

# Mental Disability: A Retrospective Study of Socio-Clinical Profile of Patients Seeking Disability Certificate at a Tertiary Care Centre in Delhi

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## Abstract

**Background:** Mental illness and mental retardation are included in "The persons with disabilities (Equal opportunities, protection of rights and full participation) Act, 1995" along with other causes of disabilities like blindness, hearing impairment, locomotor disability etc. The persons with disability are eligible for various social welfare benefits from the Government under this act if they have minimum 40% disability as certified by a Government medical authority. This is among one of the few studies on various mental disability related variables and socio-clinical profile of disability certificate seeking patients and is probably the only one to compare results with a similar kind of study done at the same centre five years ago.

**Objective:** The study aims to assess the socio-demographic profile of the cases, severity of disability in the mentally retarded and mentally ill, co-morbid psychiatric and medical conditions, pattern of utilization of different government benefits and to compare results of current study with a study done at the same centre five years ago.

**Materials and Methods:** The study was carried out in the Department of Psychiatry of a tertiary care multispecialty teaching hospital in New Delhi. This was a retrospective file-review based study of patients who were issued disability certificate for Mental retardation or Mental illness during January, 2015 to May, 2016. The subjects were diagnosed to be suffering from Mental retardation or Mental illness as per ICD-10 and disability was assessed as per guidelines issued by Government of India in 2001 for Mental retardation and for Mental illness in 2002. Indian Disability Evaluation and Assessment Scale (IDEAS) was used to assess disability in Mental illness cases.

**Statistical Analysis:** The statistical analysis was done by using WHO'S Epi Info version 7.2. Frequency, percentages, t test and chi-square analysis were used to analyze the data.

**Results:** Out of total 231 cases, majority were male 163 (70.6%), Hindu 211 (91.3%), under 18 years of age 160 (69.3%), unmarried 228 (98.7%), lived in nuclear family 186 (80.5%), from urban background 137 (59.3%). Total number of cases of Mental retardation were 220 (95.2%), 11 (4.7%) cases were of Mental illness.

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Severity wise in Mental Retardation group (220 cases) maximum number of cases were of Mild Mental Retardation 94(42.7%) having 50% disability, in Mental illness group 10 out of 11 cases had moderate disability (40-70% disability as per IDEAS Scoring). Medical co-morbidity was present in 22(9.5%) cases mainly in the form of Cerebral palsy, Epilepsy; 24(10.4%) patients had psychiatric co-morbidity in the form of Behavior problems, Attention Deficit Hyperactivity Disorder (ADHD), Conduct disorder. Maximum number of patients 177(76.6%) applied to get Monthly allowance. On comparison with a similar study done at the same centre five years back, the significant difference was low mean age of sample and increased rural representation in the present study and both the differences were statistically significant.

**Conclusion:** Number of patients seeking disability certificate has risen as compared to previous study. Majority of the cases were male, mostly from urban background although rural representation in comparison to previous (2011) study has increased significantly. Cases of Mental Retardation outnumbers patients with Mental illness seeking disability certificates reflecting more number of Mental illness cases seeking treatment early in the course of illness and availability of better treatment options.

Information related to disability and various beneficiary schemes by Government of India needs to be provided in detail so that maximum number of cases can avail other benefits along with monetary one.

**Keywords:** Mental illness, Mental retardation, Mental disability, Disability certification, Disability benefits

## Introduction

An estimated 15% of the world's population or one in seven people experiences some form of disability or impairment.<sup>1</sup> The United Nations Convention on the Rights of Persons with Disabilities, intended to protect the rights and dignity of persons with disabilities, was adopted in December 2006. The convention defines disability as including "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others". In the last few decades, the concept of disability has shifted from individual impairment to a more social phenomenon to a human-rights based approach.<sup>2</sup>

According to census of India (2011), there are 2.68 crore persons with disabilities in India who constitute 2.21% of the total population. The number of persons with mental disability was estimated to be 22.28 lakhs out of which cases of Mental Retardation were 15 lakhs and disability due to mental illness was present in 7.2 lakhs<sup>3</sup> The Persons with Disabilities(Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 has been enacted by the Government of India for benefits of such population<sup>4</sup> The persons with disability are eligible for various social welfare benefits from the Government under this act if they have minimum 40% disability as certified by a Government medical authority<sup>5</sup>

Various welfare schemes for people with disabilities from Government of India are as follow:<sup>6,7</sup>

