

Ophthalmic Disability in Prakasham District Of Andhra Pradesh

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Abstract: Poverty plays an important role in the maintenance of ill health. The full potential of an individual is not able to perform due to disability. Handicap is the result of disability. A study has been designed to know the underlying factors for disability due to ophthalmic condition. Government of Andhra Pradesh initiated a program “Software for Assessment for Disabled For Access Rehabilitation and Empowerment” to help the rural poor of handicapped due to disability.

An individual is not able to perform certain activities considered normal for his age, sex etc. is considered as disable. As a result of disability, the person experiences certain disadvantages in life and is not able to discharge the obligations required of him and play the role expected of him in the society. This is termed as handicap. Disability may be of different types like, physical, mental, and or social. There are different measures of disability, and one of the measures is disability adjusted life years (DALY). Psychological and neurological disability constitutes 28% of total. Physical conditions are another important contributor for the disability. In physical disability, ophthalmic conditions contribute to significant percentage. The prime duty of any nation is to protect the disabled and handicapped both socially and economically. Government of AP started a programme known as SADAREM (Software for Assessment for Disabled to Access Rehabilitation and Empowerment) to help the rural poor due to disability.

The responsibility of identification of Persons with Disability (PWDs) is given to the respective District Collectors. Eligibility criteria, guidelines were prepared to identify the PWDs and given to the Medical Boards. Specialty hospitals/District hospitals are identified as centers for issuing disability certificates. Rajiv Gandhi Institute of Medical Sciences, Ongole is identified in Prakasham District of AP as one of the centers. The data collected through prescribed format were analyzed.

Keywords: Disability, Ophthalmic condition, PWD, SADAREM

1. Introduction

Disabilities are an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations.

Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives. Overcoming the difficulties faced by people with disabilities requires interventions to remove environmental and social barriers.

People with disabilities have the same health needs as non-disabled people – for immunization, cancer screening etc. They also may experience a narrower margin of health, both because

of poverty and social exclusion, and also because they may be vulnerable to secondary conditions, such as pressure sores or urinary tract infections. Evidence suggests that people with disabilities face barriers in accessing the health and rehabilitation services they need in many settings.¹

- Over a billion people, about 15% of the world's population, have some form of disability.
- Between 110 million and 190 million adults have significant difficulties in functioning.
- Rates of disability are increasing due to population ageing and increases in chronic health conditions, among other causes.
- People with disabilities have less access to health care services and therefore experience unmet health care needs.²

People with disabilities report seeking more health care than people without disabilities and have greater unmet needs. For example, a recent survey of people with serious mental disorders, showed that between 35% and 50% of people in developed countries, and between 76% and 85% in developing countries, received no treatment in the year prior to the study.²

In South-east Asia, the prevalence of disability ranges from 1.5 – 21.3% of the total population, depending on definition and severity of disability (Mont 2007). Despite the increase in prevalence of disability worldwide, due to various reasons, not much attention has been paid to its evaluation, management and prevention (WHO 2002).³

Prevalence of disability globally ranging from 4-10% (Teo 2001) is observed. In developing countries the disability is around 4%. (Metts 2000) In the industrialized countries, the prevalence is 7%. In the SEA member countries, the prevalence of disability is 1.5% to 21.3%. As per census data in India it is 1.8 to 2.2% (Census 2001, NSSO 2002)³

About 8.4% and 6.1% of the total estimated households in rural and urban, respectively reported to have at least one disabled person. Among the disabilities, locomotor disability is the commonest disorder in the country. 1046/100,000 in the rural and 901/100,000 in urban are the persons affected with disabilities. It is followed by visual and hearing impairment⁴

OBJECTIVES:

- To know the proportion of people with impaired vision among the persons referred from both rural and rural areas of Praksham District of Andhra Pradesh.
- To know the relationship between various socio-economic variables with degree of disablement.

2. METHODOLOGY:

India is a vast country with variable social, cultural, geographical and economic background. A major segment of the population is suffering with disabilities even with availability of better health services in the country. GOI is trying to take several measures to assist the disabled ones. As per the recommendations of National Council for Handicapped Welfare of the Committees under the chairmanship of DGHS has prepared standard guidelines to provide uniform services throughout the country. Three types of disabilities are main contributors to major portion of disability. Physical impairment leads to limitation of functional ability. Ophthalmic disability is one among the three major disabilities.

