

Performance Of Community - Based Rehabilitation (CBR) In Rural Areas Of Islamic Republic Of Iran

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Introduction :

The situation of people with disabilities in the developing countries should be a matter of great concern . There are today close to 250 million severely and moderately disabled persons in these countries ; the annual increase is 10 million . Most of them are poor , dependent neglected , excluded from education , training and jobs ; They die early and have no power while alive . Between 15 and 20 per cent of all people now living below the poverty line have a disability .

The majority of them have no share in community development programs and are virtually excluded from the public services they need to be prepared for a life in the community . Their human rights are not well protected .

It is clear that in this situation an effort should be made to improve the quality of life of persons with disabilities .

Countries acting to assist disabled people are motivated by a belief in equality and the desire to limit the severity of disability and the hardship it imposes on individuals and families , as well as to limit the loss that occurs when a part of the population is economically unproductive . All people have the right to health . In order to ensure that right for all citizens , a nation provides opportunities for disabled people to develop and use their physical and mental abil-

ities .

The World Health organization is striving to realize Health for All . In 1978 , the International conference on Primary Health Care , held in Alma - Ata , declared that primary health care would address the main health problems in the community and thus promote Health for All through the provision of promotive , preventive , curative , and rehabilitative services . Following the declaration , WHO developed the strategy of community- based rehabilitation (CBR) as a means of integrating rehabilitation with health and development activities at the community level .

The community - based rehabilitation system has in a very short time been introduced to about 90 developing countries .

Key words : Community - Based Rehabilitation / Primary Health Care Rehabilitation Services / Impairment

Major strategies for rehabilitation:

Institution - based rehabilitation services may be provided in a residential setting , or in a hospital where disabled people receive special treatment or short - term intensive therapy . The institution- based approach focuses on the person's disability and gives little attention to the their family and community ,

or to other relevant social factors . The major shortcomings of institution - based care are high cost and its location , usually in urban centers, making it inaccessible to those living in outlying areas . In addition , specialized institutions often lack qualified personnel . Competent institution- based care, however , is an important part of the rehabilitation referral system for special assessments , surgical interventions , other skilled treatment , and specialized equipment .

Outreach rehabilitation services are typically provided by health care personnel based in institutions . Such a program provides for visit by rehabilitation personnel to homes of people with disabilities . The focus is on the disabled person , and perhaps the person's family . Education and vocational training are generally not included . Community involvement in these services is usually limited , with the result that they evoke little social change . The cost per person treatment is high. Outreach services can be a valid part of the referral system , particularly , when used in special situations , such as the delivery of services to extremely remote areas.

Community-based rehabilitation (CBR) is characterized by the active role of people with disabilities , their families , and the community in the rehabilitation process . In CBR knowledge and skills for the basic training of disabled people are transferred to disabled adults themselves , to their families , and to community members . A community committee promotes the removal of physical and attitudinal barriers and ensures opportunities for people with disabilities to participate in school, work , leisure , social , and political activities within the community . A per-

son is available in the community groups to assist the families of disabled people by providing care for their disabled children or adults , transportation , or loans to initiate income - generating activities . Community resources are supported by referral services within the health , education , labour , and social service system . Personnel skilled in rehabilitation technology train and support community workers , and provide skilled intervention , as necessary .

Community - based rehabilitation (CBR) is a common - sense strategy for enhancing the quality of life of people with disabilities by improving service delivery in order to reach all in need by providing more equitable opportunities and promoting and protecting their rights .

The goal of CBR is to bring about a change ; to develop a system capable of reaching all disabled people in need and to educate and involve governments and the public . CBR should be sustained in each country by using a level of resources that is realistic and maintainable .

Rehabilitation in Iran :

In Iran responsibility of providing rehabilitation services to disabled people is by Welfare Organization , which is an independent department of Ministry of Health & Medical Education . Independent organization supervised by the Ministry of health & Medical Education . The organization is also responsible for early childhood education and development . It is made up of 3 main departments : Preventive , Social and Rehabilitation affairs deputies .

Rehabilitation in Iran began during the

1920s. At the beginning all the activities were charitable , but later , they were supported by government budget .

