

Impact of Community Based Rehabilitation Program on Education and Rehabilitation of Persons with Intellectual Disability

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Abstract:

The present study aimed to investigate the impact of "Community Based Rehabilitation Program" on Education and Rehabilitation of Persons with Intellectual Disability between the age ranges of 0-18 years & above and attempted to analyze these impacts with respect to persons with intellectual disability's skill development, parent's reaction, attitude, awareness, acceptance, involvement, future expectations, quality of life of persons with intellectual disability and their families and community members (Village Heads/Counselor, Health Workers, School Teachers & Youth/Panchayat Leaders) prior & after CBR program, under CBR program, School areas and Non-CBR areas. Descriptive and exploratory research design was employed for this study. Stratified random sampling method was used. The sample consisted of 86 persons with intellectual disability & their parents/families (46 from under CBR program and 40 from Non-CBR program/areas) between the age ranges of 0-18 years & above and 20 community members from CBR areas and Non-CBR areas, residing in Bhubaneswar district (Odisha) in East India. Data had collected through MDPS (Jaychandran & Vimla, 1975) and Interview Schedule

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developed by the author. The data has analyzed through Descriptive and Inferential Statistical techniques to find the relation between the study variables. The result indicates that there is significant impact of CBR program on Education and Rehabilitation of Persons with Intellectual Disability.

Key words: Impact, Community, Community Based Rehabilitation Program, Education, Rehabilitation, Persons with Intellectual Disability, Persons with Disabilities.

INTRODUCTION:

The Community Based Rehabilitation (CBR) approach was formalized by the World Health Organization (WHO) in the late 1970s as “a strategy to improve access to rehabilitation services for people with disabilities in low-income and middle-income countries” (World Health Organization, 2010). In 2004, a joint position paper defined CBR as “a strategy within general community development for the rehabilitation, equalization of opportunities and social inclusion of all people with disabilities” **(ILO, UNESCO & WHO, 2004)**. Over time CBR has evolved into a multi-sectored strategy encompassing services within Health, Education, Livelihood, and Social development sectors **(World Health Organization, 2010)**.

An individual with disability can be referred as temporary/partial or permanent conditional aspect of functional limitation and most critical aspect of disability lead to permanent failure in their day to day life. It can be more vulnerable with their nature of disability and the activities he/she involved. Commonly it represents a person who unable to function independently in the community without any support due to disease, severe injuries, trauma, impairment, psychiatric disorder, chronic illness, congenital, inadequate environment for development or physical disorders, and thus

provision of his/her rights necessitates special attitude. Correspondingly, the nature of disability represents a unique hidden feature of the community, society, civil institutions and material environment, due to that people with various physical, intellectual, emotional, mental or sensory problems have no equal chance of opportunities and participation towards their personal development and self-realization **(Kumar & Jain 2014)**.

The term Intellectual Disability **(ID)** (in India, the term Mental Retardation is used in the place of Intellectual Disability) as commonly used today, embraces a heterogeneous population, ranging from totally dependent to nearly independent people. Although all individuals so designated share the common attributes of low intelligence and inadequacies in adaptive behavior, there are marked variations in the degree of deficit manifested and the presence or absence of associated physical handicaps, stigmata and psychologically disordered states. These variations greatly affect the needs of retarded individuals, the nature of the problems and services required by their families, and the burdens posed to community agencies and supportive systems. The differences are highly related to etiological factors, setting biologically damaged persons apart from psychosocially disadvantaged individuals on a number of significant dimensions, performance, problems, potentials, and prognosis **(Switzky & Greenspan 2006)**.

Persons with Mental Retardation have been historically referred in Indian context, through pre independence and post – independence era. However the shift has been significant in management and care of these persons over the recent decades. Initially they were seen as subjects of pity who are dependent on others and thus deserved charity; hence only residential care was felt necessary. After the introduction of modern education in post - independence period with scientific advances in health and developmental studies, the scenario underwent a sea

change. There was an increased realization that placement in community can improve their competencies behaviorally, socially and cognitively. Hence Parents became involved with support of community resources made accessible for achieving comprehensive rehabilitation (**Training Module on Mental Retardation: SSA**).

