Effectiveness of Competency-based Training of Village Rehabilitation Workers in Strengthening Their Community-based Rehabilitation Domains: A Policy Implication

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Abstract

This research paper investigates the effect of a targeted capacity building intervention on Village Rehabilitation Workers (VRWs) within the context of Community-Based Rehabilitation (CBR) Matrix domains in Kalaburagi, Karnataka, India. This research through its intervention approach is conducted to measure changes in VRWs' competencies across the CBR Matrix domains. Key CBR Matrix domains under consideration include health, education, livelihood, social development and empowerment. The capacity building intervention as human capital intervention to improve knowledge and skills of the VRWs in the CBR, is tailored to address specific challenges and gaps identified within each domain, aiming to empower VRWs to enact positive change within their targeted communities i.e. Persons with Disabilities (PWDs).

The findings indicate a significant improvement in VRWs' competencies following the capacity building training. This improvement is observed across various CBR Matrix domains, showcasing the intervention's effectiveness in enhancing VRWs' capacity to address the multifaceted needs of their communities. From the study, it was observed that during the baseline phase, 73% (n =117) of the VRWs had low level of Competency, and 27%, (n=50) of the VRWs had medium level of Competency. End-line status after the intervention, the level of competencies in all domains of CBR has increased. The intervention reversed the VRW's competencies as 69.2%, (n=128) of the VRWs achieved high level of competencies, and 30.8%, (n=57) of the VRWs achieved moderate level of competencies.

In conclusion, the research provides valuable insights into the competencies of VRWs attained to effectively implement the CBR-based programs for Persons with Disabilities in their locality. The findings aim to inform policy and practice dealing with the PWDs, guiding the development of targeted training programs and interventions to strengthen the capabilities of VRWs and foster a more inclusive and accessible healthcare environment for PWDs in rural communities.

Keywords: Competencies, CBR, Village rehabilitation workers, Training

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Received: 26 January 2024 Revised: 20 June 2024 Accepted: 23 June 2024

Introduction

The concept of Community-Based Rehabilitation (CBR) emerged in the 1970s as a response to the limitations of traditional, institution-based rehabilitation services. It aimed to provide a more inclusive, community-driven approach to addressing the needs of persons with disabilities, especially in resource-limited settings. The origins of CBR can be traced back to discussions within international organizations, including the World Health Organization (WHO) and the International Labour Organization (ILO), in the 1970s. The impetus for CBR arose from the recognition that many people with disabilities, particularly in developing countries, were unable to access proper rehabilitation services due to factors such as distance, cost, and lack of trained professionals. The CBR approach was formalized in the Alma-Ata Declaration of 1978, where primary health care was endorsed as the key to achieving health for all. CBR gained further momentum in the 1980s when the WHO, in collaboration with various partners, including NGOs and disabled people's organizations, began to develop CBR guidelines and frameworks (Deepak, 2001).

In the early phase of CBR, it started providing rehabilitative services by providing primary health facilities by utilizing the resources of the community. Primarily, the programs were related to physiotherapy, assistive technology and surgical treatment. Many CBR programs started educational programs and livelihood programs by providing skill development training. WHO published a manual entitled "Training in the community for PWDs" in 1989. This manual aimed to guide and provide support services related to CBR programs and its stakeholders, including PWDs, family, teachers, CBR workers, governmental and non-governmental organizations (Helander, 2007). To benefit a larger population, the manual was translated into fifty languages and is considered as an essential document that is used in different low-income nations. David Werner published a manual entitled "Disabled village children: a guide for community health workers, rehabilitation workers and families" and it played a major role in the implementation of CBR programs particularly in low-income nations (Werner, 1987).

CBR is defined as a "strategy within general community development for the rehabilitation, equalization of opportunities, poverty reduction and social inclusion of PWDs". Furthermore, in 2005, the "World Health Assembly" focused on preventing disabilities and rehabilitation by encouraging nations "to promote and strengthen CBR program" (World Health Organization, 2005.) "CBR is a strategy that promotes collaboration at the community level to enhance social inclusion and participation, reduce poverty and create equal opportunities for all people in the community, including those with disabilities". CBR programs are executed by the joint efforts of PWDs, their family members, organizations and other CBR stakeholders. The principal goal of CBR is to guarantee that PWDs boost their physical and mental capacities, to get access to different facilities, and to develop dynamic support to contribute towards community. CBR also makes sure that there is safeguard of the rights of PWDs by eradicating barriers to make their active participation in society (WHO, 2004). PWDs in CBR programs receive rehabilitative services under five domains. These domains are "Health, Education, Livelihood, Social development, and Empowerment". Many experts dedicate their time and apply their knowledge to assess and provide rules and regulations to implement CBR programs effectively.

