

AWARENESS AND UTILIZATION OF REHABILITATION SERVICES AMONG PHYSICALLY DISABLED PEOPLE OF RURAL POPULATION OF A DISTRICT OF UTTAR PRADESH, INDIA

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ABSTRACT

Background: People with disabilities are more vulnerable than general population to a range of problem including fatigue, depression, and social isolation and have more limited access to health care. It is among the poorest communities that poverty breeds disablement and disablement breeds poverty, a vicious cycle that the poor can least afford. Most of the disabilities can be prevented if proper preventive and rehabilitative measures of impairments are undertaken.

Aims & Objectives: To study awareness and utilization of rehabilitation services among disabled.

Materials and Methods: Multistage sampling technique was used in this study. For determining target sample size, population proportionate sampling was used. All the family members who are regular resident of the village were considered for the study. Disability criteria of National Sample Survey (NSS) 2002, was used. Data was analyzed for rates and proportions.

Results: Prevalence of physical disabilities was 19.46 per 1000. 64.71% disabled were unaware about the availability of the rehabilitation services and unawareness was main reason for not availing rehabilitation services. Amongst physically disabled, 65.85% discontinued the treatment and 19.51% had not taken treatment at all.

Conclusion: There is lack of awareness and utilization regarding the available rehabilitation services in the country. Physical disability was found to be higher among illiterates and community having low and medium standard of living.

Key Words: Physical Disability; Rehabilitation Services; Awareness; Utilization

Introduction

People with disabilities are more vulnerable than general population to a range of problem including fatigue, depression, and social isolation and have more limited access to health care.^[1,2] Evidences indicate that people with disabilities smoke more, and exercise less as compared to people not identified as having disabilities.^[3]

The inability to perform some key activities (e.g. basic mobility, feeding, personal hygiene and safety awareness) due to disability lead to 'dependency' – the need for human help (or care) beyond that customarily required by a healthy adult. Most such help is given by family members or other 'informal' care givers.^[4] Overall, a country is greatly affected by the increasing number of dependent people and would need to identify the human and financial resources to support them. These increases will occur more in the context of generally increasing populations, and dependency ratios will increase modestly to about 10%. The dependency ratio would increase more in China (14%) and India (12%) than in other areas with large prevalence increase.^[5]

The occurrence of disability is high in developing countries. It is among the poorest communities where poverty breeds disablement and disablement breeds poverty, a vicious cycle that the poor can least afford.

The majority of people with disabilities find that their situation affects their chances of going to school, working for a living, enjoying family life, and participating as equals in social life. Quality of life is compromised not only for the disabled person, but also for the family. The presence of one person with disability in a family has negative consequences of social stigma which affects the entire household. Social segregation of disabled person is also widespread. The mortality and morbidity among disabled is much greater as compared to people without disability.

Although most of the disabilities can be prevented if proper preventive and rehabilitative measures of impairments are undertaken, it is estimated that only 2% of people with disabilities in developing countries have access to rehabilitation and appropriate basic services.^[6] The public health community has traditionally paid little attention to the health needs of people with

disabilities.^[7] According to WHO, people with disabilities tend to seek more healthcare than people without disabilities. They also have more unmet needs. Recent surveys by WHO says that between 76 to 85% of people with disabilities in developing countries receive no care.

The purpose of this study is to understand the awareness and utilization level of health care services and rehabilitation services among people with disabilities.

Materials and Methods

A cross sectional observational study was conducted amongst rural population of Mau district in Uttar Pradesh during February 2007 to June 2007. Mau is the bastion of textile weavers in Eastern Uttar Pradesh. On the basis of NSSO – 2002 and Census – 2001, prevalence of disability at 2% was taken for sample size calculation. With a 95% confidence coefficient and 30% allowable error, the sample size was 2091 for this study. Multistage sampling technique was used in this study.

In the first stage, out of total nine community development blocks four blocks were selected by random number method. For determining target sample size for each block, Population Proportionate Sampling (PPS) was used. In the second stage, one village was selected from the block wise list of villages by using random number table. In third stage, the hamlets/tolas of the village were enlisted and numbered serially. From this list a hamlet/tola was selected. If any hamlet/tola population was below the target sample size, another tola was added to it.

In a family, all the members who are regular resident of the village, were considered for the face to face interview. Informed consent was taken prior to the interview. All the disabled subjects were counseled and informed about the available health care services and rehabilitation. In case of female participant, interview was conducted in the presence of another family members or peer.