Proper classification of disability is essential to provide assistance to the disabled. Disability is classified according the period which the affected is unable to do work. Using this criteria, there are two broad categories. 1. Temporary total disability & Partial disability 2. Permanent disability.

The expert committee classified four broad categories of visual impairment and given guidelines regarding certain conditions which are ambiguous.

Based on the guidelines of expert committee, a permanent disability certificate will be issued to disabled one.

According to GOI & State Government a Board will be constituted with three members. One among them is ophthalmic specialist. Appellate medical board constituted at higher level gives advice on critical issues.

The Committee recommends assistance in any form to the disabled if a person of disability more than 40% of disability. The degree and extent of disability can be classified in to four groups.

- 1) <40%
- 2) >40% to <75%
- 3) >75% to <100
- 4) 100%

DGHS & Ministry of Health & FW will be the final authority in case of any controversies. Arranging responsibility of issuing certificates to the needy disables is given to District Collector by Commissioner Disabled Welfare, Hyderabad, Telangana State.

The Government of India had enacted the Persons with Disabilities (Equal opportunities, Protection of Right and Full Participation) Act 1995 and the Act came into force in AP on 7/2/1996. As per the Act, seven categories disabilities were identified. Blindness is one among them. Visual impairment is classified under two heads: 1) Low vision 2) Blindness

Those who are having vision less than 6/18, field less than 50 degrees, hemianopia with macular involvement & attitudinal defect involving lower visual fields are considered as low vision subjects. Blindness refers to a condition where a person suffers from any of the following conditions: Total absence of sight, VA not exceeding 6/60 even after correction and limitation of the field vision subtending an angle of 20 degree or worse.

GOI prepared standard guidelines to assess various disabilities to have uniformity in issuing disability certificates throughout country. Issuing certificate of disability Medical Boards were established with three members with at least one of them of concerned specialty. District hospitals/Specialty hospitals were identified as centers of issuing certificates. The Head of the Hospital will be acting as chairman of the Medical Board team and can appoint concerned field specialist if needed further. Necessary test is to be done before issuing disability certificate. The chairman will have right to preserve all the certificates issued from the center for any verification or reissued certificate if necessary. The District Collector is having right to constitute Medical Board in consultation with Head of the Hospital as per the guidelines of Rural Development Department. All the persons with disability will be shifted to the center as a camp mode. The Board will sit once in fifteen days in a month to issue certificates. After approval and issue of disability certificate by the Board, old certificates will be nullified. Any loss of certificate issued by the Medical Board, filing FIR and applying to Board, a new certificate can be obtained within 20 days. Issues of complication will be addressed by Appellate Authority constituted with Superintendent of Hospital as chairman, HOD of specialty and with concerned specialist. Sarojini Devi Eye Hospital, Hyderabad will act as apex hospital in the state. The tertiary care hospital in the district/district hospital will be the center for issuing disability certificate. Even the guidelines have been issued to the centers for issuing fraudulent certificates with fine and imprisonment.

The issued medical certificate will be valid for lifelong if the disability is permanent. If the certificate issued by the Medical Board is a temporary one, it will be reviewed over a period of time and fresh certificate will be issued. One percent of the open seats are reserved for ophthalmic conditions that are having more than 40% of disability.

Government has been exploring the possibility of introducing a transparent mechanism for screening and assessing the degree of disability which requires an assessment software that is objective, scientific, verifiable and based on parameters that doctors measure and compute to generate the percentage of disability accurately. Government after careful examination, software has been introduced by name SADAREM (Software to assess Disability for Access, Rehabilitation & Empowerment). Government made it available to all the district collectors in 2001. The district heads were instructed to use only the certificates generated through SADAREM to use for the purpose of Social Security Pensions in place of the certificates issued by Medical Boards in the past. The District Collector will constitute a committee with the following members to mobilize the PWDs from their residential places to examination centers and to bring them back to facilitate for getting certificates:

1. District Collector
2. DM & HO
3. District Coordinator
4. Superintendent
5. Project Director, Women and Child Welfare Department
6. Assistant Director, Disabled Welfare Department
7. Project Director, MEPMA
8. Project Director, Rajiv Vidya Mission
9. CEO, Zilla Parishad
10. Reputed NGO working for disabled nominated by the District Collector
11. Project Director, DRDA

As per the directors of Committee, the local NGO/AWW/ASHA/NSS Volunteers will mobilize the PWDs to examination center in batches of 50. APSRTC will arrange transport to the center at the free of cost. The eligibility criteria for issuing certificate are white ration card holders.

