

PREVALENCE OF DISABILITY IN INDIA-AN UPDATE

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ABSTRACT:

Background: In recent years, there is growing realization among developing countries about the need to evolve suitable policies & programs for the welfare of the disabled. But the paucity of data on the size of population of the handicapped belonging to different categories, needed for understanding the magnitude of the welfare services for their rehabilitation, is a major impediment for evolving a realistic approach to their problems.

Objectives: The objective is to present the prevalence of different disabilities with a focus on rural and urban differential in distribution, their age of onset, etiology, and social status of disabled in the country. **Methods:** NSSO survey methodology. Mental retardation & mental illness was included first time in NSSO survey.

Results: NSSO Survey indicates, India is having 18.49 million PWD forming about 1.8% of the total population. For every 100,000 people there are 1755 PWD either mentally or physically disabled. About 10.63% PWD were having more than one type of disabilities. In rural & urban area about 8.4% & 6.1% of total estimated house holds respectively reported to have at least one PWD. The prevalence of locomotor disability is highest among all types of disabilities. About 55% PWD were illiterate and only 26% PWD were employed. Survey showed that 5% live with their spouse and 47% were never married.

Conclusions: India has a large population of disabled who are in need of education, employment, and rehabilitative services. Special focus is needed for rural areas.

Introduction:

In India Persons with disabilities (PWD) has been receiving attention during last five decades since independence. Prevalence and incidence of disability has been changing over the years with changing causes of disability. Approach to rehabilitation has also seen a change in view of changing disability scenario. Rehabilitation is a difficult & challenging task which requires overall combined efforts of government, community, voluntary organizations, & individuals. Earlier rehabilitation of the persons with disability meant taking care of them & placing in special institution where their needs in terms of food and shelter were cared for. Over the years, the concept of rehabilitation has undergone a sea change in its approach; the care and management of PWD; today means not only educating and training the PWD, but also empowering PWD to be included with normal mainstream in their own community (Grover, 2005)¹.

In the recent past there has been however a growing realization all over the world especially among developing countries about the need to evolve suitable policies & programs for the welfare of the disabled. But the paucity of data on the size of population of the handicapped belonging to different categories, needed for understanding the magnitude of the welfare services for their rehabilitation, is a major impediment for evolving a realistic approach to their problems.

In order to evolve a successful programme for their

comprehensive rehabilitation including social integration, detailed information relating to prevalence, types of disability, incidence of their age, sex, etiology etc is very essential. Present article, based on the findings of the Government of India publication, "Disabled Persons In India" Report No. 485, NSS 58th Round July-Dec 2002 (published in Dec-2003)² will be of immense help to policy makers/ planners and administrators, rehabilitation professionals and medical, paramedical persons who are actively involved in strengthening of disability prevention and rehabilitation services for the disabled persons. The objective of this article is to present the prevalence of disabilities in India in different geographical and cultural regions, pattern of age of onset, etiology and to describe the social status of the PWD in the country.

Methodology:

The National Sample survey organization (NSSO) had conducted thrice the detailed survey of PWD to provide information on their magnitude & other relevant features of PWD. The first survey was conducted during July- Dec 1981 (NSS 36th Round) followed by second survey during July- Dec 1991 (NSS 47th Round) The third & recent survey of PWD was held during July- Dec 2002 (NSS 58th Round) wherein for the first time the information on mental retardation & mental illness was also included.

In this NSSO survey, 45571 households from 4637 villages and 24731 households from 3354 urban block were

surveyed from the whole country. The 49300 PWD were observed in rural area whereas in urban area 26679 PWD were enumerated. NSSO categorised, mentally disabled in two groups i.e. Mental retardation (MR) & mentally ill (MI). Categorization was done through three probing questions and based on the information so obtained the persons were grouped in to MR & MI. The visually disabled persons were categorized in two groups i.e. Blindness and Low Vision. Inability to hear properly was considered as Hearing Disability (HD) and Inability to speak properly was considered speech disability (SD). Locomotor Disability (LD) included (a) paralysis of limb or body, (b) deformity of limb (c) loss of limb (d) dysfunction of the joints of the limbs (e) deformity of body other than in the limb.