- Travel concession in Railways: 75% concession to the disabled and an accompanying person
- Concessional bus passes
- Monthly maintenance allowance/ Disability pension
- Income tax benefits
- Free education up to 18 years
- Aids and appliances (for multiple disabilities)
- Family pension: This will be given to the disabled after death of parents
- Employment reservation: Three to five percent jobs in Government are reserved for disabled

Mental illness and mental retardation are included in "The persons with disabilities (Equal opportunities, protection of rights and full participation) Act, 1995" along with other causes of disabilities like blindness, hearing impairment, locomotor disability. Government of India has issued guidelines for evaluation of disabilities due to Mental Retardation in 2001<sup>8</sup> and due to Mental illness in 2002.<sup>9</sup>

There are numerous Indian studies<sup>10-14</sup> on disability in psychiatric disorders but there is a dearth of published literature on socio-clinical profile of patients seeking disability certification due to mental illness and mental retardation. Therefore this study was designed to assess the socio-demographic profile of the

mentally retarded and mentally ill coming to psychiatry department for disability certification, severity of disability in these cases, and existence of co-morbid psychiatric and medical conditions. The pattern of utilization of different Government benefits by such cases was also assessed. The current data was also compared with the data available five years back to assess the trends in utilization and presentation of cases.

## Materials and Methods

This is a retrospective file-review based study of patients who were issued disability certificate for Mental Retardation or Mental illness during January, 2015 to May, 2016. Patient's case record file and copy of disability certificates were reviewed for socio-demographic profile, psychiatric diagnosis, medical and psychiatric co-morbidities, severity of disability (percentage of disability mentioned in disability certificate) in Mental retardation and Mental illness, purpose to apply for disability certificate (for type of benefit). The subjects were diagnosed to be suffering from Mental retardation or Mental illness as per ICD-10 and degree of disability was assessed as per guideline issued by Government of India in 2001 for Mental retardation, and for Mental illness in 2002. Indian disability evaluation and assessment scale (IDEAS) was used to assess disability in Mental illness<sup>15</sup>

## Statistical Analysis

The statistical analysis was done by using WHO'S Epi Info version 7.2.<sup>16</sup> Frequency, percentages, t test and chi-square analysis were used to assess any significant difference between the groups.

## Results

Total number of Disability certificates issued during this period were 231 (n=231). Mean age of sample was 16.31 with standard deviation of 10.11. Patients were divided in two age group below 18 and above 18 year. Majority of patients 160 (69.3%) were in below 18 year age group, male, Hindu, unmarried, lived in nuclear family and from urban background. (Table 1)

Out of 231 cases, 220 (95.2%) cases were of Mental retardation, 10 (4.32%) cases were of Schizophrenia and 1 (0.43%) case was of Obsessive compulsive disorder. (Table 2)

In Mental retardation group (220 cases), 94 (42.7%) cases were of Mild Mental Retardation having 50% disability, 71 (32.2%) cases had Moderate Mental Retardation with 75% disability, 44 (20%) cases had Severe Mental Retardation with 90% disability, and 11 (5%) cases were of Profound Mental Retardation with 100% disability. (Table 3)

Out of 11 cases of mental illness, 10 cases had moderate disability (40-70% disability), one case had mild disability with (<40% disability). (Table 4)

Medical co-morbidities, mainly Epilepsy and Cerebral palsy, were present in 22(9.5%) cases whereas psychiatric co-morbidities in the form of behavioral problems, psychosis, ADHD, Conduct disorder were present in 24(10.4%) cases. (Table 5)

Maximum number of patients 177(76.6%) applied to get monthly allowance. (Table 6)

**Table 1. Patients characteristics of study population**

Characteristic		
Age	Mean (SD)	16.31 (10.11)
Age Group	<18 years	160 (69.3%)
	>18 YEARS	71 (30.7%)
Gender:	Male	163 (70.6%)
	Female	68 (29.4%)
Religion:	Hindu	211 (91.3%)
	Muslim	17 (7.4%)
	Christian	3 (1.3%)
Education: (Formal education)	Present	58 (25.1%)
	Absent	173 (74.9%)
Marital status	Unmarried	228 (98.7%)
	Married	3 (1.3%)

Table 2.Type of Psychiatric diagnosis

<b>Mental Retardation :</b>		<b>220 (95.2%)</b>
	Mild	94 (40.6%)
	Moderate	71 (30.7%)
	Severe	44 (19.0%)
	Profound	11 (4.7%)
Mental illness		11 (4.7%)
Schizophrenia		10 (4.32 %)
Others		1 (0.43%)