The study was conducted in a tertiary care hospital. Data collected from outpatient Department of Ophthalmology. Government of Andhra Pradesh to provide assistance to the disabled, involved several welfare departments and Ophthalmology Department of Rajiv Gandhi Institute of Medical Sciences, Ongole, Prakasham District for both mobilizing and certifying the patients for degree of disability. A standard protocol of certification was adopted. As per the guidelines, every refereed candidate was tested by the Medical Board constituted by the Superintendent of RIMS General Hospital for issuing disability certificate as per degree. Based on the amount of disability, it was expressed in percentage.

The data pooled was compiled in excel and analyzed taking various variables to draw conclusions through using SPSS software.

3. OBSERVATIONS & DISCUSSIONS:

TABLE-1: DISTRIBUTION OF PATIENTS AS PER CASTE WISE

S.NO	CATE	NO	%
1	OC	2310	35.52
2	BC	2603	36.64

3	SC	1766	24.86
4	ST	230	3.23
5	MINORITY	194	2.73
TOTAL		7103	100

TABLE-2: LITERACY STATUS OF SUBJECTS REFERRED TO THE HOSPITAL

S.NO	LITERCY STATUS	NO	%
1	ILLITERATE	5651	79.56
2	<10 TH STANDARD	876	12.33
3	10 TH STANDARD	269	3.79
4	INTERMEDIATE	166	2.34
5	DIPLOMA	23	0.32
6	DEGREE	92	1.30
7	POST GRADUATE	26	8.42
TOTAL		7103	100

TABLE- 3: EMPLOYMENT STATUS OF SUBJECTS REFERRED TO THE HOSPITAL

S.NO	STATUS OF EMPLOYMENT	NO	%
1	GOVERNMENT	21	0.30
2	PRIVATE	14	0.01
3	SELF EMPLOYMENT	288	4.05
4	UNEMPLOYMENT	5281	74.35
5	WAGES	1499	21.10
6	TOTAL	7103	100

TABLE-4: STATUS OF CERTIFICATION OF THE SUBJECTS REFERRED TO THE HOSPITAL

S.NO	STATUS OF CERTIFICATION	NO	%
1	LIVE	6033	84.94
2	NOT ELIGIBLE	255	3.60
3	DUPLICATION	03	0.04
4	SUSPENDED	03	0.04
5	PERMANENT	58	0.81

	MIGRATION		
6	TOTAL	7103	100

More number of patients with structural/functional disability was observed in four mandals of the district. Those mandals were Bestavaripeta, Kanigiri, Markapuram and Padaraveedu. The reason for attending more number of cases in these mandals could be active mobilization/higher prevalence of impairment. Minimal prevalence was reported from mandals like Karamchedu, Shantanutalapadu, Inkollu and Yeddanapudi. In these mandals the prevalence was less than 1%.

85% of the patients attended for examination were certified and the remaining was not issued due to several reasons mentioned in table 4.

Table-5: Grading of ophthalmic disability of subjects referred for certification

	Frequency	Percent	Valid Percent	Cumulative Percent
0	5	.1	.1	.1
20	95	1.3	1.4	1.4
30	1459	20.5	20.8	22.3
40	2367	33.3	33.8	56.1
42	1	.0	.0	56.1
75	819	11.5	11.7	67.8
100	2258	31.8	32.2	100.0
Total	7004	98.6	100.0	
Missing System	99	1.4		
Total	7103	100.0		

Total number of subjects was referred for certification 7103. 55% of them were having less than 40% disability and not eligible for social security benefits as per the guidelines provided by the Government. 11% of the subjects were certified as with moderate disability and 32% as severe disability.

