Community based rehabilitation, CBR Matrix, CBR workers, CBR Guidelines

INTRODUCTION

Community-based Rehabilitation (CBR) is a strategy within general community development, for the rehabilitation, equalisation of opportunities and social inclusion of all people with disabilities. CBR is implemented through the combined efforts of people with disabilities themselves, their families, organisations and communities, as well as the relevant governmental and non-governmental health, education, vocational, social and other services (1). CBR promotes collaboration among community leaders, people with disabilities, their families, and other concerned citizens, to provide equal opportunities for all people with disabilities in the community.

CBR Matrix

World Health Organisation (WHO) produced a manual on CBR, which provided information on different disabilities, and suggested what could be done by family members and persons with disabilities. It focused on increasing the autonomy of persons with disabilities for the "Activities of Daily Living" (ADL) (2).

Three United Nation organisations - ILO (International Labour Organisation), UNESCO (United Nations Educational, Scientific and Cultural Organisation) and WHO - produced a "Joint Position Paper on CBR", which underlined CBR's multi-disciplinary nature. Rehabilitation needs of persons with disabilities cut across all sectors. Moreover, the community represents disabled persons of all ages, at different stages of life, with different needs in different life domains. No one sector can begin to respond to the comprehensive needs involved in the rehabilitation process. Thus, CBR is seen as a multi-sectoral approach (3).

CBR Guidelines, produced jointly by IDDC (International Disability and Development Consortium), ILO, UNESCO and WHO (4), have identified five different domains of rehabilitation needs through the CBR Matrix. The five domains are – health, education, livelihood, social and empowerment. The CBR Matrix provides a framework to understand the different activities of CBR programmes in a systematic manner.

CBR Workers

The need for a new cadre of worker in the rehabilitation field, namely the community rehabilitation worker (CRW), was advocated by WHO in 1981 (2). The major difference described between other forms of rehabilitation and CBR was that in the latter, the needs of people with disabilities are met in their own environment, with the involvement of family members and the community. At the same time, it was suggested that for rural health care services, the use of highly trained health professionals is ineffective in addressing the magnitude of the problem. This is because their training is costly, and since they are accustomed to working in high-technology oriented settings, they seldom function well outside cities or large towns (5).

Ideally, CBR workers should be from the same communities in which they work. They can then relate better to the local community needs (6).

Training of CBR Workers

Regarding the training of CBR workers, the second edition of Joint Position Paper (1) of ILO, UNESCO and WHO on CBR (2004) proposed that "CBR workers need to learn the skills used in training people with disabilities, and they need to learn how to provide this training in a competent manner. They also require training for their role in facilitating contact between people with disabilities and their families on the one hand, and the community leaders and specialised service providers on the other."

The Joint Position Paper also identified a number of areas in which CBR workers needed training. These included home-based interventions, community and family organisations, teaching skills, prevention, awareness programmes and government schemes.

In a meeting of trainers and practitioners of CBR, the training needs of persons working in CBR programmes were broadly subdivided into two major areas – disability related technical skills and programme management tasks. It was also suggested that training should be designed and implemented in collaboration with persons with disabilities and their organisations (DPOs), and that universities and governments should incorporate CBR training into existing training schemes (7).

The kind of training provided to CBR workers varies greatly, between countries and between projects. For example, CBR workers in Malaysia were provided the following training courses – basics of CBR, sign language, child development and needs of children with disabilities, nutritional needs and nursing care of children with disabilities (8). At the same time, training does not include certain aspects such as technical and mobility appliances (9).

Thus, while there are CBR programmes which provide two or three weeks basic training to CBR workers, there are also other more formal courses that may last up to 2 years. A curriculum review of a two-year diploma course for CBR workers in Ghana, concluded that the training curriculum was "limited for equipping the workers with full range of knowledge and skills relevant to promoting social inclusion of persons with disabilities" (10).

Training of CBR workers also depends upon the specific groups of persons with disabilities at whom the CBR activities are targeted. Thus, a programme focusing on deaf children, would focus its training activities on their specific needs.

RESEARCH OBJECTIVES

The two main objectives of this research were to understand:

- How do activities of CBR programmes fit in with the CBR Matrix?
- What are the perceived training needs of CBR workers in different areas of CBR Matrix?

METHOD

To collect information from CBR workers, a questionnaire was prepared. It had four parts: (i) general information about the person (ii) information about the CBR programme activities for different groups of persons with disabilities, in different domains of CBR matrix (iii) training needs related to the five domains of CBR activities, and (iv) training needs related to different disabilities. The questionnaire was field-tested in a CBR project in India, and then finalised.