Disability criteria of National Sample Survey (NSS) 2002 was used which was based on functional limitation. However, mental disability was not included in the current study considering the infeasibility for assessing the same. The interview schedule was translated and re-translated in the local dialect and field tested / piloted, before interviewing the study participants. Data was analyzed for rates and proportions.

Results

This study covered 2107 subjects. To achieve the target sample size of 2091; 285 families were surveyed in 4 villages of a district. The prevalence of physical disabilities assessed among the study population was 19.46 per 1000 (n = 41). The most prevalent physical disability was loco-motor disability (10.44 per 1000) followed by hearing (4.27 per 1000), visual (3.80 per 1000) and speech disability (0.95 per 1000).

Table-1: Prevalence of physical disability (n= 41)

Type of Physical Disability	N (%)	Prevalence per 1000
Loco-motor	22* (53.66)	10.44
Hearing	9 (21.95)	4.27
Visual	8 (19.51)	3.80
Speech	2 [@] (4.88)	0.95
Total	41 (100)	19.46

* One loco-motor disabled person had speech disability also; [@] One speech disabled person had deafness also.

Table-2: Reasons for not taking treatment n=41

Reasons		A	B	C	D	Sub Total (%)	Total (%)
Ignorance	Not taking	2	1	0	0	3 (7.32)	(24.39)
	Stopped	0	0	1	0	1 (2.44)	6 (14.63)
Improvement	Not taking	0	3	2	0	5 (12.19)	(14.63)
	Stopped	14*	0	3	2 [@]	19 (46.34)	19 (46.34)
Still continuing treatment		0	0	0	0	0	(46.34)
Total		6	0	0	0	6 (14.63)	41(100)

A: Loco-motor; B: Visual; C: Hearing; D: Speech; * One loco-motor disabled person had speech disability also; [@] One speech disabled person had deafness also.

Table-3: Status of disability registration; n = 41

Status of Certification	Loco-motor	Visual	Hearing	Speech	Total
Yes	10*	0	0	0	10 (24.39%)
No	12	8	9	2 [@]	31 (75.61%)
Total	22	8	9	2	41 (100%)

* One loco-motor disabled person had speech disability also; [@] One speech disabled person had deafness also.

Table-4: Status of rehabilitation services; n = 41

Type of Disability	Avalied				Total	Not Avalied
	Medical	Vocational	Social	Psycho social		
Loco-motor	5	0	0	0	5	17*
Visual	1	0	0	0	1	7
Hearing	1	0	0	0	1	8
Speech	-	0	0	0	0	2 [@]
Total	7	0	0	0	7	34
					(17.07%)	(82.93%)

* One loco-motor disabled person had speech disability also; [@] One speech disabled person had deafness also.

Among the study participants with loco-motor disabilities, 65.85% (n = 14) discontinued the treatment and 19.51% (n = 2) had not taken any treatment at all. Other study participants with visual, hearing and speech disabilities stopped their treatment or never took treatment for their disabilities. Overall, 24.39% disabled

were not able to take treatment or had to stop their treatment because of financial crisis. No improvement (46.34%) and financial problems (17.07%) were given as reasons for discontinuing the treatment. Among those who didn't take treatment due to financial reason (7.32%) 50% were visually disabled and 12.19% of them were not taking treatment due to ignorance which covers 60% visually disabled.