Actual number of persons with Mental Retardation is estimated to be 2% to 3% of any given total population as per international estimates of WHO. International estimates are followed in India as there is no systematic enumeration study available in Indian context, reason being the large geographical spread of the country. This also applies to the distribution of persons with mental retardation across degree of disability and curricular wise division. Data obtained from various sources indicate that the prevalence rate of Mental Retardation is about 20 per 1000 of general population, while the prevalence of developmental delays is about 30 per 1000 in the 14 year old population. In rural areas, the incidence of Mental Retardation is 3.1% and in urban, it is 0.9%. The report by NIMH, Secunderabad states that 2% of general population has persons with Mental Retardation and three quarters of them are with Mild and one fourth is with severe Mental Retardation (**Jayachandran, 2004**).

CBR for persons with mental retardation involves, training the persons, empowering the families and reduce stress and cope with the condition of the individual with mental retardation. In other words, training is the main focus. The CBR worker should be competent in training ranging from early intervention, activities for daily living, referral to school, vocational training and parental support to reduce stress. This demands a different orientation of the CBR worker to be successful in empowering the person with mental retardation and families and community in general. It is also to be noted that CBR for disabilities other than mental retardation involves

arranging for surgery where appropriate, supply of aids and appliances and assistive devices, education, linkages to funding sources for economic rehabilitation and guiding the disabled person towards independent living (**Narayan, 2015**).

Support services enable disabled persons including persons with intellectual disability to live as equal members of the wider community. These services include peer counseling (counseling by and for disabled persons), information and referral services on community resources (public and private) that disabled persons may avail themselves of, social skills training for disabled persons to learn to make their own decisions in day-to-day living, advocacy for disabled individuals to obtain the services and equipment needed, community-level advocacy for the integration of disabled persons in the community, and other services which are deemed necessary, depending on the needs of disabled persons in a particular community (**UNESCAP, 1991: Self-Help Organizations of Disabled Persons**).

A research conducted on “Training of Trainers on ID for CBR Workers” by **Narayan & Reddy (2008)**. In this they found a major difference between CBR for people with ID and other disabilities is that people with ID need appropriate training for independent living while people with other disabilities need suitable aids and appliances, assistive devices and guidance so that they can function in society with minimal support. Most CBR programs, they suggest, have minimal focus on ID. 13 Twenty three Community Coordinators for Disabilities (CC-D) or Community Development Workers (CDWs) were trained using a manual on ID which included a “Training of the Trainers” package to train the trainers of grass root level workers. Participants in the training were tested using a multiple choice questionnaire for knowledge of ID pre and post training. There was a mean gain of 15% in scores (70% pre-test/85% post-test). An impact evaluation was done by

listening to reports of each participant. After training they had gained competencies and were able to see progress in people with ID. These essentially anecdotal reports suggest that progress was seen in some areas, with training tips to parents being helpful and the person with ID learning faster.

Another research conducted on “Parents Evaluation of CBR in Jamaica” by **Thorburn (1992)**. A CBR program in Jamaica involving children with all types of disabilities (including ID) was evaluated through a survey of parents’ views of the CBR service. A total of 375 questionnaires were included in the analysis. However, questionnaires were anonymous so that it was not possible to look at responses based on different disability categories thus it was not possible to draw any conclusions in relation to type or severity of disability, or age. Thus, whilst it was found that 76% of parents said that their child had done better since being in the program.

Nordholm & Lundgren-Lindquist (1999) also highlighted in their research on effect of CBR in Botswana. Total 151 disabled persons were identified via a house to house survey of whom data was available for 132. Rehabilitation interventions were proposed for all those identified and two follow up studies conducted. Of those identified, 22% were younger than 15 years of age and the second largest group was those with ID (33%). However, it is not possible to extract any information with regards to children with ID per se. The only point noted with regards to children is that the CBR program had promoted integration into normal schools for physically disabled children and referrals to special schools for those with hearing and seeing disabilities. Hence, no information of the effectiveness of CBR for children with ID can be extracted from this study.

Community Based Rehabilitation Program (CBR) is probably the most suitable way not only for Persons with Intellectual Disability but whole disabilities for better training,

education and rehabilitation. CBR is a well planned strategy for implementing of need based rehabilitation services to persons with disabilities in their communities. The existing understanding is that CBR is a multipurpose community development program, which is multidisciplinary and addresses all multiple areas that are centre for the improvement of quality of life of persons with disabilities including persons with intellectual disability.