The questionnaire was sent to different CBR projects that had received some financial or technical support in 2008, from Amici di Raoul Follereau (AIFO), an Italian Non-Governmental Organisation. Each project was invited to participate in the research, and to identify 7-10 CBR workers - with at least two years of experience in a CBR programme- to answer the questionnaire. (CBR workers were defined as "persons working at field level in urban or rural communities, in direct contact with persons with disabilities and their families"). As far as possible, projects were asked to ensure gender balance among respondents.

The questionnaire was prepared in English. If required, projects were provided information pertaining to the translation of the questionnaire into local languages, as well as verification of the translation through reverse translation. Projects were also asked to translate the answers from the local languages into English.

A total of 105 CBR workers, from 13 CBR projects in 7 countries, filled in the questionnaire. The answers from the different questionnaires were analysed and a draft report was prepared. This draft report was shared with all the CBR project managers who had participated in the research. Their comments were integrated in this paper and the report was finalised.

RESULTS

Projects participating in the research

105 CBR workers, from 13 CBR projects in 7 countries, participated in the research. There were 7 CBR projects from India and 1 CBR project each from Guyana, Indonesia, Liberia, Mongolia, Pakistan and Somaliland (Somalia). Thus, CBR projects from 4 countries in Asia, 2 countries in Africa and 1 country in South America, participated in this study.

Out of the 105 persons who answered the questionnaire, more than 50% (55 persons) were from India.

Among these projects, a majority (10 projects) were managed by Non-Governmental Organisations (NGOs), 2 projects were managed by the Governments (Ministries of Health) and one project involved both Government and an NGO. In terms of size, there was a mix of small and large projects - from those covering a few villages with around 200 persons with disabilities, to those covering a sub-district, and up to national level projects reaching out to about 35,000 persons with disabilities.

Table 1. Projects participating in the Study

Country/Project	Managed by	Total PwD involved in Project	N. of Respondents		
			M	F	Tot.
Guyana CBR	NGO & Min. Health	400	1	6	7
India/Bidar, Karnataka	NGO	7,528	6	4	10
India/Chainpur, Jharkhand	NGO	227	-	7	7
India/Gudivada,Andhra Pradesh	NGO	236	7	-	7
India/Kollapur, Andhra Pradesh	NGO	2,107	4	3	7
India/Malavalli ,Karnataka	NGO	11,012	3	4	7
India/MOB Mandya, Karnataka	NGO	11,018	1	6	7
India/Mudhol, Karnataka	NGO	2,319	5	5	10
Indonesia/South Sulawesi	Min. Health	3,399	1	10	11
Liberia/Monrovia Gardnersville	NGO	1,934	5	5	10
Mongolia National CBR	Min. Health	32,843	3	4	7
Pakistan/RCPD Peshawar	NGO	36,350	2	3	5
Somalia/Somaliland	NGO	1,174	5	5	10
Total			**43**	**62**	**105**

Thus, the research includes CBR projects of different geographical dimensions, managed by Governments as well as Non-Governmental Organisations, from three different continents.

Characteristics of CBR workers participating in the study

CBR projects involved in this research vary vastly, in terms of the total number of CBR workers working for them - from about 20 persons in small projects, to

more than a thousand persons in large projects. For this study, each project was asked to identify only 7 - 10 CBR workers to answer the questionnaire. Thus, the sample of CBR workers involved in this study is not a representative sample of CBR workers in different projects. It is therefore not possible to draw general conclusions about CBR workers involved in these projects.

Age of CBR workers: Out of 105 CBR workers who participated in the study, 45.7% were below 30 years of age, 53.3% were above 30 years, and 1% did not answer this question.

Gender of CBR workers: Out of 105 CBR workers who participated in the study, 41% were male and 59% were female.

Education level of CBR workers: 15.2% had middle school or lower level of education, while 84.8% had high school or higher level of education.

Duration of work: Though projects were asked to select persons with at least two years of experience as CBR workers, 12.4% of those who answered the questionnaire had worked as CBR workers for less than 2 years, 53.3% had been working as CBR workers for 2 to 5 years, and 34.3% had been working as CBR workers for more than 5 years.

Occupation: About 53% of persons who answered the questionnaire were full time salaried CBR workers, while the remaining 47% did not receive any salary and gave some time every week to a CBR project.