Table 6: Gender basis grading of ophthalmic disability

	percentage							Total	
	0	20	30	40	42	75	100		
gender of the pensioners	Female	2	39	621	944	0	347	925	2878
	Male	2	56	838	1423	1	472	1333	4125
Total		4	95	1459	2367	1	819	2258	7103

Number of females referred to hospital for certification was 2879. They were shown in table number 6 as per percentage of disability. 32% of attended females were suffering with severe disability with eye condition. Similar percentage of disability was also observed in males.

4. Conclusion & Recommendations:

Number of referred subjects from different zones of the district was 7103. Out of them 40% were females. 65% of

the attended were belonging to socially from backward communities. 80% of them are illiterates. 74% of the study group is from unemployed group. From four mandals of Prakasham district more number of subjects were mobilized. The following are the mandals from where large number came for utilize social security benefits offered by the Government: Bestavaripeta, Kanigiri, Markapuram and Padaraveedu. 55% of the study group was having less than 40% ophthalmic disability and they the group is not eligible for social security benefit. 32% of the subjects in both the sexes are with severe grade of disability.

Government is spending huge amount to give benefit to the disabled and through creation of awareness, adopting of transparency in certifying the cases may improve the quality of life of the people with disablement.

5. References:

1. WHO Rehabilitation and News letter, April 2013
2. WHO, Disability & Health, December 2014
3. Disability, Gagandeep Kaur Walia, South Asia Network for Chronic Disease
4. Report No. 485 (58/26/1), Disabled persons in India, NSS 58th round, July-Dec 2002, Report No. 485 (58/26/1), National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India, Dec 2003

Author's Profiles:

First Author

- Presently working as Associate Professor in RIMS Medical college, Ongole, Prakasham District
- He worked for 13 years in SD Eye Hospital Hyderabad as assistant Professor
- He worked as Professor in Gandhi Medical College Hyderabad for 2 years
- He was examiner for UG and PG students of Dr. NTRUHS, Rajiv Gandhi University of Health Sciences & Dr MGR UHS.

Second Author:

- Working as Professor in Dept. of Social and Preventive Medicine in Malla Reddy Medical College for Women, Hyderabad.
- Completed 20 years of teaching experience in Govt Medical Colleges
- Acquired Diploma in Community Eye Health from London School of tropical medicine and hygiene, London, UK
- President of Community Ophthalmologist Association, India
- Member of All India association of SPM
- Participated in many community surveys as Principal investigator
- Participated in Rapid Assessment of Avoidable Blindness survey conducted by Govt. of India
- Conducted health camps in 108 villages as part of study conducted to collect baseline data around Uraium Project located at Tummalapalli Village of Kadapa district of AP with financial assistant of GOI

- A Demographic study conducted among the population of villages surrounding Uranium Project located at Tummalapalli village of Kadapa, AP with financial assistance from BARC, Mumbai & GOI.
- Two Scientific papers were presented for the 18th National Symposium on Environment conducted in December 2013 organized by JNTUA, Anantapur, AP & BARC, Mumbai
- Involved in academic activities for UG and PG students
- Assisting in PG dissertation work
- Presented papers in State, Zonal CME programmes, state, national and international conferences

Third Author

- Working as Professor in Dept. of Social and Preventive Medicine in Malla Reddy Medical College for Women ,Hyderabad
- Experience of 37 years of teaching for both UG and PG students
- Is a internal and External examiner for PG and UG students
- Participated in public health projects in HIV /AIDS, Safe Injection practices and UIP

Fourth Author

- Working as a Professor and Head, Department of Community Medicine, Malla Reddy Medical College for Women, Suraram Hyderabad.
- Worked in the Public health field for more than 38 years
- Has more than 20 years of teaching experience
- Worked with WHO India in Polio eradication program
- Acquired a Diploma in Advanced Vaccinology from Annecy France.
- Participated and contributed to many community based surveys.
- Participated in five Maternal and Neonatal elimination validation programs (4 in India and one in Indonesia as a Global Associate from WHO)
- Participated in American Public Health Association conference in Boston in 2007 and presented a paper on Supportive Supervision
- Presented papers in National and International conferences