The present study attempts to examine the impact of community based rehabilitation program (CBR) with respect to education, rehabilitation, skill development, parent's reaction, attitude, awareness, acceptance, involvement, quality of life of Persons with Intellectual Disability and their families and community members and future expectations for Persons with Intellectual Disability as a consequence of CBR program.

OBJECTIVES OF THE STUDY:

The objectives of the study are:

1. To assess the skill development in the Persons with Intellectual Disability under CBR programme through intervention by Parents and CBR workers.
2. To assess the skill development in the Persons with Intellectual Disability under School setup through intervention by Teachers and the Parents.
3. To find out the changes in the reaction & attitude of Parents towards Persons with Intellectual disability as a result of CBR program.
4. To study the attitude, acceptance and awareness (related to social benefit schemes and services) of community members towards Persons with Intellectual disability under CBR & School areas.

HYPOTHESIS:

Having the objectives mentioned above the following hypothesis is formulated to be tested.

1. There is no significant difference in the skill development of Persons with Intellectual Disability prior and after CBR programme in different age groups such as (a) 0-6 years (b) 6-18 years (c) 18 years and above.
2. There is no significant difference in the skill development of Persons with Intellectual Disability under CBR and School areas in different age groups such as (a) 0-6 years (b) 6-18 years(c) 18 years and above.
3. There is no significant difference in parents of Persons with Intellectual disability prior and after CBR programme regarding reaction & attitude towards Persons with Intellectual disability.
4. There is no significant difference between the community members of CBR and School areas regarding attitude, acceptance and awareness (related to social benefit schemes and services) towards Persons with Intellectual disability.

METHOD:

The researcher chooses the descriptive and exploratory method for this research. The study sample was composed of total 86 children with Intellectual Disability between the age ranges of 0 to 6, 6 to 18 and 18 years & above and the equal numbers of their families 86, and 20 community members from the population under CBR program and non CBR area, selected through stratified random sampling residing in khurd, Bhubaneswar, district of Odisha state, North-East India. Assessment tool adopted by the researcher which is Madras

Developmental Programming System (MDPS) containing Part-1 & Part 2 for assessing skill development and Interview Schedules developed with proper coding for assessing the other variables of this research. The data was collected through the above assessment tool and interview schedules and the internal consistency of tool was established. Data were tabulated and analyzed using appropriate statistical techniques.

RESULTS:

Testing of Hypothesis-1

Skill development of Persons with ID in the age group of 0-6 years in all domains in MDPS check list prior and after CBR program:

H₀: There exists no significant differences between the mean scores of development / improvement of Persons with ID in the age group of 0-6 years prior to cbr program (\bar{x}) and the mean scores of development of Persons with ID in the age group of 0-6 years after implementation CBR program (\bar{y}) in the areas of Cognitive Skills, ADL Skills, Motor Skills, Language Skills, and Socialization Skills.

TABLE: 1: Skill Development prior & after CBR Program between 0-6 Years:

H ₀	Domains	Age group of children	Mean	Sample (n)	Z _o	Zt at 5% level of significance	Inference
There is no significant difference between the mean scores of \bar{x} and \bar{y} in the areas of cognitive, ADL, motor, language	Cognitive skills	0-6 years	$\bar{x} = 4.550$ $\bar{y} = 19.783$	3 27	13.099	1.96	H ₀ is rejected
	ADL Skills	0-6 years	$\bar{x} = 8.600$ $\bar{y} = 30.533$	3 27	10.990	1.96	H ₀ is rejected
	Motor skills	0-6 years	$\bar{x} = 7.800$ $\bar{y} = 37.200$	3 27	15.570	1.96	H ₀ is rejected
	Language skills	0-6 years	$\bar{x} = 3.333$ $\bar{y} = 18.050$	3 27	14.799	1.96	H ₀ is rejected

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and socialization skills.	Socialization skills	0-6 years	$\bar{X} = 5.050$ $\bar{Y} = 26.500$	$\frac{3}{27}$	16.055	1.96	H ₀ is rejected
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Z₀ : Observed value of Z.