After the Islamic Revolution in 1979 all the activities were united under a national government body named " IRAN WELFARE ORGANIZATION " .

By year 2000 the population of I.R.Iran was close to 68 million , during the next 25 years the population is expected to grow by about 40 percent to about 94 million .

On the basis of census in 1996, about 479,590 households out of 12,398,235 have disabled people . It is 3.9 percent of above households which is calculated 3.4 percent in urban areas and 4.7 percent in rural areas .

The prevalence of moderate and severe disability in the I.R.Iran based on international standard calculations for the year 2000 estimated at about 4.2 per cent . As the country recently went through a period of war , leaving behind it a large number of disabled veterans , so the above numbers may underestimate the prevalence .

The annual incident rate using international standard calculations should be about 0.5 per cent of the population . This excludes temporary (expected to last less than three months) disability and that occurring during the terminal phase of a disease .

In addition to the Welfare Organization of Iran which is responsible for offering different services such as :

Medical , vocational , social and educational rehabilitation services . The Exceptional Education Organization also has the responsibility of the public education of the disabled people in primary school , guidance - school and high

school .

At the present time more than 80 thousand exceptional students are studying in specialized schools under this organization . The state Welfare Organization in the medical rehabilitation services department is offering services to the disabled people in different centers of physiotherapy , occupational therapy,audiometry , speech therapy , optometry and technical orthopedics.

There is especial emphasis on different disorders such as spinal cord injuries , C.P , mental retardation , visual and hearing disorders .

Every year a considerable number of hearing aids , wheel chairs , various kind of walking sticks , writing machines for the blind , cassette recorders , tape cassettes and medical aid equipments are purchased and distributed among the disabled, mostly free of charge . Reconstructing barrier - free (accessible) environments in the residential area and cities to be used by the disabled is one of the important measures which have been taken by the deputy of social rehabilitation with the help of different organizations such as the ministry of Housing and Municipality .

Organizing educational courses for the blind and the deaf , publishing books and publications in Braille and cassettes .

For mentally retarded people , some of them participate in daily educational and training classes and some are looked after in residential caring centers . In addition those elderly people who can not be kept in home or do not have a care giver are sent to special nursery homes .

From the vocational point of view , mentally retarded people pass training courses in

more than 100 vocational rehabilitation centers and it has been attempted to find them a suitable job after training, and in this area with the help of ministry of labor and other organizations, every year Job opportunities are provided for the disabled, although they are not enough.

Special budgets for establishing cooperations by disabled persons and paying their insurance premiums are of high priorities in job - placement of disabled people. Over 10,000 individuals are trained annually.

Contributing factors Causing different categories of disability :

It is not possible to precisely account for the specific contributors to and categories of disability in Iran without a proper scientific study. Below follows some indicative numbers, built on international data : a) congenital conditions and other disabilities appearing during infancy and childhood, congenital malformations (for instance, club foot, hip dislocation, spina bifida) and inborn errors of metabolism, about 1-3/1000, moderate to severe mental handicaps about 10- 15/1000, cerebral palsy about constitutes 1-2/1000.

Consanguineous marriage may concentrate the incidence of hereditary diseases in the families, but appear to have less impact on the total disability prevalence. Malnutrition is not common in Iran, but might specifically affect persons with disability. for perinatal maternity care and childbirth there are special maternity homes, some 85 per cent of all births take place in these homes or in hospitals are assisted by professional midwives. These are important, as they contribute to pre-

vention of perinatal and maternal disability.

b) Vision impairment is in most countries assessed to affect about 10/1000, most of it caused by cataract, glaucoma and eye infections, congenital blindness is very rare.

c) hearing and speech disorders : congenital deafness is usually rare about 1 - 2 / 10000, aquired moderate to severe hearing impairment appears to affect about 10/1000 of all populations, mostly among the elderly. Speech disorders are common, but most of them are slight, severe speech disorders are often associated with hearing impairment, cerebral palsy and stroke.

d) Non - communicable somatic diseases is the main cause of disability after the age of 50, among these osteoarthritis and is Rheumatologic disorders, including back disorders is the most important group, followed by cardiovascular disease, stroke, cancer, asthma and chronic bronchitis, diabetes, and others.