Observations (Important Findings):

The NSSO survey revealed that for every 100,000 people in India, there were 1755 PWD who were either mentally or physically disabled (Table I). Among rural & urban residents, the prevalence of disability was 1.85% & 1.50% respectively. Further between the two sexes, prevalence of disability is marginally higher in males (2.12% and 1.67%) while among female is (1.5% and 1.31 %) in both rural & urban areas respectively. Prevalence of locomotor disability is highest followed by hearing disability and visual disability. About 48% could not speak at all and 19% could speak only single words. The speech of about 33% was not understandable. The distribution by sex follows a similar pattern except that the proportion of disabled female was higher in category of blindness. The results show more than one type of disabilities was present in 10.63% PWD.

Prevalence Of Disabilities In Major States :

Across the country, the prevalence rate per 100,000 was highest in Orissa followed by Kerala & Punjab. The lowest rate was observed in Assam followed by Jharkhand & Rajasthan. The prevalence rate of speech disability was maximum in Kerala (335), followed by Himanchal Pradesh (281), Andhra Pradesh (259) & Tamilnadu (353)

Locomotor disability was highest in rural areas of Punjab (1484) & in urban areas of Kerala. The lowest prevalence rate for LD was observed in both rural and urban areas of Assam (406 & 471) respectively.

Rural And Urban Distribution :

The aggregated estimates of the disability in rural and urban India are given in (Table II) separately for each sex and type of disability. These estimates are obtained by using survey proportions on the projected populations. According to study estimates, the number of PWD in our country was 18.49 million during July to Dec. 2002 & they formed about 1.8% of the total estimated population. The survey estimated prevalence of loco motor disability is highest in our country i.e. 1046 in the rural and 901 in the urban per 100,000 persons. The second highest is hearing disability i.e. for every 100,000 persons living in rural areas 310 were having hearing disability where as number is 236 in Urban Sector. This is followed by speech disability (210 rural & 187 urban) and

visual disability i.e. Blind (210 rural) and 171 (urban) (Figure-1).

Etiology and Age Of Onset Of Disabilities :

Mental Disability (MR & MI)

Causes of MR- In majority of MR cases, cause was "illness during childhood" (42%) followed by 'Head Trauma in childhood' (10%) and 'pregnancy & birth related problem' (3%). Only 2% reported, hereditary as caused of MR. The remaining 23% of the respondents were not aware of probable cause of MR.

Causes of Mental Illness- About 9% cases of MI reported, 'illness during childhood' as cause of their disability. Large number (36%) was not aware of the cause. 46% respondents reported, pregnancy & birth related illness, childhood illness, head injury & hereditary) as a cause of their disability which were not included in the list of causes.

Age at the on set of MR/MI- Unlike other disabilities, MR was reported since birth or at very early age. About 87% of mentally disabled had the problem since their birth and about 8% had the onset at age of 0-4 years. Among females about 90% had the MR since their birth. The other important point observed among MR is that the manifestation of disability is completed within the teen age. The problem of MI is more of an old age and the possibility of onset of MI increases as one gradually become old.

Visual Disability (VD) :

Causes of VD- About 24% reported, 'old age' as the cause for their blindness followed by 'cataract' (21%) and 'other eye diseases', caused blindness in about 17%. The 57% PWD with low vision reported this problem due to 'old age' or 'cataract' followed by 'other eye diseases' (12%). Probable cause of Low vision was not known to 10% PWD.

Age at the onset of VD- About 68% to 72% acquired VD at the age of 60 years & above. 1% to 2% cases visually disabled by birth.

Hearing Disability (HD) :

At all India level about 32% had profound and 39% had severe hearing disability (table III).

Probable Cause of HD- 'Old age' was reported as a probable cause of HD by 25% and 30% for rural & urban PWD respectively followed by 'other illnesses' and 'ear discharge'.

Age at onset of HD- NSSO estimated that about 7% of PWD with HD were born with it. Onset of HD at age of 60 years and above in the rural & urban area was reported in 56% and 62% PWD respectively.

Speech Disability (SD) :

Causes of SD- Among the reported causes, 'paralysis' and 'other illnesses' were the major ones. i.e. 46 and 49% reported paralysis or other illness as the cause of speech disability in the rural & urban sectors respectively. 'MR/MI' accounts for 9% SD and 8% due to 'voice disorders'. Only 1% reported 'old age' as the cause of SD in contrast to visual & learning disabilities.

Age at onset of SD- At all India level, about 35% & 43% in rural & urban areas respectively reported that they were affected by SD at the age of 60 or more. About 38% (Rural) & 31% (Urban) PWDs had congenital speech defects.