Studies focusing on CBR are largely contributed by the WHO through issuing guidelines from time to time. One such publication was released in 2010. The CBR guidelines focused

particularly on all types of disabilities. However, the guidelines were comprehensive enough to cover mental health and other disabilities, which were not covered in the earlier guidelines (WHO, 2010). There have been a very few studies that focused on CBR matrix through systematic review. The studies stated about the civil society organizations that implemented programs under the CBR matrix of WHO. The studies highlighted the fact that the intervention studies under the CBR matrix were very few that the NGOs conducted. The studies largely covered different types of interventions following random control trials. However, the experiments and initiatives could not cover CBR Matrix of WHO (Sue Lukersmith et al., 2013; Shaun Clever et al., 2014; Asher et al., 2017; Butura, et al., 2024). Hence, the present study comprehends the gap in the CBR matrix-based studies in the existing literature. The present study is also unique in the sense of contributing to the WHO matrix-based intervention through capacity building of the VRWs.

Village rehabilitation workers (VRWs) are appointed by the Government of Karnataka, India, to provide rehabilitation services to persons with disabilities and their families at village level. They have multiple roles to perform in the process of rehabilitation. Most importantly, they identify diverse needs of persons with disabilities in the areas of health, education, livelihood, social, and empowerment and assists them in executing daily living activities. They additionally perform a role of advocacy for persons with disabilities in education, health, and skill development and help them to have accessibility and inclusion. Village rehabilitation workers provide awareness about the availability of different assistive devices based on the needs of persons with disabilities to enhance their functioning. They help persons with disabilities to learn "sign language" and make them able to use wheelchair to go from one place to another. Village rehabilitation workers have the role to aware persons with disabilities regarding existing schemes and act as a facilitator between persons with disabilities and service providers.

Aim of the Study

The study aims to find out the effect of competencies-focused training on the Village Rehabilitation Workers (VRWs) across the CBR domains of health, education, livelihood, skill and empowerment. It intends to know how far the capacity-building interventions could produce desired outcome in terms of the competencies of the VRWs.

Method

Research Design

The present study used *one-group pre–post design* to identify the effect of training on the village rehabilitation workers in their CBR matrix domains. Pre intervention data was collected and analyzed. Based on need assessment, training modules were prepared. Training was imparted and after a gap of 45 days, post intervention data collection was completed.

One-group pretest–posttest design or A-B design

Pretest (A)	Intervention	Post-test (B)
O1	X	O2

O1 = Pre-test observation,

X = Intervention,

O2 = Post-test observation.

Variables

Independent variable: Socio demographic variables, CBR domain-based training

Dependent variable: Competency of Village Rehabilitation Workers, Community based Rehabilitation Matrix domains i.e. health, education social development, livelihood and empowerment.

Need assessment of the VRWs

Training needs of the VRWs have been assessed two times, before the intervention and post intervention. Intervention plan was prepared considering the pre intervention training needs of VRWs. Single subject design is the basis of assessing the baseline status for training need assessment, and outcome status to assess the impact of the training on the VRWs.

Method of categorizing the level of needs of VRWs

The training needs have been measured based on following criteria –

i. Responses were recorded based on 5-point Likert scale.

ii. To categorize training needs into low, medium and high, a range was set using the criteria - 5/3 = 1.6 i.e. 5 responses and 3 categories.

iii. The range of 3 categories was set as –

a. The values from 1 to 1.6 were considered as low

b. The values from 1.7 (+1.6) to 3.3 were considered as medium

c. The values from 3.4 (+1.6) to 5 were considered as high

Study area

Kalaburagi district is one of the backward districts of Kalyana-Karnataka region in the state of Karnataka, India. It has a total population of 25,66,326, in which 66,392 are persons with disabilities which constitute 2.58% of the total population. It has low literary rate, low per capita

income, less yield per hectare, and low life expectancy. In 2006, the Ministry of Panchayat Raj, Government of India, named Kalaburagi as one of the country's 250 most backward districts (Mamatha, 2018)**.** It is one of the five districts in Karnataka currently receiving funds from the Backward Regions Grant Fund Programme.