Z_t : Table value of Z at 5% level of significance

It is evident from the above table that Z scores at 5% level of significance in respect of cognitive, ADL, motor, language and socialization skills after implementation of CBR Program, Since the mean scores of cognitive, ADL, motor, language and socialization skills are significantly higher than the mean scores of cognitive, ADL, motor, language and socialization skills prior to CBR Program, Thus the null hypothesis is rejected. Hence it is inferred that there is improvement in the children with Intellectual disabled in the age group of 0-6 years, after implementation of CBR Program. So there is positive impact of CBR Program on Persons with Intellectual disabled.

Skill development of Persons with ID in the age group of 6-18 & 18 years and above in all the domains in MDPS-scale prior and after CBR program:

H₀: There exists no significant differences between the mean scores of improvement of Persons with ID in the age group of 6-18, 18& above years prior to cbr program \bar{x} and the mean scores of development of Persons with ID in the age group of 6-18, 18 & above years after implementation of cbr program \bar{y} in the areas of Motor Skills, ADL Skill, Language Skills, Socialization Skills, Functional Academics, Domestic Activities, Community Orientation, Recreation and Leisure Time Activities and Vocational Skills.

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TABLE: 2: Skill Development prior & after CBR Program between 6-18, 18 & above:

H ₀	Domains	Age group of children with ID	Mean	Sample (n)	Z ₀	Z _t at 5% level of significance	Inference
There is no significant difference between the mean scores of \bar{X} and \bar{Y} in the areas of Motor skills, ADL skills, language skills, socialization skills, functional academics, domestic activities, community orientation, recreation and leisure time activities and vocational skills in the age group of 6-18, 18 years & above years.	Motor skills	6-18 years	\bar{X} =10.267 \bar{Y} =16.350	29 7	7.786	1.96	H ₀ is rejected
		18 & above years	\bar{X} =13.667 \bar{Y} =21.117	14 6	9.013	1.96	H ₀ is rejected
	ADL skills	6-18 years	\bar{X} =13.383 \bar{Y} =23.139	29 7	9.756	1.96	H ₀ is rejected
		18 & above years	\bar{X} =20.083 \bar{Y} =29.993	14 6	9.910	1.96	H ₀ is rejected
	Language skills	6-18 years	\bar{X} = 5.917 \bar{Y} =13.611	29 7	7.694	1.96	H ₀ is rejected
		18 & above years	\bar{X} = 7.883 \bar{Y} =16.233	14 6	9.931	1.96	H ₀ is rejected
	Socialization skills	6-18 years	\bar{X} = 3.117 \bar{Y} =10.682	29 7	7.565	1.96	H ₀ is rejected
		18 & above years	\bar{X} = 4.500 \bar{Y} =14.290	14 6	9.790	1.96	H ₀ is rejected
	Functional academics	6-18 years	\bar{X} = 1.200 \bar{Y} = 9.233	29 7	7.362	1.96	H ₀ is rejected
		18 & above years	\bar{X} = 4.717 \bar{Y} =11.144	14 6	6.427	1.96	H ₀ is rejected
	Domestic activities	6-18 years	\bar{X} = 0.350 \bar{Y} = 6.767	29 7	5.908	1.96	H ₀ is rejected
		18 & above years	\bar{X} = 1.600 \bar{Y} = 9.683	14 6	8.567	1.96	H ₀ is rejected
	Community orientation	6-18 years	\bar{X} = 1.133 \bar{Y} =11.683	29 7	9.677	1.96	H ₀ is rejected
		18 & above years	\bar{X} = 3.100 \bar{Y} =11.033	14 6	9.866	1.96	H ₀ is rejected
	Recreation and leisure time activities	6-18 years	\bar{X} = 0.850 \bar{Y} = 7.833	29 7	6.936	1.96	H ₀ is rejected

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		18 & above years	$\bar{X} = 1.917$ $\bar{Y} = 8.885$	14 6	7.904	1.96	H ₀ is rejected
	Vocational skills	6-18 years	$\bar{X} = 0.000$ $\bar{Y} = 4.617$	29 7	3.194	1.96	H ₀ is rejected
	Vocational skills	18 & above years	$\bar{X} = 0.500$ $\bar{Y} = 5.250$	14 6	4.844	1.96	H ₀ is rejected