Chronic neurological disorders such as multiple sclerosis, parkinson disease and muscular dystrophy appear to affect only small groups of people in Iran. Epilepsy is in most countries relatively common, about 10 per cent of all people have at least one attack but most is transitory.

e) Mental disease, especially senile dementia and Alzheimer's disease are important causes of disability among those aged 70 and above, an increasing population group in Iran.

Chronic mental disease such as schizophrenia and Bipolar Mood Disorders could have a prevalence of 1-2/1000.

Conditions caused by traumatic events of the recent war such as PTSD and depression are no doubt common.

Alcohol appears to affect few people in Iran , the official estimate for drug abusers is two million .

f) Accidents/ trauma besides very large group of war victims in Iran , as well as those who had accidents at home , at work or in the traffic . There are about people with spinal cord injury .

g) Contagious diseases do not appear to be a major disability - causing factors in Iran , the immunization programs for polio , tuberculosis , diphtheria - pertussis tetanus , measles and hepatitis are at saturation point . Malaria and AIDS are cause of concern in Iran, but there is no leprosy . Future consideration could be given to meningitis and rubella immunization to reduce certain specific causes of disability .

The above numbers may be compared with the categories of the resulting disabilities according to the national statistics for participants in the CBR program during year 2000 (Multiple disability mostly refers to persons with cerebral palsy and among them it is common to see a combination of motor and learning difficulties)

Based of the above numbers and of a wide experience it is estimated that a program for active rehabilitation including follow - up , needs to include at any one time some 1% to 1.5% of the population . In Iran this would imply a delivery system capable of presently (year 2001) serving between 700,000 and 1,000,000 persons , by the year 2025 at least between 950,000 and 1,400,000 .

CBR in Islamic Republic of Iran :

CBR project began in 1990 . At present it is implemented through PHC in rural areas of 65 cities (28 provinces) and about 2,695,262 individuals are observed .

There are 49,576 disabled people over 80 percent out of them are referred to higher levels to receive some services .

CBR in Iran began after the WHO manuals (Training in the community for people with disabilities) were translated and adopted to Islamic culture . Evidently the technologies described in the training packages appear to be adequate and the functional results of excellent quality .

The first training workshop was held for physicians , PHC managers from WHO and senior therapist from Welfare Organization with assistance from WHO , in Semnan province , where the first pilot project began in 2 districts, Miami and Shahrood in 1992 . This was followed by a cascade model training , for other six cities .

The physiotherapists and occupational therapists in welfare organization were trained in Tehran and other cities . Then they were involved in training CBR personnel in other cities with the guidance of the Welfare Organization Headquarter in Tehran .

Now 28 provinces in Iran are implementing CBR . this is a national program running under the aegis of Welfare Organization, but within the primary health care (PHC) referral framework . PHC is organized as a four - level referral system , from the Health House or

unit , rural health center , district and provincial center (figure 1) .

Table1. Categories of disabilities in Iran (on the base of CBR's studies) :

Category of Disability	Percentage
Visual	14.2
Hearing and speech	16.7
Moving	28.3
Mental	11.3
Seizures	7.5
Psychiatric	6.6
Multiple disabilities	15.4

Health Staff and Health Units :

There are 16,000 health houses in Iran (in this time 1921 health houses are involved in CBR programme) , each serving a population of 1,500 and staffed by one or two health workers (behvarze) who are trained for two years and receives 2 weeks training in CBR . These are also key workers in CBR , identifying , functional training , referring and supporting disabled person . In most communities , CBR is implemented through a rehabilitation committee with representatives from disabled persons , their families , health workers and CBR advisers . Advisers are specialists in therapies , community and social work .

2) Rural health center : these normally cover 5-6 health houses . These staff includes a general practitioner and mid level workers (kardans) who have undergone 2 years of training , including 1 week in CBR .

3) District center : in which there is spe-

cialized personnel . For the rehabilitation sector there are : Physician (MD) , phisyo - and occupational therapists , social workers and psychologists .

4) Provincial and national levels : there are other specialized services , such as hospitals , clinics and orthopedic workshops.