This research study has been conducted in Kalaburagi district of Kalyana-Karnataka. It comprises seven blocks, i.e. Kalaburagi, Chitapur, Aland, Jevargi, Chincholi, Afzalpur, and Sedam. Kalaburagi districts cover 220-gram panchayats in 7 blocks. There are 225 village rehabilitation workers working in the gram panchayats in Kalaburagi, India.

Sample

The population of the present study includes all the village rehabilitation workers working in Kalaburagi district at gram-panchayat level. A total of 185 village rehabilitation workers were recruited from 7 blocks using purposive sampling. List of village rehabilitation workers was prepared in consultation with the District Disability Welfare Office, Kalaburagi. VRWs themselves were persons with disabilities. 185 VRWs have been recruited based on their willingness to participate in the study as there were many who could not participate because of their visual and hearing impairment.

Inclusion criteria

Village rehabilitation workers with experience of not less than 3 years were selected for the study. Only those VRWs were recruited who has experience of working for the rehabilitation of persons with disabilities in their respective Panchayats (local self govt. body).

Exclusion criteria

Village rehabilitation workers with hearing and visual impairment have been excluded from participating into the study.

Data collection procedure

The research was approved by Departmental Research Committee of Ethics at Central University of Karnataka, India, and the consent was taken from all the participants including the District Disability Welfare Office, Kalaburagi, Karnataka, India. After the consent from the concerned office, multipurpose rehabilitation workers (MRWs) have been approached. Multi-purpose rehabilitation workers have been appointed by the Government of Karnataka, at block level to monitor and supervise the functions of village rehabilitation workers in each *panchayat*. In Kalaburagi district, there are seven MRWs, one in each block. Multi-purpose rehabilitation workers have been informed about the pre-intervention data collection, followed by implementation of intervention programs and post-intervention data collection. They have been assigned responsibility to inform village rehabilitation workers in their respective blocks. All village rehabilitation workers were informed, and date of pre-intervention data was finalized with district disability rehabilitation officer, and accordingly all village rehabilitation workers participated in the study. It has been decided that pre-intervention data collection shall be completed at district headquarters Kalaburagi. Village rehabilitation workers from all the seven blocks were informed to be present at District Disability Welfare Office, Kalaburagi, for pre-intervention data collection. One hundred and forty village

rehabilitation workers have been selected for data collection, and data were collected by using questionnaire, which undergone the process of reliability and validity. All the village rehabilitation workers gave their consent to be a part of the study.

Group sessions conducted for the capacity building-training of the VRWs at the premises of the District Disability Welfare Office, Kalaburagi, where 140 village rehabilitation workers have attended the training sessions. The total number of training sessions held was 10, and each session lasted for 1 hour. On collaboration mode, between the Department of Social Work of Central University of Karnataka and the District Disability Welfare Office, conducted the training sessions.

Themes of training sessions for VRWs

Training sessions were designed considering the CBR domains on (a) Concept of disabilities. Typology (blindness, low vision, leprosy cured persons, hearing impairment (deaf and hard of hearing), locomotor disability, dwarfism, intellectual disability, mental illness, autism spectrum disorder, cerebral palsy, muscular dystrophy, chronic neurological conditions, specific learning disabilities, multiple sclerosis, speech and language disability, thalassemia, haemophilia, sickle cell disease, multiple disabilities including deaf-blindness, acid attack victim and Parkinson's disease.

(b) Characteristics, causes, and symptoms of 21 types of disabilities as per the Rights of Persons with Disabilities Act 2016 in India.

(c) Models of disability – charity, medical, social, and biopsychosocial models.

Focus of the training sessions was knowledge, competencies, practice and training needs components of the VRWs to empower them to perform their role in a desirable and expected way.

Instrument

Socio demographic questionnaire:

The socio demographic sheet includes the details related to name, gender, age, education, monthly income, caste, religion, marital status, family type, house type. House ownership, land (in acres) and experience (in years).