This segment of 47% included housewives (7.6%), students (3.8%), health sector employees (5.7%), social welfare sector employees (6.7%), education sector employees (6.7%), community volunteers (8.6%) and others (5.2%).

Thus, the research covered a wide variety of persons working as CBR workers - both men and women, of different age groups, different education levels and backgrounds - of whom about 88% had more than 2 years of CBR experience in the field.

Domains of activities of CBR projects

In the CBR Matrix, activities are organised in five main areas or domains – health, education, livelihood, social and empowerment. Study participants were asked whether their projects included different activities in the five domains, and if they were directly involved in any activities related to these domains.

According to the CBR workers, all the projects involved in this study had some activities in each of the five domains of the CBR Matrix. Regarding the work of individual CBR workers, the following information was collected: 96% were involved in health activities, 96% were involved in education activities, 94% were involved in livelihood activities, 75% in social activities and 94% in empowerment activities. Thus, a vast majority of CBR workers have multi-sectoral responsibilities, that is, they are involved in activities related to different life domains.

At the same time, no CBR worker brought out an issue that did not fit in the CBR Matrix. Therefore, it would appear that the CBR Matrix organised in five domains covers all the significant CBR related activities, and it can be an appropriate way of organising, understanding and analysing CBR projects.

Working with different kinds of Disabilities in the CBR projects

The WHO Manual on CBR (2) organises the persons with disabilities in eight groups – vision disabilities, hearing and speech disabilities, movement disabilities, loss of sensation, convulsions, strange behaviour, learning disabilities, and multiple or other disabilities. The respondents were asked to specify if they worked with one or more of these eight groups of persons in their CBR projects.

CBR workers from only one project (Peshawar, Pakistan), responded that they work only with persons with movement disabilities. CBR workers from all other projects responded that they work with all the eight different groups of persons with disabilities.

Perceived Learning Needs according to the Domains of CBR Matrix

Persons were asked to think about their work as CBR workers, and the difficulties they faced in responding to the needs of persons with disabilities, for each domain of activity from the CBR Matrix. They were asked to express 2-3 of their most important learning needs for each domain. All the needs expressed were grouped into broad categories for analysis.

<u>Priority learning needs related to health domain</u>

83% of the workers identified home-based care of persons with disabilities, as the area in which they needed more training. The goals of the home-based care were expressed in many different ways, such as - for improving body functioning, preventing new disabilities and preventing worsening of existing

disabilities, and for promoting autonomy in daily living activities of persons with disabilities.

30% of the workers identified the making and repairing of mobility aids and appliances, as an important learning need. Another 11% identified learning about the "use of medication" for certain disabilities such as convulsions and mental illness, as an important learning need.

Priority learning needs related to education domain

The most common learning need expressed by 55% of CBR workers related to, "working with young children". This need was expressed in different ways, including "early childhood development training" and "training on primary education".

32% identified, "understanding inclusive education" as their most important learning need. Another 31% of workers identified "non- formal education" as their priority learning need.

Priority learning needs related to livelihood domain

About 60% of CBR workers identified "organisation of vocational training skills" as their most important learning need. This learning need was expressed in different ways, including organising vocational training courses, job placements, skills training, accessing referral centres, finding resources for accessing such trainings, etc.

39% identified advocacy skills related to occupation, including rights protection and legal training, as the most important learning need. 38% identified issues related to sustainable development and income generation for persons with disabilities, as the priority learning need. 24% identified accessing government schemes, micro-credits and loan schemes, etc., as their priority learning need.

Priority learning needs related to social domain

Very different activities are mentioned here, indicating that CBR workers are not sure about which activities are part of the social domain.

57% of CBR workers have mentioned "how to do advocacy" as their key learning need under social domain. Another 22% have mentioned "organising cultural activities in the community" as their priority learning need.

Priority learning needs related to empowerment

About 75% of the CBR workers stated that learning about "organisation of self-

help groups and federations", including organising community meetings and social mobilisation, was their priority learning need. Another 40% felt that they needed training on "advocacy and lobbying skills", including rights protection and legal training.

Perceived Learning Needs according to Kind of Disabilities

CBR workers were asked to think of their daily work routine, and the difficulties they face in responding to the needs of persons with different kinds of disabilities. They were asked to express 2-3 of their most important learning needs for each kind of disability.

Priority learning needs in relation to persons with vision disabilities

48% of the workers would like to learn more about Braille. Often, CBR workers in the field have heard about Braille but do not know any thing else about it, and have never seen a Braille document.