Health & CBR workers liaise with health centers , schools and employment agencies to facilitate assessment , treatment , surgery , physio and occupational therapy , fitting of prothesis , referral , educational and work placement . Health and / or CBR workers are also involved in prevention activities including genetic counselling , health education and promotion . They select a member of families of disabled people and give them translated WHO manuals about each type of disability and involve them to provide effective rehabilitation services for disabled persons .

Therefore family training and community participation are very important in Iran's CBR program .

Role of WHO in development of CBR in Iran :

Community Based Rehabilitation Program in iran started with complete coordination with WHO about principles of CBR and experiences of other countries , which are involved in CBR .

One of the most important services in Iran's CBR is family training which is in the base of the WHO's manuals . These manuals were translated at the first and modified for Iranian culture and now they are used as reference for training of

disabled persons , their families , staffs , teachers , community committees and other persons or components of CBR .

WHO office in Iran was very interested to implementing of this program and tried for providing scientific and financial supports for it .

They invited some international advisors who had very useful roles in guidance and training of managers for setting good program and planning for it's sustainability and evaluation . For this reason Dr.Zinkin , Dr. Hariharan , Dr. Populin , Dr. Helander , Dr.Mendis , Dr. McConkey have travelled to Iran and after visiting from fields presented their reports and participated in workshops .

Also some managers and experts took part in International courses with supports of WHO . In countries like India , Vietnam , Lebanon , France , Portugal were trained about principles of management and evaluation .

Some regional and national workshops about CBR have been organized with scientific and financial supports of WHO representative office .

In the meantime WHO has provided some equipment such as audiovisual materials for CBR department .

CBR department in Iran is hopeful that these supports to be continued in the future. There are many Ideas for promotion and developing of this program which needs to be supported from WHO.

Some planning for future are:

1 - setting courses about CBR for training in the university for Physiotherapists , occupational therapists , social workers , speech therapists , psychologists and nurses .

2- providing training curriculum for mid - level staffs with coordination of university of social welfare and Rehabilitation sciences.

3 - planning for an urban CBR program.

4- Development of CBR in National level .

5- coordination with Ministry of Labor for Inclusive vocational skill training .

6- Making Iran's CBR special website .

Strategies In CBR :

-Using existent PHC network to develop and expand the CBR program .

-Complete the PHC network with adding CBR as the third level of prevention .

- Providing accessibility services for rural population .

- Decrease the cost of rehabilitation services .

-Provide a help for social development .

- Community participation in the all sections of rehabilitation .

Activities in CBR :

- Increase public awareness and change attitudes .

- Family training (using WHO manual) .

- Training outside of the family (kindergarten , schools , ...)

- Forming community committees for using public participation .

- Providing rehabilitation equipments with simple technology in the community .

- Income generation for disabled people .

- Providing financial and social supports for indigent disabled people .

- Designing a multi- sectoral referral system .
- Coordinaton with other governmental or non governmental systems which have influence in disabled people's life.
- Training of PHC network's staffs about rehabilitation .

Conclusion regarding service delivery :

The service delivery system has been set up in agreement between the Welfare Organization and the Ministry of Health and Medical Education . The CBR program is now a portion of the PHC .

During this initial period the experts working at district and provincial levels have evidently to a larger or smaller extent delivered services directly at the homes of disabled persons , in some cases this delivery has been done by the local health workers .

No doubt this participation by the experts ,, at the grassroots has given them a valuable experiences of the realities to cope with .

However it will now be necessary to re-structure the CBR service delivery into a proper multi level system . This has already been done with the PHC system .

The tasks carried out by the " experts " , because of the high costs should be reserved for the tertiary and quaternary levels . The primary level work by the behvarze(primary health worker) can be increased to include all the primary , direct contacts with the disabled person and the families : choosing and motivating the family trainers , provide instructions and hand- on guidance on how to use the training packages , fill out the assessment and evaluation forms etc .

What now appears to be missing is the secondary level represented by the health center and the kardan (middle level worker) .

The re-structuring of the service delivery system will be necessary , and the CBR grows to become a nation- wide system , caring for a very large number of PWDs .