CBR Matrix questionnaire: The questionnaire has been developed considering "CBR Matrix" of WHO (2004). The purpose of the tool was to assess the level of knowledge, competencies and needs of Village Rehabilitation Workers (VRWs). There are five domains in the matrix and items have been developed considering all five domains which included education, health, livelihood, social development and empowerment. For the preparation of questionnaire, the items have been reduced in consultation with the experts working in disability management. The items that are repeated/ not relevant were reduced. The questionnaire tool initially consisted of 104 items, after the face validity, content validity and pilot study, items were reduced to 47.

Education domain: The first domain of CBR matrix is education. The items in this domain measures knowledge and competencies related to early childhood education; primary, secondary and higher education, non-formal education and Lifelong learning. There are seven items in the domain. The responses were recorded on five-point Likert scale. i.e., strongly disagree, disagree, undecided,

agree and strongly agree. Here strongly disagree specifies low level of knowledge and competencies and strongly agree shows high level of knowledge and competencies. Reliability of the tool is 0.561.

Health domain: Health is the second domain of CBR matrix. The items in this domain measure knowledge and competencies related to health promotion, prevention, medical care, rehabilitation and assistive devices. There are five items in the domain. The responses were recorded on five-point Likert scale i.e., strongly disagree, disagree, undecided, agree and strongly agree. Here strongly disagree specifies low level of knowledge and competencies, and strongly agree specifies high level of knowledge and competencies. Reliability of the tool is 0.640.

Livelihood domain: Livelihood is the third domain of CBR matrix. The items in this domain measure knowledge and competencies related to skill development, self-employment, wage employment, financial services and social protection. There are seven items in the domain. The items are based on five-point Likert scale i.e. strongly disagree, disagree, undecided, agree and strongly agree. Here, strongly disagree specifies low level of knowledge and competencies, and strongly agree specifies high level of knowledge and competencies. Reliability of the scale is 0.577.

Social development: Social development is the fourth domain of CBR matrix**.** The items in this domain measure knowledge and competencies related to **p**ersonal assistance, relationships, marriage and family, culture and arts, recreation, leisure and sports and justice. There are eight items in the domain. The items are based on five-point Likert scale i.e. strongly disagree, disagree, undecided, agree and strongly agree. Here, strongly disagree specifies low level of knowledge and competencies and strongly agree shows high level of knowledge and competencies. Reliability of the tool is 0.627.

Empowerment domain: Empowerment is the fifth domain of CBR matrix. The items in this domain measure knowledge and competencies related to communication, social mobilization, political participation, self-help groups, and disabled People's Organization. There are eight items in the domain. The items are based on five-point Likert scale i.e., strongly disagree, disagree, undecided, agree and strongly agree. Here, strongly disagree shows low level of knowledge and competencies, and strongly agree specifies high level of knowledge and competencies. Reliability of the tool is 0.445

Perceived training needs: There are twelve statements that assess the needs of VRWs in all the domains of CBR matrix. The items access disability knowledge and CBR matrix components. The responses were recorded on a five-point Likert scale i.e., strongly disagree, disagree, undecided, agree and strongly agree. Here strongly disagree shows high level of training need and strongly agree shows low level of training needs.

Table 1 Socio-demographic details of the VRWs

Socio-demographic variables	Category	n	Percentage
Age (in years)	18-27	16	8.6
	28-37	78	42.2
	38-47	77	41.6
	48-57	14	7.6
	Total	185	100.0

Socio-demographic variables	Category	n	Percentage
Gender	Male	146	78.9
	Female	39	21.1
	Total	185	100.0
Education	SSLC	80	43.2
	PUC	58	31.4
	Graduation	47	25.4
	Total	185	100.0
Category	General	61	33.0
	OBC	78	42.2
	SC/ ST	46	24.9
	Total	185	100.0
Religion	Hindu	164	88.6
	Muslim	20	10.8
	Buddhist	1	.5
	Total	185	100.0
Marital Status	Married	140	75.7
	Unmarried	45	24.3
	Total	185	100.0
Family Type	Nuclear	110	59.5
	Joint	75	40.5
	Total	185	100.0
Experience (in years)	0-3	32	17.3
	4-9	30	16.2
	10 & above	123	66.5
	Total	185	100.0