Table 3.Degree of disability in cases of Mental Retardation

Borderline	70-79	-	25%
Mild	50-69	94 (42.7%)	50%
Moderate	35-49	71 (32.2%)	75%
Severe	20-34	44 (20%)	90%
Profound	Less than 20	11 (5%)	100%

Table 4.Degree of disability in cases of Mental illness

	Schizophrenia	Others	Total
Mild disability <40%	1	-	1
Moderate disability 40-70%	9	1	10
Severe disability 71-99%	-	-	
Profound disability 100%	-	-	
Total	10	1	11

Table 5.Medical and Psychiatric Co-Morbidity

Medical Co-morbidity	Absent	209 (90.5%)
	Present	22 (9.5%)
Psychiatric Co-morbidity	Absent	207 (89.6%)
	Present	24 (10.4%)

Table 6.Pattern of utilization of Government benefits

Transfer of Government Pension	52 (22.5%)
Disability Pension/Monthly allowance	177 (76.6%)
Others	2 (0.8%)
Total	231 (100%)

In Mental retardation group maximum number of cases 161 (73.1%) were in under 18 year age group , in Mental illness group maximum number of cases (10 out of 11 cases) were in above 18 year age group and this association between age group and type of psychiatric diagnosis was statistically significant,  $\chi^2=17.59$ , df 1, p value=0.00002.(Table 7).

Association between age group, gender, domicile and percentage of disability in cases of Mental retardation was not significant statistically. (Table 8)

Association between age group, gender, domicile and percentage of disability in cases of Mental illness was not found statistically significant. (Table 9)

In both the age group maximum number of cases applied to get Monthly allowance but age wise distribution of Monthly allowance among under 18 and above 18 group was in the ratio of almost 3:1 and this difference was significant statistically,  $\chi^2=6.2$  df 2 P value=0.04.(Table 10)

Table 7.Association between age group and type of psychiatric diagnosis

	<b>Mental Retardation</b>	<b>Mental illness</b>	<b>Total</b>	$\chi^2=17.59$ , df 1 P value=0.001
<18 years	161 (73.1%)	1 (9.0 %)	162 (70.1%)	
>18 years	59 (26.8%)	10 (90.9 %)	69 (29.8%)	
Total	220	11	231	

**Table 8. Association between age group, gender, domicile and severity of disability in cases of Mental Retardation**

Age group	50%	75%	90%	100%	Total	
<18 years	66	53	32	10	161	$\chi^2 = 2.26, df 3$ p=0.51
>18 years	28	18	12	1	59	
Male	65	52	29	9	155	$\chi^2 = 1.46, df=3$ p=0.69
Female	29	19	15	2	65	
Urban	62	37	24	6	129	$\chi^2$
Rural	32	34	20	5	91	
Total	94	71	44	11	220	

**Table 9. Association between age group, gender, domicile and severity of Disability in cases of Mental illness**

Age group	Percentage of disability			Fisher Exact P value=1
	Mild disability <40%	Moderate disability 40-70%	Total	
<18 year	0	0	0	
>18 year	1	10	11	
	Mild disability <40%	Moderate disability 40-70%	Total	
Male	1	7	8	
Female	0	3	3	
	Mild disability <40%	Moderate disability 40-70%	Total	
Urban	1	7	8	
Rural	0	3	3	
Total	1	10	11	

\*In Severe and Profound disability category of Mental illness group there were no cases

**Table 10. Relationship between age group and type of benefit**

	Govt pension transfer	Monthly allowance	Others	Total	$\chi^2 = 6.2, df = 2$ P value=0.04
<18 years	29 (55.7%)	130 (73.4%)	1 (50%)	160	
>18 years	23 (44.2%)	47 (26.5%)	1 (50%)	71	
Total	52	177	2	231	

**Table 11. Comparison with study done at same centre in 2011**

n=102	n=231	
Mental illness=16 (15.6%)	Mental illness=11 (4.7%)	Chi-square value $\chi^2 = 11.3, df 1$ P value=0.0003
Mental retardation= 86 (84.3%)	Mental retardation= 220 (95.2%)	
Mean age=27.68 (SD=14.43)	Mean age=16.31 (SD=10.11)	t value=4.3 P value=0.01
Gender		
Male=75 (73.52%)	Male=163 (70.6%)	$\chi^2 = 0.34,$ P value=0.58
Female=27 (26.74%)	Female=68 (29.4%)	
Domicile		
Urban= 97 (95.1%)	Urban= 137 (59.3%)	$\chi^2 = 41.6$ P value <0.001
Rural= 5 (4.9%)	Rural= 94 (40.7%)	
Monthly allowance=47 (46.1%)	Monthly allowance=177 (76.6%)	$\chi^2 = 35, df 2$ P value <0.001
Govt pension transfer= 37 (36.3%)	Govt pension transfer= 52 (22.5%)	
Others= 14	2 (0.8%)	

We compared results of our study with a study done at same centre five years ago in the year 2011. Total number of certificates issued in 2011 study were 102 (in two year duration) as compare to 231 certificates in current study in one and half year duration.