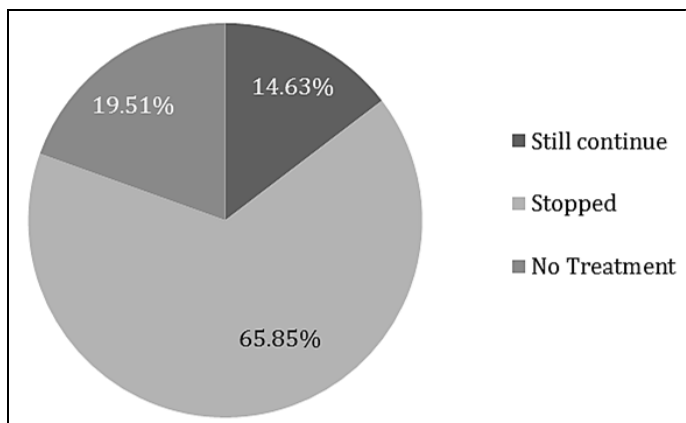


Figure-1: Status of disabled currently under medical supervision; n = 41

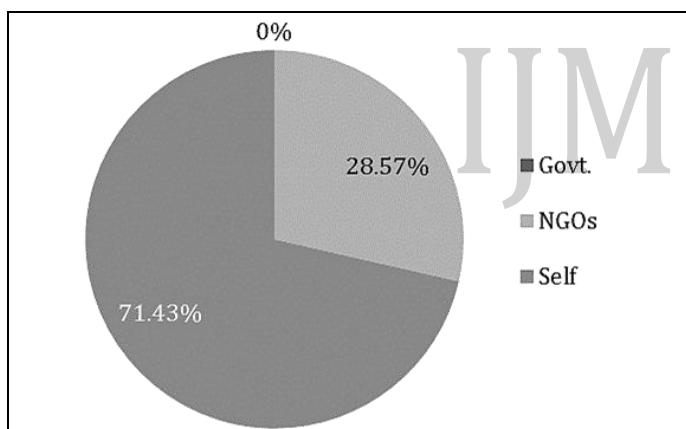


Figure-2: Source of availed rehabilitation services; n = 7

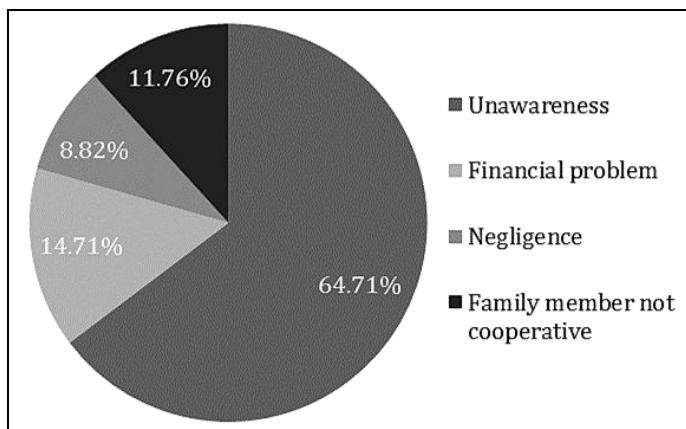


Figure-3: Reason for not availing rehabilitation services; n = 34

Those who registered at district hospital, in 24.39% cases, were having loco-motor disability. No one with

visual, hearing or speech disability was registered.

Rehabilitation services were not availed in 82.93% cases and others (17.07%) sought only medical type of rehabilitation services. Other types of rehabilitation services, like vocational, social or psychosocial, were not availed by any disabled. In 71.43% cases, rehabilitation services were availed by family itself that is without any support from the government or other agencies. Rehabilitation services through NGOs were only in 28.57% cases.

Unawareness was the main reason for not availing rehabilitation services (64.71%). Financial problem, negligence and non-cooperation from family members contribute 14.71%, 8.82% and 11.76% respectively for not being offered rehabilitation services to disabled.

Discussion

In developing countries, it was estimated that not more than 2% - 3% of the disabled could benefit from rehabilitation services.^[8] Significant disparities in health and medical care utilization were found for adult with developmental disabilities relative to non-disabled adults.^[9] There is considerable need for the improvement of facilities, services and opportunities for the disabled.^[10]

In the Somerset health district, 53 of the 181 disabled subjects had unmet needs for aids to allow independence in activities of daily living. This study shows that the needs of severely physically disabled adults in a community, especially those with progressive disorders, are being monitored inadequately by health professionals.^[11] The treatment seeking behaviour of disabled persons reflects a wider differential according to different background characteristics.^[12] Another study in rural Bangladesh showed that around 81% of the disabled had utilized some kind of healthcare, while more than half consulted unqualified practitioners of modern medicine.^[13]

A study conducted in Tamil Nadu found that 98% of the visually disabled did not use spectacles, and only 1.5% of them expressed the need for spectacles. 96% of the hearing disabled did not use hearing aids. Only 3% of the disabled expressed the need for hearing and other aids like crutches, tricycles and callipers.^[14] Chopra A et al. observed in the COPARD study conducted in rural India, that only 21% of the patients had never visited the doctor.^[15]

In the sample of companies selected for the study, the rate of employment of disabled persons was only 0.4% of the total work force, only 13% of what 'The People with Disabilities' Act prescribes as desirable. Many public sector companies also do not employ disabled persons, even though it is legally binding on them to fill 3% in all categories of jobs with disabled people.^[16]

Disler PB et al. observed that 80% of the study population had no contact with health services in black residential area of the Cape Peninsula.^[17] Osman and Rampal observed that 42 (85.7%) of the 49 cases had received treatment in a Malay Community in Tanjung Karang, Kuala Selangor.^[18] Various studies have observed different reasons for non-utility of rehabilitative services. Patel SK states that treatment seeking behaviour of disabled persons depends not only on socio-economic factors but also on cultural factors, area of residence, literacy status, sex etc.^[12]

Limitations: The study was questionnaire based. Medical examination and record analysis for the cases were not done, which might have result in losing valuable data. This could have been captured if all means of data collection had been adopted. Precise measurement of disability was done in the present study, so this wouldn't give any estimate about severity or extent of physical disability.