Loco motor Disability (LD):

The 'deformity of limbs' is the maximum among different type of LD both in rural (458) and urban (442) followed by 'dysfunction of joints' of limbs in rural (222) & urban (250) and 'paralysis of limbs' in rural (144) & urban (146). The 'loss of limb' constitutes only about 7 to 8%. NSSO Survey also revealed that 4% of LD reported to have either multiple LD or 2 or more other disabilities in both rural and urban sectors (Table IV).

Probable cause of LD- At all India level, 'Polio' was the major cause of LD in 30% & 27% of PWD with LD in rural & urban area respectively, followed by 'injury other than burns' accounting for 26%-27% cases of LD. Contrary to visual & hearing disability, percentage of PWD with acquired LD due to 'old age' was as low as 3% or 4% at all India level. Leprosy (cured & not cured) reported as the cause of LD by 3% of PWD.

Discussion :

NSSO-2002² reveals shocking figures, a total of 18.53 million disabled, constituting about 1.8% of the total population. The disability rate (number of disabled per 100,000 populations) for whole country works out to 1755. Frustrating enough, more than 10% of the disabled population is suffering from multiple disabilities. Census 2001³ also reported high disability rate of 2130 for the country. Rehabilitation Council of India⁴ estimated that there would be 8.94 million loco motor disabled, 3.24 million hearing disabled, 1.96 million speech disabled, 9 million mental disabled, and 4.01 million visual disabled & 3 million CP in the age group 5-14 years in India (estimated total 30.15 million). According to Krishnaswamy⁵ the total disabled population in India amounted to 14.27 million based on NSS prevalence rates of disabilities & 1981 census report of India; whereas NSS reported nearly 12 millions total disabled number wide 36th Report 1981. J. Narayan⁶ also observed that reports on disabilities in India reveal different statistics.

In comparison to previous two NSS Rounds, prevalence & incidence rate seems to have declined during two decades in each sector & sex (1981, 1991 & 2002)^{2,7*}. Incidence of LD per 100,000 persons obtained from 1981 and 1991 showed an increase, it remained steady during 1991 to 2002 in the rural

but showed a very marginal dip in urban sector.

However rural-urban differential is of great concern. The prevalence of disability is more in rural areas, and difference in the proportions of the disabled by sex is marginally higher in males. Similarly census 2001³ also revealed more number of disabled in rural areas but also shows that there is no appreciable difference in the proportions of the disabled by sex in rural and urban areas. Use of appliances/ aids is minimal in the survey population especially in the rural areas similar to this Tripathi Anand et al¹⁰ also found in rural Lucknow that only 4.08% PWD were using any appliance or aids. The biased distribution of health infrastructure/ rehabilitative services in favor of urban area is a visible truth in our country. With the dearth of both private and government health facilities in the rural areas, a great responsibility has to be shared by the NGOs especially in the field of rehabilitative services. Services provision by community based mode will be the best answer in rural areas.

When the respondents were explored further for their literacy, education, and marital status, NSSO observed that 47% of the PWDs were never married and only 5% were living with their spouses. This survey found that only 45% PWDs were literate. Very few PWD were able to complete any vocational courses and only 26% were employed. Jayanti Narayan (2005)⁶ estimated that there are over 3500 special schools for PWD. It is estimated that there are only 900 schools for HD, 900 schools for VD, 1000 schools for MR, and 700 schools for LD in the whole country.

To conclude this, continuous and sustained efforts are needed for to educate and uplift the economic status of the disabled so that they can live self independent life. With medical services/ facilities, extensive efforts are also needed to educate families of PWDs, community for complete and full social acceptance of the disabled and to ensure rights of disabled. The family and the community can also play a significant role in prevention and early detection of the disability if given the right information, motivation, and modicum of material assistance. Voluntary organizations engaged in area of disability can also do a lot; they should be encouraged with suitable financial and technical support to expand education and training programs for disabled especially in rural areas. For this continuous networking activities are needed within the different service sectors and with the NGOs. More research and infrastructure is needed in field of rehabilitation and special education.

Table 1
NUMBER OF DISABLED PERSONS (FOR 1,00,000 PERSONS) BY SEX & SECTOR (ALL-INDIA)

Type of Disability	Disabled Person Per 1,00,000								
	Rural			Urban			Rural+Urban		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Mental Retardation	113	69	92	118	81	100	115	72	94

Table Contd.