In current study percentage of Mental retardation cases. increased with proportionate decrease in percentage of Mental illness cases as compared to previous study ( Mental retardation 2011 vs 2016-84.3% vs 95.2% ; Mental illness 15.6% vs 4.7% ) and

this difference was statistically significant ( $\chi^2=11.3$ , df 1,  $P=0.0003$ ). Mean age of sample in current study was less 16.31 (SD=10.11) as compared to 27.68 (SD=14.43) in 2011 study and this difference was statistically significant (t value=4.3;  $P$  value=0.01). In 2011 study rural representation was merely 4.9% which increased to 40.7% and this difference was statistically significant ( $\chi^2=41.6$ , df 1,  $P$  value=<0.001). In both the studies maximum number of cases applied to get monthly allowance, it was 46.1% in 2011 which significantly increased in 2016 study (76.6%) and this difference was also statistically significant ( $\chi^2=35$ , df 2,  $P$  value=<0.001). (Table 11)

## Discussion

The current study aimed at assessing the socio-clinical profile of the cases, various illness/disability related variables, to compare results of current study with a study done at the same centre five years ago. In current study, majority of study subjects were male (70.6%), this finding corroborates with the general trend of gender based help seeking attitude in developing countries like India where females are given less importance due to socio-cultural reasons like inequality, dependence on others for most of their needs including health/ mental health related issues. This finding has also been observed in some of the Indian studies on socio-clinical profile of disability certificate seeking patients. In a study done by Balhara et al<sup>17</sup> on 173 disability certificate seeking patients in a tertiary care multispecialty hospital, 72.3% were male.

Comparing with previous study<sup>18</sup> majority of (69.3%) cases were below 18 year (with a statistical significant difference in mean age of sample) and 40.7% cases were from rural background, this trend showed significant increase in cases from rural areas and early seeking of disability certification, reflecting increasing awareness among general population about various beneficiary schemes of Government of India related to mental disability.

In most of the studies on Mental disability and related variables, number of cases of Mental retardation were significantly more in comparison to the cases of Mental illness<sup>17,18</sup> but in current study number of Mental retardation cases were overwhelmingly high 95.2%. In a study by Kashyap et al.<sup>19</sup> to assess the trends of utilization of government disability benefits over a period of 3 years, out of total 2079 cases 1794 (86.2%) cases were of Mental retardation. Percentage of cases of Mental illness in comparison with 2011 study also decreased in current study from 15.6% to

4.7% reflecting increasing number of cases seeking treatment for Mental illnesses early in the course of illness and availability of better treatment options.

In Mental retardation group maximum number of cases were under <18 year age category whereas in Mental illness group maximum number of cases were in above 18 year age category, this is explainable with the fact that onset of most of the mental illnesses is during adolescence or early adulthood.

In 2011 study 46.1% and in current study 76.6% cases applied to get disability pension/ monthly allowance as compared to other benefits. This pattern reflects preference for regular monetary benefits and underutilization of other different benefits given by Government of India for people with disabilities.

## Limitation of the study

The study is from one centre only therefore results cannot be generalized. Being retrospective study, there are chances of poorly recorded or incomplete information about co-morbidities.

## Conclusion and Future Directions

Number of patients seeking disability certificate has risen. Majority of the cases were male, mostly from urban background although rural representation as compare to previous (2011) study has increased significantly.

Cases of Mental Retardation outnumbers patients with Mental illness seeking disability certificates reflecting more number of Mental illness cases seeking treatment early in the course of illness and availability of better treatment options.

In case of Mental illnesses early diagnosis and treatment should be the primary goal along with psychosocial and vocational rehabilitation so that disability due to Mental illnesses can be prevented/reduced at initial stages.

Information related to disability and various beneficiary schemes by Government of India needs to be provided in detail and at grassroot level ie small cities, districts, towns, villages so that maximum number of cases can avail other benefits along with monetary ones.

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**Conflict of Interest:** None

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