The above table shows that Z scores at 5% level of significant in respect of 6-18, 18 years & above years of Persons with Intellectual disability are improved in the areas of Motor, ADL, Language, Socialization, Functional academics, Domestic activities, Community orientation, Recreation and leisure time activities and Vocation skills, since the mean scores of Motor, ADL, Language, Socialization, Functional academics, Domestic activities, Community orientation, Recreation and leisure time activities and Vocational skills after implementation of CBR Program proved significantly higher than the mean scores of Motor, ADL, Language, Socialization, Functional academics, Domestic activities, Community orientation, recreation and leisure time activities and Vocational skills prior to CBR Program, Thus the null hypothesis is rejected. Hence, it is revealed that there is improvement in the Persons with Intellectual disabled in the age group of 6-18, 18 years & above years after implementation of CBR Program. So there is positive impact of CBR Program on Persons with Intellectual disability.

Testing of Hypothesis-2

Skill development of Persons with ID in the age groups of 0-6 years in selected domains of MDPS check list under CBR and School areas:

H₀: There exist no significant differences between the mean scores of z development / improvement of Persons with ID in the age group of 0-6 years under CBR setup \bar{x} and School setup

\bar{y} in the domains of Cognitive Skills ADL Skills, Motor Skills, Language and Socialization Skills.

TABLE: 3: Skill Development under CBR & School Areas between 0-6 Years:

H ₀	Domains	Age group of children	Mean	Sample (n)	Z ₀	Z _t at 5% level of significance	Inference
There is no significant difference between the mean scores of \bar{X} and \bar{Y} in the areas of cognitive skills, ADL skills, motor skills, language skills, and socialization skills	Cognitive skills	0-6 years	\bar{X} =13.317 \bar{Y} =14.900	03 27	0.490	1.96	H ₀ is rejected
	ADL skills	0-6 years	\bar{X} =21.617 \bar{Y} =24.150	03 27	0.058	1.96	H ₀ is rejected
	Motor skills	0-6 years	\bar{X} =27.217 \bar{Y} =29.133	03 27	0.712	1.96	H ₀ is rejected
	Language skills	0-6 years	\bar{X} =12.417 \bar{Y} =12.333	03 27	1.003	1.96	H ₀ is rejected
	Socialization skills	0-6 years	\bar{X} =17.450 \bar{Y} =18.467	03 27	0.354	1.96	H ₀ is rejected

It is evident from the above table that Z scores at level of 5% significance in respect of Cognitive Skills ADL Skills, Motor Skills, Language and Socialization Skills. Thus the null hypothesis is rejected. So, it is inferred that the improvement of Persons with ID in cognitive, ADL, motor, language and socialization skills under CBR and School areas of are more or less the same.

Skill development of Persons with ID in the age groups of 6-18 and 18 & above years in all domains of MDPS Scale under CBR and School areas:

H₀: There exists no significant difference between the mean scores of improvement of Persons with ID in the age group of 6-18, 18 years & above under CBR community (\bar{x}) and the mean score of development of Persons with ID in the age group of 6-18, 18 years & above under School (\bar{y}) in the respect of Motor Skills, ADL Skills, Language Skills, Socialization Skills,

Functional Academics, Domestic Activities, Community Orientation Recreation And Leisure Time Activities, and Vocational Skills.

TABLE: 4: Skill Development Under CBR & School Areas between 6-18, 18 & Above:

H ₀	Domains	Age groups of children with M.R	Mean	Sample(n)	Z ₀	Z _t at 5% level of significance	Inference	
There is no significant difference between \bar{X} and \bar{Y} in the areas of motor skills, ADL skills, language skills, socialization skills, functional academics,	Motor skills	6-18 years	\bar{X} =13.017 \bar{Y} =12.817	29 07	0.198	1.96	H ₀ is rejected	
		18 years & above	\bar{X} =17.683 \bar{Y} =17.267	14 06	0.394	1.96	H ₀ is rejected	
	ADL skills	6-18 years	\bar{X} =20.467 \bar{Y} =20.883	29 07	0.186	1.96	H ₀ is rejected	
		18 years & above	\bar{X} =26.300 \bar{Y} =31.750	14 06	2.108	1.96	H ₀ is rejected	
	Language skills	6-18 years	\bar{X} =8.083 \bar{Y} =9.350	29 07	1.253	1.96	H ₀ is rejected	
		18 years & above	\bar{X} =10.683 \bar{Y} =13.167	14 06	2.198	1.96	H ₀ is rejected	
	Socialization skills	6-18 years	\bar{X} =4.200 \bar{Y} =5.133	29 07	1.674	1.96	H ₀ is rejected	
		18 years & above	\bar{X} =6.167 \bar{Y} =6.917	14 06	1.297	1.96	H ₀ is rejected	
	Domestic activities community orientation, recreation and leisure time activities and vocational skills in the age group of 6-18, 18 years & above years.	Functional academics	6-18 years	\bar{X} =4.350 \bar{Y} =6.767	29 07	1.875	1.96	H ₀ is rejected
			18 years & above years	\bar{X} =7.967 \bar{Y} =11.917	14 06	1.935	1.96	H ₀ is rejected
		Domestic activities	6-18 years	\bar{X} =1.400 \bar{Y} =2.050	29 07	1.475	1.96	H ₀ is rejected
			18 years & above years	\bar{X} =4.033 \bar{Y} =4.817	14 06	1.088	1.96	H ₀ is accepted
Community orientation		6-18 years	\bar{X} =3.067 \bar{Y} =3.700	29 07	0.999	1.96	H ₀ is accepted	

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		18 years & above years	$\bar{X} = 5.017$ $\bar{Y} = 5.783$	14 06	0.930	1.96	H ₀ is accepted
	Recreation leisure time activities	6-18 years	$\bar{X} = 1.850$ $\bar{Y} = 2.450$	29 07	1.176	1.96	H ₀ is rejected
		18 years & above years	$\bar{X} = 3.333$ $\bar{Y} = 3.500$	14 06	0.252	1.96	H ₀ is rejected
	Vocational skills	6-18 years	$\bar{X} = 0.283$ $\bar{Y} = 1.043$	29 07	0.249	1.96	H ₀ is rejected
		18 years & above years	$\bar{X} = 1.317$ $\bar{Y} = 3.894$	14 06	1.443	1.96	H ₀ is rejected

The above table shows that Z scores at level of 5% significant, there is improvement in School areas of Persons with ID in the age group 18 years & above in ADL and language skills, since the mean scores of ADL and language skills in the age group of 18 years & above children under School areas are significantly higher than the mean scores of ADL and language skills in the age group of 18 years & above under CBR setup, Thus the null hypothesis is rejected. The mean score of 6-18 years Persons with ID in the areas of motor, ADL, language, socialization, functional academics, domestic activities, community orientation, recreation & leisure time activities and vocational skills under CBR setup and the mean score of 6-18 years Persons with ID in the above domains under School areas are more or less same. And the mean score of 18 years & above in motor, socialization, functional academics, domestic activities, recreation and leisure time activities and vocational skills under CBR setup and the mean score of 18 years & above Persons with ID in the above domains under School areas are more or less same. Hence, it reveals that there is improvement in School areas of Persons with ID in the age group of 18 years & above in ADL and language skills but in the age group of 6-18 years, there is no significant improvement in all the domains under CBR and School areas.

Testing of Hypothesis-3

Reaction & Attitude of parents of Persons with ID in the age group of 0-6, 6-18 and 18 & above years towards Persons with ID prior and after CBR program:

H₀: There is no significant difference between the mean scores of reactions & attitude of parents about different age group children 0-6, 6-18, and 18 & above prior to CBR program \bar{x} and the mean score of reaction & attitude of parents different age group of children 0-6, 6-18, and 18 & above after CBR program \bar{y} towards their children with ID.