30% would like to learn about mobility and orientation training, and the use of a white cane. 15% would like to learn about the use of spectacles.

Priority learning needs in relation to persons with hearing and speech disabilities

65% of CBR workers would like to learn more about sign language, and 28% would like to learn more about the use of hearing aids.

Priority learning needs in relation to persons with moving disabilities

51% of the workers have cited "technical aids and appliances" as the priority learning area. 28% feel physiotherapy and activities for improving autonomy of persons with disabilities, are their priority learning needs.

Priority learning needs related to convulsions

The most important learning need expressed by 32% of respondents relates to the use of medication for convulsions. 13% would also like to learn more about counselling persons with convulsions, and their families. 12% would like to learn about assessment of persons' and families' needs. Another 12% would like to learn more about prevention of convulsions.

Priority learning needs related to loss of feeling

21% of workers stated that their priority learning need related to the loss of feeling and the use of protective footwear for persons with loss of sensation in the feet. For 20% of CBR workers, the second area of priority pertained to self-care and the

prevention of new disabilities. 11% would like to learn about the use of technical aids and appliances for persons with loss of sensation. Another 11% would like to learn about how to examine and assess persons with loss of feeling.

Priority learning needs related to strange behaviour

With regard to mental illness, the top priority learning need, expressed by 63% of CBR workers, related to counselling and support for affected persons and their families. The second most important learning need for 19% of workers, concerned support to persons receiving medicines for the treatment of mental illness. The third area of priority, expressed by 16% of respondents, related to identification and assessment of the needs.

Priority learning needs related to learning disabilities

About 54% of the respondents felt that their most important learning need pertained to understanding the needs of those with learning disabilities, and communicating with and supporting these persons and their families. 11% of respondents expressed needs related to areas of vocational training, promoting autonomy and supporting daily living activities.

Global Priority Learning Needs

The last part of the questionnaire asked respondents to bring together and review all the different learning needs they had expressed - in relation to different areas of CBR Matrix and for the different groups of persons with disabilities. From this review, they were asked to select their three most important learning needs. However, many respondents indicated more than 3 priorities.

At the same time, project managers were asked to review the learning needs expressed by their CBR workers, and to select the three most important learning needs according to their own experience. While eleven project managers completed this part of the questionnaire, two did not. Some of them also indicated more than 3 priorities.

The answers from the two groups of persons (CBR workers and CBR project managers) were analysed, and the frequency of each learning need was calculated. The summary of answers from each group, in order of decreasing frequency, is shown in Table 2.

Table 2. Summary of most important Learning Needs

Areas of Learning Needs of CBR workers	% of Total Learning Needs	
	CBR workers	Proj. Managers
Advocacy, lobbying, legal protection, social protection, DPOs, federations, UNCRPD, legislation, rights-based approach	22%	27%
Promoting economic independence, vocational training, self-help groups	14%	12%
Early identification, child development, prevention, medical rehabilitation, access to medicines	11%	10%
Sign language, hearing and speech disabilities	9%	5%
Self care, activities of daily living	8%	16%
Assistive devices, repair and maintenance, protective footwear, how to access	6%	4%
Issues related to single groups of disabilities such as movement disabilities, mental illness, etc.	6%	2%
Counselling persons with disabilities and families, emotional support, psychosocial support	6%	4%
Inclusive education, non-formal education, working with schools for inclusion	5%	9%
Administrative issues, management, reporting	4%	-
Communication, community awareness, communicating with certain groups such as persons with learning disabilities	3%	5%
Learning about Braille, Braille script	3%	4%
Social and cultural issues, integration in community activities, marriage	3%	-
Severe disabilities	-	2%
Total learning needs	100%	100%

Thus, according to the CBR workers, the most common learning needs are those related to areas of empowerment, livelihood and health (medical rehabilitation). According to the CBR programme managers, the most important learning needs of CBR workers are related to areas of empowerment and health.

CONCLUSION

All the CBR workers from the different CBR projects, managed by NGOs as well as Governments, in Asia, Africa and South America, seem to recognise their

activities within the CBR Matrix framework. Therefore, CBR Matrix can be used as a framework for a systematic review of different CBR project activities.

The most important learning needs expressed by CBR workers and CBR project managers relate to "Empowerment", and include different issues such as promoting DPOs, understanding rights-based approach and how it is implemented, understanding advocacy and lobbying activities and how to implement them, etc. This could be because of the increasing attention given to issues of human rights and empowerment, following the UN Convention on Rights of Persons with Disabilities. However, training of CBR workers does not, as yet, cover these areas adequately.