Table 1 indicates socio-demographic details of the respondents. A Majority of the VRWs, 42.2% (n=78) belong to the age group of 28 to 37 years, 41.6% (n=77) belong to age group of 38 to 47 years, 8.6% (n= 16) belong to 18 to 27 age group, and 7.6% (n=14) belong to age group of 48 to 57 years. Gender distribution shows that a majority of the VRWs, 78.9% (n=146) belong to male category, while 21.1% (n=39) belong to female category. Education background of the VRWs indicate that 43.2% (n=80) VRWs have qualified SSLC, 31.4% (n=58) passed PUC, while 25.4% (n=47) VRWs are graduates. Caste-wise distribution shows that a majority of the participants 42.2% (n=78) belong to other backward castes (OBC), 33% (n=61) belong to general category followed by 24.9% (n=46) belong to scheduled tribes (SC/ST). Religion distribution of the VRWs shows that a majority of the participants, 88.6% (n=164) are Hindus, 10.8% (n=20) are Muslims followed by 0.5% (n=1) belong to Buddhism. Marital status of the VRWs observed that a majority of the participants 75.7% (n=140) are married, while as 24.3% (n=45) are unmarried. Family status indicate that a majority of the participants 59.5% (n=110) belong to nuclear families while as 40.5% (n=75) participants belong to joint families. Experience background of the VRWs show that a majority of the participants 66.5% (n=123) experience is 10 years and above, 17.3% (n=32) VRWs have the experience of 3 years followed by 16.2% (n=30) VRWs have the experience of 4-9 years.

Table 2 Level of Competencies of VRWs in Education domain

	Pre-Intervention		**Post-Intervention**	
	Frequency	Percent	Frequency	Percent
Low	137	74.1	10	5.4
Medium	46	24.9	75	40.5
High	2	1.1	100	54.1
Total	185	100.0	185	100.0

Table 2 indicates the level of competency related to Education domain of CBR. Before intervention, it was found that 74.1%, (n =137) VRWs had low level of competency, 24.9%, (n=46) had moderate level of competency followed by 1.1%, (n=2) VRWs with high level of competency. After the intervention, the level of competency in Education domain of CBR has increased. 54.1%, (n=100) VRWs have high level of competency, 40.5%, (n=75) VRWs have moderate level of competency followed by 5.4% (n=10) VRWs with low level of competency.

Table 3 Level of Competencies of VRWs in Health domain

	Pre-Intervention		**Post- Intervention**	
	Frequency	Percent	Frequency	Percent
Low	130	70.3	21	11.4
Medium	52	28.1	54	29.2
High	3	1.6	110	59.5
Total	185	100.0	185	100.0

Table 3 indicates the level of competency related to Health domain of CBR. Before intervention, it was found that 70.3%, (n =130) VRWs had low level of competency, 28.1%, (n=52) VRWs had moderate level of competency followed by 1.6%, (n=3) VRWs with high level of competency. After the intervention, the level of competency in Health domain of CBR has increased. 59.5%, (n=110) VRWs have high level of competency, 29.2%, (n=54) VRWs have moderate level of competency followed by 11.4% (n=21) VRWs with low level of competency.

Table 4 Level of Competencies of VRWs in Livelihood domain

	Pre-Intervention		**Post Intervention**	
	Frequency	Percent	Frequency	Percent
Low	53	28.6	9	4.9
Medium	131	70.8	133	71.9
High	1	.5	43	23.2
Total	185	100.0	185	100.0

Table 4 indicates the level of competency related to Livelihood domain of CBR. Before intervention, it was found that 28.6%, (n =53) VRWs had low level of competency, 70.8%, (n=131) VRWs had moderate level of competency followed by 0.5 (n=1) VRWs with high level of competency. After the intervention, the level of competency in Livelihood domain of CBR has increased. 23.2%, (n=43) VRWs have high level of competency, 71.9%, (n=133) VRWs have moderate level of competency followed by 4.9% (n=9) VRWs with low level of competency.

Table 5 Level of Competencies of VRWs in Social development domain

	Pre-Intervention		**Post Intervention**	
	Frequency	Percent	Frequency	Percent
Low	156	84.3	2	1.1
Medium	27	14.6	34	18.4
High	2	1.1	149	80.5
Total	185	100.0	185	100.0

Table 5 indicates the level of competency related social development domain of CBR. Before intervention, it was found that 84.3%, (n =156) VRWs had low level of competency, 14.6%, (n=27) VRWs had medium level of competency, followed by 1.1%, (n=2) VRWs with high level of competency. After the intervention, the level of competency in social development domain of CBR has increased. 80.5%, (n=149) VRWs have high level of competency, 18.4%, (n=34) VRWs have medium level of competency followed by 1.1% (n=2) VRWs with low level of competency.