TABLE: 5: Reaction & Attitude of Parents Prior & After CBR Program:

H ₀	Age group of children	Mean	Sample (n)	Z ₀	Z _t at 5% level of significance	Inference
There is no significant difference between the mean scores of reaction & attitude of parents of different age group persons 0-6, 6-18, and 18 years & above prior to CBR program \bar{X} and the mean score of reaction & attitude of parents different age group of persons 0-6, 6-18, and 18 years & above after CBR program \bar{Y} towards their persons with ID.	0-6 years	$\bar{X} = 1.500$ $\bar{Y} = 2.967$	03 27	7.094	1.96	H ₀ is rejected
	6-18 years	$\bar{X} = 2.567$ $\bar{Y} = 2.700$	29 07	0.397	1.96	H ₀ is accepted
	18 years & above	$\bar{X} = 2.100$ $\bar{Y} = 2.767$	14 06	2.235	1.96	H ₀ is rejected

The above table indicates that **Z** scores at level of 5% significant, after implementation of CBR program 0-6 and 18 years & above persons with ID parents possesses positive reaction & attitude. Since the mean score of parents after implementation of CBR program is significantly higher than the mean score of parent's prior CBR program, thus the null hypothesis is rejected. Where as in the age group of 6-18 years persons with ID parents have positive reactions & attitude after implementation of CBR program than prior to CBR program, but it is significantly not different. Hence, it is revealed that parents of 0-6, 18 years & above persons with ID

have significantly positive reaction & attitude towards their persons with ID, after implementation of CBR program than the 6-18 years person's parents.

Testing of Hypothesis-4

Attitude of Community Members towards Persons with Intellectual disability under CBR and School areas.

There is no significant difference between the mean scores of attitude of elder persons, health, workers, school teachers, Panchayat leaders under CBR areas (\bar{x}) and the mean scores of attitude of elder persons, health, workers, school teachers, Panchayat leaders under School areas program (\bar{y}) towards Persons with Intellectual disability.

TABLE: 6: Attitude of Community Members Under CBR & School Areas:

H ₀	Community members	Mean	Sample (n)	Z ₀	Z _t at 5% level of significance	Inference
There is no significant difference between the mean scores of attitude of elder persons, health, workers, school teachers, Panchayat leaders under CBR area (\bar{X}) and the mean scores of attitude of elder persons, health, workers, school teachers, Panchayat leaders under School area program (\bar{Y}) towards persons with Intellectual disability.	Elder Persons	$\bar{X} = 5.950$ $\bar{Y} = 5.200$	5 5	1.903	1.96	H ₀ is accepted
	Health Workers	$\bar{X} = 5.450$ $\bar{Y} = 5.200$	5 5	0.521	1.96	H ₀ is accepted
	School Teachers	$\bar{X} = 5.500$ $\bar{Y} = 4.500$	5 5	1.980	1.96	H ₀ is rejected
	Panchayat Leaders	$\bar{X} = 5.350$ $\bar{Y} = 5.450$	5 5	0.211	1.96	H ₀ is accepted

The above table shows that there is no significant difference between the mean scores of attitude of elder persons, health workers, school teacher, Panchayat leaders under CBR and School areas thus the null hypothesis is accepted. Hence, it is revealed that the elder persons, health workers, school teachers, Panchayat leaders under CBR and School areas have more or less same attitude towards persons with ID.

Acceptance of Persons with Intellectual disability by community members under CBR & School areas:

There is no significant difference between the mean score of acceptance of Persons with Intellectual disability by community members under CBR areas \bar{x} and the mean score of acceptance of Persons with Intellectual disability by community members under School areas \bar{y} .

TABLE: 7: Acceptance By Community Members Under CBR & School Areas:

H ₀	Mean	Sample (n)	Z ₀	Z _t at 5% level of significance	Inference
There is no significant difference between the mean score of acceptance of Persons with Intellectual disability by community members under CBR areas \bar{X} and the mean score of acceptance of Persons with Intellectual disability by community members under School areas \bar{y}	$\bar{X} = 5.306$	20	1.68	1.96	H ₀ is accepted
	$\bar{y} = 5.011$	20			

The above table shows that there is no significant difference between the mean score of acceptance of Persons with ID by community members under CBR areas and the mean score of acceptance of Persons with ID by community members under School areas. Hence, it is inferred that there is no difference in the acceptance of children with Intellectual disabled by community members under CBR areas and School areas.