Quality of life in the disabled was not included in the study so there is a gap on how the disabled fare in Activities of Daily Living. Income and expenditure survey in the disabled were not included in the study so there is a gap regarding their dependency status.

Conclusion

Majority of disabled population in this study was illiterate and belonged to lower and backward caste. They were not aware of the available rehabilitation services and very poor access to available rehabilitation services. Thus it is recommended that an awareness program be devised and implemented to make the disabled aware of the available rehabilitation services. There should be a comprehensive health care package for the disabled such as special medical camps at the village level for cataract operations and periodic medical

care for the other types of disabilities special arrangement to accommodate them in small scale industries which can be home based or industrial based according to their capacity.

References

1. Health-related quality of life and activity limitation- Eight States, 1995. Morbidity Mortality Weekly Report 1998;47:134-40.
2. Use of cervical and breast cancer screening among women with and without functional limitations- United States, 1994-1995. Morbidity Mortality Weekly Report 1998;47:853-6.
3. Health risk among North Carolina adults, 1999. North Carolina Department of Health and Human Services, Division of Public Health. Available from: URL: <http://www.schs.state.nc.us/schs/brfss/healthrisks1999.html>
4. Medical Research Council Cognitive Function and Ageing Study (MRC CFAS); Resource Implications Study (RIS MRC CFAS). Profile of disability in elderly people: estimates from a longitudinal population study. *BMJ* 1999;318:1108-11.
5. Harwood RH, Sayer AA, Hirschfeld M. Current and future worldwide prevalence of dependency, its relationship to total population, and dependency ratios. *Bull World Health Organ* 2004;82:251-8.
6. Disability, Poverty and Development. Department for International Development Report. *IHF Official Journal* 2000;38:1.
7. Lollar DJ. Public Health and Disability: Emerging Opportunities. *Public Health Rep* 2002;117:131-6.
8. World Health Organization. Training in the community for people with disabilities. Geneva: WHO; 1989.
9. Haverkamp SM, Scandlin D, Roth M. Health disparities among adult with developmental disabilities, adults with other disabilities, and adult not reporting disability in North Carolina. *Public Health Rep* 2004;119:418-26.
10. Pal HR, Saxena S, Chandrashekar K, Sudha SJ, Murty RS, Thara R, et al. Issues related to disability in India: A focus group study. *Nat Med J India* 2000;13:237-41.
11. Williams MH, Bowie C. Evidence of unmet need in the care of severely physically disabled adults. *BMJ* 1993;306:95-8.
12. Patel SK, Ladusingh L. Age pattern of onset of disability and treatment seeking behaviour of disabled persons in India. XXVI IUSSP International Population Conference. Available from: URL: <http://iussp2009.princeton.edu/abstracts/91173>
13. Hosain GM, Chatterjee N. Health care utilization by disabled persons: A survey in rural Bangladesh. *Disabil Rehabil* 1998;20:337-45.
14. D'Novemony MA, Raj SS. A study in the family and socio-economic conditions of the persons with disabilities in Vallioor Panchayat Union. *Asian Pac Disabil Rehabil J* 2003;5:14-20.
15. Chopra A, Saluja M, Patil J, Tandale HS. Pain and disability, perceptions and beliefs of a rural Indian population: A WHO- ILAR COPCORD study. WHO-International League of Associations for Rheumatology. Community Oriented Program for Control of Rheumatic Diseases. *J Rheumatol* 2002;29:614-21.
16. Abidi J. Current status of employment of disabled people in Indian industries. <http://www.dinf.ne.jp/doc/english/asia/resource/apdrj/z13jo0400/z13jo0410.html>
17. Disler PB, Jacka E, Sayed AR, Rip MR, Hurford S, Collis P. The prevalence of loco motor disability and handicap in the Cape Peninsula. Part II. The black population of Nyanga. *S Afr Med J* 1986;69:353-5.
18. Osman A, Rampal KG. A study of loco motor disabilities in a Malay community in Kuala Selangor. *Med J Malaysia* 1989;44:69-74.

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