Table 6 Level of Competencies of VRWs in Empowerment

	Pre-Intervention		**Post Intervention**	
	Frequency	Percent	Frequency	Percent
Low	118	63.8	0	0
Medium	61	33.0	41	22.2
High	6	3.2	144	77.8
Total	185	100.0	185	100.0

Table 6 indicates the level of competency related to Empowerment domain of CBR. Before intervention, it was found that 63.8% (n =118) VRWs have low level of competency, 33%, (n=61) have medium level of competency, followed by 3.2%, (n=6) with high level of competency. After the intervention, the level of competency in Empowerment domain of CBR has increased. 77.8%, (n=144) have high level of competency where as 22.2%, (n=41) have medium level of competency.

Table 7 Competencies in CBR Matrix domains

	Pre-Intervention		**Post Intervention**	
	Frequency	Percent	Frequency	Percent
Low	135	73.0	0	0
Medium	50	27.0	57	30.8
High	0	0	128	69.2
Total	185	100.0	185	100.0

Table 7 indicates the total level of Competency on different domains of CBR Matrix (Education, Health, Livelihood, Social and Empowerment). Before intervention, it was found that 73%, (n =117) VRWs have low level of Competency and 27%, (n=50) VRWs have medium level of Competency. After the intervention, the level of Competency in all domains of CBR has increased. 69.2%, (n=128) VRWs have high level of Competency and 30.8%, (n=57) VRWs have medium level of Competency.

Table 8 Paired sample t test for pre and post scores on CBR matrix domains of VRWs

	n (no. of participants)	**Mean**	**SD (Standard deviation)**	**df**	**t (t value)**	**p (Significant value)**
Pre- test scores of CBR matrix	185	50.8865	6.95585	184	-43.717	.000
Post- test scores of CBR matrix		90.7838	13.31462			

Table 8 shows the paired sample t test to compare the scores of CBR matrix domains of the VRWs before and after the intervention. There is a significant difference found in the level of CBR matrix between pretest (M= 50.8865, SD=90.7838) and post-test (M=6.95585, SD= 13.31462, df=184; t = -43.717, $p<0.01$) phases of the VRWs. The result indicates significant effect of the capacity building human capital intervention in improving the competencies of the VRWs.

Discussion

Community rehabilitation workers have a vital responsibility in imparting the services to disabled population. To provide better services, there is a need to be competent to organize outreach activities in society and provide awareness to the community about the prevention of diseases. They need to help PWDs to get benefitted from medical services and need to provide referral services and assistance to get social support. They need to have the competency to deliver training to PWDs about self-management to acquire their health-related targets.

From the findings, it is observed that competencies of the VRWs have increased after the intervention in all the domains of CBR matrix. Out of 185 VRWs, a large number of the VRWs (n=135) despite their work experience, they lacked in knowledge and skill domains of the CBR. The human capital in terms of knowledge and skills of the VRWs drastically improved during the post-training phase. Although, the RPD Act insists on the empowerment of the CBR at the grassroots, efforts have been minimal and not satisfactory. Unless the competencies of the VRWs improve, empowerment of the CBR is a mirage. The study rightly perceived the gaps in the system of CBR and intervened through capacity-building training for the VRWs. The study also emphasizes the need of stakeholder approach that through collaboration resilience and synergy is created to improve the functioning of the CBR system. (Gibson et al., 2010) reported that capacity building program has increased the level of knowledge among health workers. The training was effective in improving knowledge related to mental health among community rehabilitation workers. (Remington et al., 2010) discussed fundamental competencies that determine the actions and skills of a community health worker to provide rehabilitation. Competencies that need "to be learned on the job" depends on knowledge, skills and practices of rehabilitation workers. They have awareness regarding social issues and problems related to PWDs and their physical health-related problems. They possess complete knowledge about various mental illnesses and are aware of the difficulties in the functioning of such persons. Competencies include knowledge about different methods to maintain the status of mental health and wellbeing of PWDs. They are equipped with the information on community health resources and amenities.