Awareness about social benefit schemes among community members under CBR and School areas:

TABLE: 8: Awareness of Community Members Under CBR & School Areas:

Variable	Elder Persons	Health Workers	School Teachers	Panchayat Leaders	Total
Awareness	40% (2)	20% (1)	40% (1)	20% (1)	25% (5)
No Awareness	60% (3)	80% (4)	60% (4)	80% (4)	75% (15)
Total	100% (5)	100% (5)	100% (5)	100% (5)	100%(20)

It is evident from the above table that a majority (40%) of elder persons and school teacher have more awareness about social benefit schemes followed by Panchayat leaders (20%), 20% of health workers are aware of social benefit schemes and services. 80% of health workers have no awareness about social benefit schemes followed by Panchayat leaders (80%), elder persons and school teachers 60%. Hence it is inferred that an overall 25% have awareness, and 75% have no awareness about social benefit schemes under CBR and School setup. Among community members elder persons and school teachers have more awareness about social benefit schemes, health workers and Panchayat leaders have less awareness about social benefit schemes under both CBR and School areas.

OVERALL DISCUSSION:

In the present study majority of respondents were male in the both CBR and School areas. It is observed in the present study that the impact of CBR program is evident of significant improvement for persons with Intellectual Disability in the age range of 0-6, 6-18 & 18 years and above. It is also found that the CBR having positive impact on parents of Persons with Intellectual Disability and community members with regard to various variables of this study. Related to skill development prior and after CBR program, it is found that after implementation of CBR program for Persons with Intellectual Disability between the age ranges of 0-6, 6-18 & 18 years and above, there is positive impact of CBR program in the areas of Motor, ADL, Language, Socialization, Functional Academics, Domestic, Community Orientation, Recreation and Leisure Time Activities and Vocational Skills. Skill development of Persons with ID in the age groups of 0-6 years under CBR and School areas, the study results reveals that the improvement of Persons with ID in cognitive, ADL, motor, language and

socialization skills under CBR and School areas of are more or less the same and for the age group 6-18 & 18 years and above, the research results indicates that there is improvement in School areas of Persons with ID in the age group of 18 years & above in ADL and language skills but in the age group of 6-18 years, there is no significant improvement in all the domains under CBR and School areas. It is revealed that parents of 0-6, 18 years & above persons with ID have significantly positive reaction & attitude towards their persons with ID, after implementation of CBR program than the 6-18 years person's parents. Study also showed that the attitude of community members like elder persons, health workers, school teachers, Panchayat leaders under CBR and School areas have more or less same attitude towards persons with ID and in terms of acceptance of Persons with ID, there is no difference found within community members under CBR and School areas. Related to community awareness, researcher found that majority (40%) of elder persons and school teacher have more awareness about social benefit schemes rather than other community members. The researcher applied Z test and large sample tests to examine the significance of CBR program related to all variables of the present study.

CONCLUSION:

Each Person with Intellectual Disability is part of this living world where various aspects affect them such as their family members, their age, their gender, their caste & category, their religion, their educational status, their psychological & physical conditions and their socio economic status. They need frequent support from their neighbors, societies and communities for their better living standard. If we talk about our country, we will find that 80% of the populations are residing in rural areas and most of them are illiterates and have superstitious beliefs.

The present study is a complex study because the sample includes slum areas also. It is also difficult for researcher to collect data from the respondents due to task considering and time constraint as the researcher has to go to each of the respondents, explain the questions and record their responses. Since most of the respondents are Persons with Intellectual disability who cannot immediately respond, the researcher has to spend lot of time with them to get their responses. The results of the research need to be seen as impact of CBR program. The research shows that impact of CBR program can potentially benefit the Persons with Intellectual Disability in every aspects of their real life. The extent and degree of the positive impact may differ between different groups. This research provided evident that a CBR Program in Khurd, Bhubaneswar districts of Odisha state in India has had a positive impact among Persons with Intellectual Disability, their parents & family members and community members in the areas of education, rehabilitation, skill development, attitude, acceptance, awareness, social participation and empowerment. Similar studies are needed for other groups and areas of Persons with Intellectual Disability which is not represented in this research.

RECOMMENDATION:

The findings of this study clearly show that Community Based Rehabilitation (CBR) Program is the current need of this age to fulfill the all aspects of rehabilitation related to not only Persons with Intellectual Disability but for all types of Disabilities. As we know that CBR Program having a wider scope and it cannot be limited to education and rehabilitation only. In addition it will be boon for rural, remote and slum areas of India in the field of rehabilitation and habilitation. Further studies can be conducted in this area related to

different nature of disability including their relevant areas on a large sample by taking more time.

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