To use the PHC system does not imply that all primary and middle level workers have to be trained . It will at the beginning be enough to train one primry health care worker at each health house and one middle level worker at each health center .

Different levels in Iran's CBR

CBR Center in districts (common between health and welfare systems)

Functions :

- Planning and coordinating the covered rural PHC centers .
- Examining and prescribing , rehabilitation assistive devices needed by the referred disabled people .
- Providing the financial support and employment
- Providing the inter sectoral relationships .
- Referring the disabled people to higher levels .
- Formulating the statistical record keeping .

Staff :

- The rehabilitation experts (PT, OT , ...)

-The health experts

Rural PHC stations

Functions :

- Intervention on the environment adaptation and the social affairs .
- Monitoring the health workers functions .
- The medical examination and referring to the higher levels if necessary .
- Statistics and records keeping .

Staff :

- Physician .
- Middle level worker (kardan)

Health house

Functions :

- Identifying the disabled persons .
- The preliminary testing and referring to the higher levels .
- Selection of a person from family for training disabled person in home .
- The intervention in social affairs of disabled persons .
- Organizing the rural CBR committees .
- Formulating and submitting the statistical reports .
- Communicating with schools to accept the disabled person .

Staff :

Two health workers (male and female) .

Training of staffs in CBR :

- The PHC staff training :
Health workers 3 weeks
Middle level workers 1 week
Physicians 2 days

- The Welfare Expert training :

- PHC training 1 month
- CBR training 1 week

The management system :

a) local level

There is already now an involvement in the management of CBR at the community level through the community rehabilitation committees (CRCs). There is no doubt that when the system works well , the local "ownership" of the CBR program can be " transferred " to them . The CRCs can then be participating and taking responsibility for :

- I) Local planning such as proposing new initiatives to the authorities .
- II) Seeking and managing local funds for CBR .
- III) taking an active part in the reporting , monitoring and evaluation processes .
- IV) assisting the change among non-disabled citizens in improving attitudes and behavior towards PWDs.

b) Record keeping and reporting system :

There is already now a system with records of all PWDs , who participate in CBR . The records are however very time- consuming to read . It is not easy to find out the results , unless records with a standardized form are introduced .

c) Monitoring and evaluation

At present monitoring is not quite complete , it only records the quantity- of PWDs and numbers of services which they were received but doesnot measure the quality of results .

d) Cost control :

Cost control is a measure of the efficiency of the resources used . Although there are at the level of the province and headquarters level of the Iran Welfare Organization indications of the alternative costs of various rehabilitation services , the managerial system needs more development to ensure a more rigorous approach to spending and accounting .

Now Welfare organization in the base of excellent results from performance of CBR in Iran decided to develop this program within a 5 years period to 140 cities of 28 provinces (rural area) .

Table.2-Population & Centers under CBR Coverage (2002)

Health House	Rural health centers	Population under coverage	Identified disabled people	Percentage of disabled people	Under coverage disabled people	Percentage of coverage
1910	467	2695262	49576	1.8	28518	57.5

Table.3-Staffs involved in CBR program (2002)

Community workers	Middle level workers	Physicians	Experts		Managers		Other
			Welfare Org	Health network	Welfare Org	Health network	
3597	635	527	306	117	114	78	44

Table.4-Numbers & types of identified disabled people (2002)