Competencies can be developed by providing capacity building programs to CBR workers and need to be part of planning, implementation and delivery of the services. Capacity building programs need to be "context-sensitive" and adopt "rights-based approach". Training programs to enhance competencies of CBR workers need to be supervised and to be continuously observed so that their problems can be solved collectively. Moreover, CBR workers are dignified persons and need to be respected and should get an identity as professional workers who will enhance their decision-making process. CBR workers need to follow strategies for the effective delivery of services and adopt "integrated tiered system" in which professional rehabilitation workers, as well as ordinary rehabilitation workers, perform their roles. It is vital to involve PWDs in decision making of selecting CBR workers in the community. CBR workers need to get training related to "case management, social protection, the CBR Matrix, monitoring and recording." CBR workers need to develop and implement counselling skills while dealing with PWDs and their family members to provide rehabilitative services (Gilmore, et al., 2017).

CBR workers find their main competency as the capacity to perform "early identification and screening" of PWDs within the community so that they can be provided effective interventions to overcome disabilities. CBR workers can identify health conditions and impairments such as "cerebral palsy, epilepsy, learning disabilities, spinal cord injuries and mental illness". CBR workers usually work alone as in most of the areas there are no clinics, and therefore, they need to be equipped with clinical skills to identify the impairments of the persons and provide rehabilitation to such persons.

CBR workers have the competency to make negotiations for inclusive development of PWDs in the communities. They need to make sure that PWDs become the part of their families and communities in which they have been excluded. They possess the skills to take initiatives regarding inclusive education and self-employment of PWDs. They have skills to mobilize individuals, family

members, key persons in the community and identifying locally available resources for the economic development of PWDs and their families. CBR workers have competencies to organize awareness programs regarding disability. They play an essential role in educating community members regarding various diseases and impairments and provide intervention for their wellbeing. CBR workers follow inter-sectorial approach and coordinate in collaboration with other departments for an effective outcome of CBR programs. Community based Rehabilitation workers usually work in rural areas where there is a scarcity of professional services to provide services with great impact. CBR workers act as a rehabilitation therapist and provide essential support in the process of rehabilitation of PWD's. They have skills in project planning and management of CBR activities and work for the sustainability of such programs for the betterment of PWDs and their family members (Lorenzo et al., 2015).

Policy implications of the study

Results of the study have a strong bearing on the functioning of the government agencies and non-government organizations working for the rehabilitation of the PWDs, which are engaged in implementing the CBR at the grass-root level. The Rights of Persons with Disability Act, 2016, section 47 states the need for human resource development of the stakeholders working for the Persons with Disabilities. It states that the capacity-building training programmes in accordance with the need-analysis require conducting for the various stakeholders. VRWs are the main stakeholders to empower the community-based rehabilitation system at the grass-root level. The need-assessment conducted as part of the capacity-building training for the VRWs, indicated lacking in their competencies across the CBR domains, which set barrier in effective functioning of the VRWs. The present study shows a model of human resource development, and responsibility of the higher education institutions towards the effective implementation of the CBR system through a need-based training program designed to empower the VRWs. Non-government organizations working for the PWDs are also an important stakeholder in the CBR, working in collaboration with the government agencies. For such organizations, the present study provides a human resource development model to work with the VRWs and CBR system, through replicating the capacity-building training program.

Limitations of the study

The present study used one-group pre-test–post-test design. This design restricts the actual understanding of the effect as there was no control group to compare groups. The present study did not have a control over the variables such as experience and education of the participants. The present study did not select the participants according to the proportion of population in each taluka.

Conclusion

This research paper underscores the necessity of an integrated and community-driven approach to address the diverse needs of persons with disabilities in India. By advocating for the implementation of Community Based Rehabilitation (CBR) and emphasizing the pivotal role of Village Rehabilitation Workers (VRWs), this paper aims to contribute to a more inclusive and empowering future for individuals with disabilities in rural India. The study also emphasizes the significance of integrating the capacity-building training in the RPD act in order to empower the grass

root functionaries and CBR system at the grass root level. The policy on the Persons with Disabilities need to clearly specify the role of human capital-based trainings that are CBR Matrix domain-specific to be integrated in order to empower the effective functioning of the CBR system.

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