Asking CBR workers to prioritise their learning needs, helped to focus attention on areas of self-care, economic independence and medical rehabilitation.

Looking at the different learning needs expressed throughout the questionnaire and the comments written by CBR workers, certain issues tend to surface repeatedly. These include the following:

- Issues related to advocacy, DPOs and federations have become increasingly important for CBR projects, but the workers' training has not equipped them to deal with these activities.
- Different activities which come under "Social" domain seem to be unclear to many CBR workers. They tend to view them as "activities from social welfare departments". This can also be an indication that issues related to social relationships and interactions, are inadequately covered in CBR training courses.
- Similarly, the concept of inclusive education and how to put it into practice, is another area that seems unclear to many CBR workers.
- How to communicate with and support persons with disabilities and their families, in terms of inter-personal relationships, is another issue that recurs in many parts of the questionnaire.

However, many "learning needs" expressed by CBR workers, such as "understanding non- formal education", "organising cultural activities" or "understanding Braille", indicate lack of understanding of terms which they may have heard, but which are not part of their work.

With their knowledge of local working conditions, individual programme managers will be able to separate the actual learning needs from terms that need

clarifications. The results from this study can also be useful in reviewing and planning the training of CBR workers and programme managers, along the CBR Guidelines.

Limitations

To facilitate the analysis of data, the sample size of CBR workers from each participating project was limited to 7-10 persons. This did not permit any general conclusions to be drawn about the CBR workers themselves.

All the persons who answered this questionnaire were working at community level, in projects that had received a financial contribution from AIFO, Italy, in 2008. All the different authors are also linked to the same organisation, though in different roles and locations, and this could have influenced the answers collected through the questionnaires.

The questionnaire approach to understand learning needs, can provide indications about areas that require more attention during training. However, planning the actual training interventions to cover those areas would require a more in-depth understanding of existing and required skills.

*Address for correspondence
Head of Medical & Scientific support department, AIFO, Bologna, Italy.
Email: sunil.deepak@aifo.it

**CBR Coordinator, Amici, Bangalore, India
***Head of Project department, AIFO, Bologna, Italy
****Ex-head of Disability and Rehab team, WHO Geneva and
honorary Board member, AIFO-Italy

ACKNOWLEDGEMENT

The authors would like to acknowledge the contribution of different CBR projects, in different countries, which supported this study. Special thanks are due to Mr. M. V. Jose, Mr. B. Ramesh and Sr. Leela in India, for reviewing the results and sharing their ideas about its significance. Finally, thanks are due to Mr. Matthias Mahal, Erasmus student in Bologna University, for data entry and help in the preliminary data analysis.

REFERENCES

1. ILO UNESCO, WHO. ***CBR: A Strategy for Rehabilitation, Equalization of Opportunities, Poverty Reduction and Social Inclusion of People with Disabilities,*** Joint Position Paper, Geneva, 2004.
2. Helander E, Mendis P, Nelson, Goerdt A. ***Training in the Community for People with Disabilities.*** WHO, Geneva, 1989.
3. O'Toole B. ***Multisectoral approach to CBR.*** International Health Cooperation Papers, AIFO, Italy, 1997.
4. WHO, ILO, UNESCO, IDDC. ***Community-based Rehabilitation: CBR Guidelines.*** Geneva, 2010.
5. Thomas M, Thomas MJ. ***Manual for CBR Planners.*** Asia Pacific Disability and Rehabilitation Journal Group Publication, Bangalore India, 2003.
6. WHO. ***Analysis of Evaluation Reports of Six CBR Projects,*** Background papers for "Reviewing CBR – International Consultation", Helsinki, 2003.
7. WHO, AIFO. ***Training needs/opportunities in CBR.*** Report on meeting of experts held in Bologna (Italy) February 2003.
8. Kumaraswamy J. ***CBR Experiences in Malaysia,*** presentation at the first Asia Pacific CBR Congress, Bangkok, February 2009.
9. Omar Z. ***Prosthetic and orthotic training for CBR workers in Malaysia.*** ISPO Asian Orthotic and Prosthetic workshop, Japan, 1998.
10. John M. ***Developing More Effective Training of Community based Rehabilitation Workers to Promote the Social Inclusion of Persons with Disabilities,*** Presentation at CAN Conference, 2010.