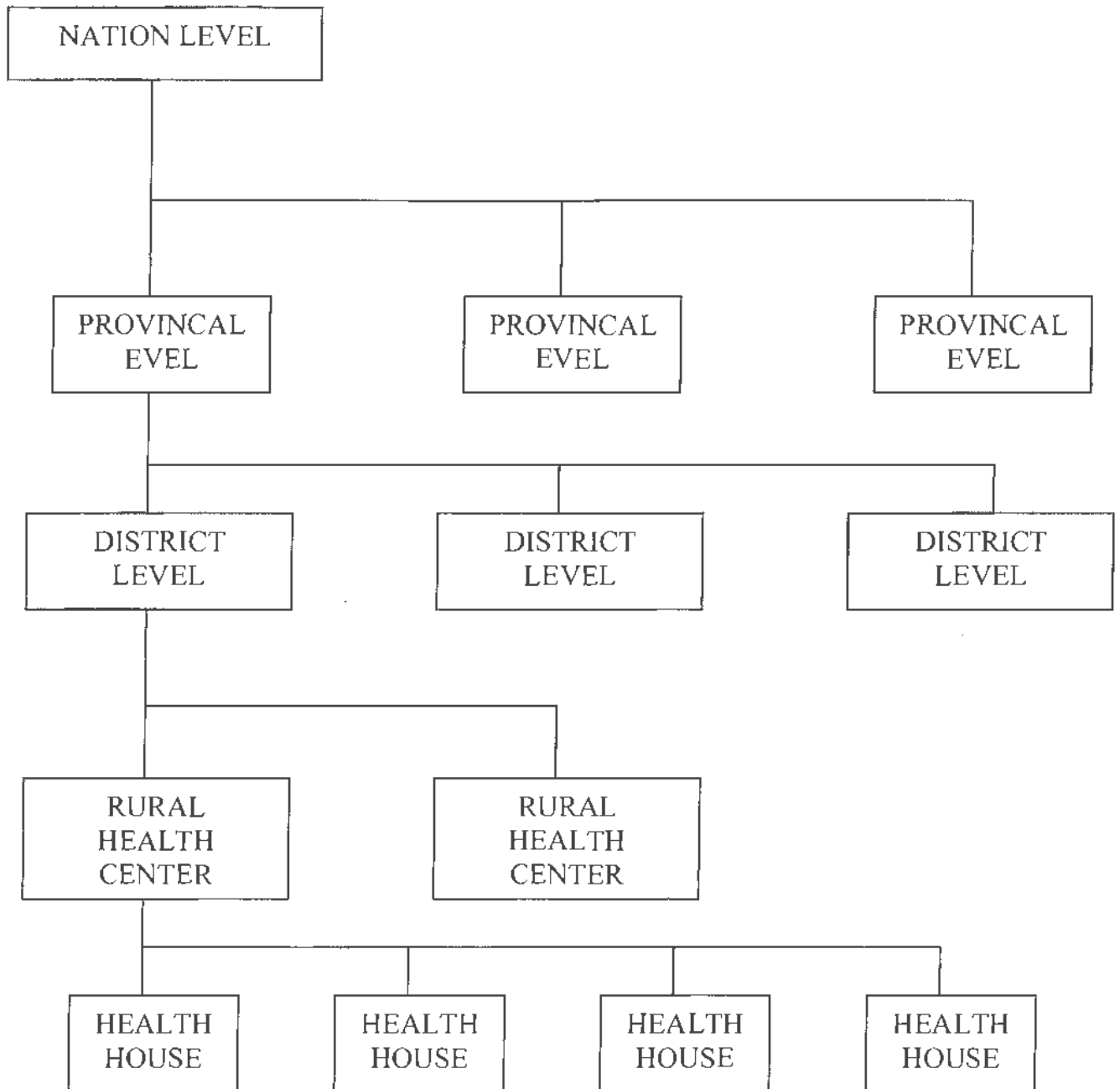
Types of disability	Visual	Hearing & speech	Physical & moving	Mental retardation	Psychotic	fits	Multiple	Total
Number	7011	8293	14014	5554	3288	3758	7658	49576
Percentage	14.2	16.7	28.3	11.3	6.6	7.5	15.4	100

Table.5-CBR program's rehabilitation services to disabled people (2002)

Types of services	Need to services	Performed services	Total cost	Cost unit \$	Percentage of services
Training in the family	21957	14507	96109	6.6	66
Training outside the family	8615	5533	89188	16.1	64.2
Referral services	23302	18731	817061	5.4	80.3
Provision of Rehabilitation assistive devices	14021	8417	102133	41.6	60
Employment	4606	1183	367325	310	25.6
Financial support	18312	11238	620152	55.1	61.3
Total number	90815	59609	1625572	27.2	65.6

- Total population under coverage : 2695262
- Identified disabled people : 49576
- Identified disabled people who are under coverage : 28518

P.H.C NETWORK IN IRAN (Figure 1.)



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