Mental Illness	128	91	110	105	71	89	122	86	105
Blindness	191	230	210	116	166	140	171	214	192
Low Vision	76	95	86	46	62	54	68	87	77
Hearing Disability	319	301	310	234	238	236	296	285	291
Speech Disability	242	176	210	221	151	187	237	169	204
Locomotor Disability	1274	804	1046	1058	730	901	1217	785	1008
Any Disability	2118	1556	1846	1670	1311	1499	2000	1493	1755

Table 2

ESTIMATED* NUMBER (In'00) OF PWD BY TYPE OF DISABILITY AND SECTOR

Type of Disability	Rural			Urban		
	Male	Female	Persons	Male	Female	Persons
Any disability**	83102	57748	140850	25811	18249	44060
Mental disability						
mental retardation	4434	2561	6995	1824	1128	2951
mental illness	5022	3377	8399	1623	988	2611
Physical disability						
visual disability						
blindness	7494	8536	16030	1793	2311	4104
low vision	2982	3563	6545	711	877	1588
hearing disability	12516	11171	23687	3617	3313	6930
speech disability	9495	6532	16027	3416	2102	5518
locomotor disability	49987	29839	79826	16352	10162	26514
estd (00) total persons	3923611	3711319	7634930	1545555	1391996	2937551

* Estimates are obtained by using survey proportions on the projected population.

** at least of mental, visual hearing, speech and locomotors disability.

Table 3

NUMBER OF PERSONS WITH HEARING DISABILITY (10,000 PERSONS) BY DEGREE OF DISABILITY FOR EACH SEX AND SECTOR (ALL INDIA)

Degree of Disability	Hearing Disabled Persons Per 1,00,000 Persons								
	Rural			Urban			Rural+Urban		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Profound	102	90	96	81	82	81	96	88	92
Severe	123	124	123	85	85	85	113	114	113
Moderate	93	86	90	68	70	69	86	82	84
All	318	300	309	234	238	236	296	285	291

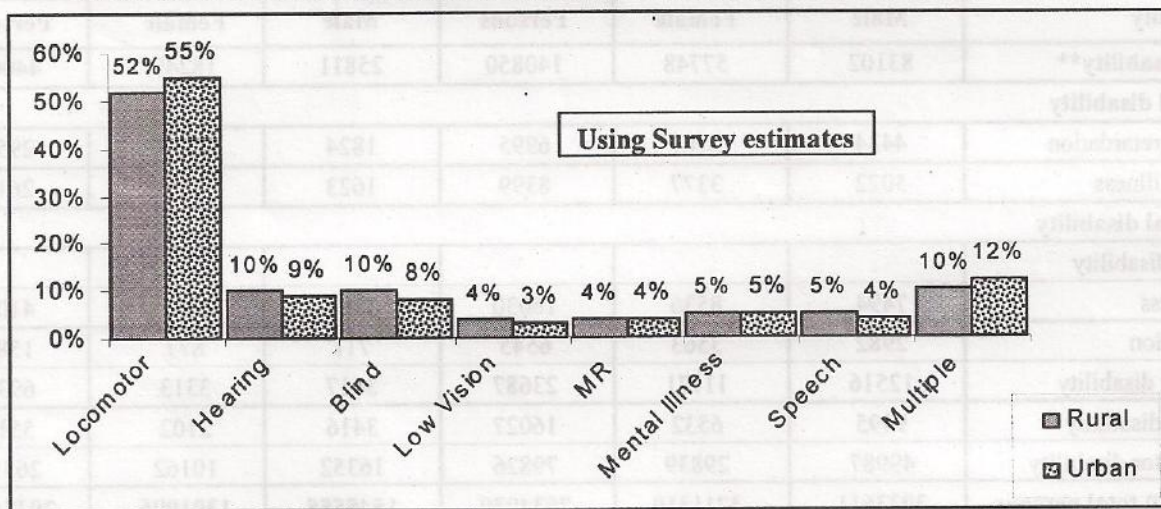
Table 4

DISTRIBUTION OF PWD WITH LD (PER 1000) BY TYPE OF DISABILITY

Type of LD	Rural			Urban			Rural+Urban		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Paralysis	143	146	144	142	154	146	142	148	145
Deformity of Limb	463	448	458	448	433	442	460	444	454
Loss of Limb	92	51	77	95	46	76	93	50	77
Dysfunction of Joint	203	253	222	233	277	250	210	259	228
Deformity of Body	98	99	98	81	89	84	94	97	95
All	1000	1000	1000	1000	1000	1000	1000	1000	1000

Fig 1

PERCENTAGE DISTRIBUTION OF DISABLED PERSONS BY TYPES OF DISABILITY



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