



A RETROSPECTIVE STUDY OF PROFILE OF PATIENTS WITH MENTAL ILLNESS SEEKING DISABILITY CERTIFICATE AT A TERTIARY CARE HOSPITAL

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Abstract

Background

An Occupational Therapist plays an important role in disability evaluation of patients with mental illness. This study will throw light on how disability evaluation is done secondary to mental illness and what are the different purposes for which his certificate is sought. This study will be helpful to others in the field of disability evaluation secondary to mental illness.

Study design

Retrospective analysis of record of reports of patients with Mental Illness of past five years 2015 - 2019

Methods

Patients evaluation for disability certificate will be viewed for age, sex, psychiatric diagnosis, severity of disability (percentage of disability mentioned in the evaluation for disability certificate in mental retardation and mental illness), the purpose to apply for disability certificate and the type of evaluation. The evaluation for subjects with mental retardation was done using VSMS and for mental illness using IDEAS.

Conclusion

The patients were analysed on number of patients seeking disability certificate every year secondary to mental illness along with type of illness (diagnosis), severity or percentage of disability, type of evaluation done and the purpose of the patients to apply for disability certificate. The correlation between diagnosis and reason for disability and diagnosis and severity of disability was also analysed.

Keywords

IDEAS, Mental illness, VSMS



Introduction

Disability- 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.¹

According to Censes of India 2011, there are 2.68 crore persons with disabilities in India who constitute 2.21% of 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.²

The person 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.³

The Persons with disability are eligible for various social welfare benefits from Government under this act if they have minimum 40% disability as certified by a Government medical authority.⁴

Mental illness and mental retardation are included in “The person with disabilities (Equal Opportunities, Protection of Rights and Full Participation) act 1995” along with other causes of disabilities like blindness, hearing impairments and locomotor disabilities. Government of India has issued guidelines for evaluation of disabilities due to mental retardation in 2001 and due to mental illness in 2002.^{5,6}

Various welfare schemes for people with disability from Government of India are as follows:^{7,8}

- Travel concession in railways: 75% concession to the disabled and accompanying persons
- concessional bus passes,
- monthly maintenance allowances/disability pensions,
- Income tax benefits,
- Free education upto 18 years,
- Aids and appliances (for multiple disabilities),
- Family pension- This will be given to the disabled after death of parents
- Employment reservation: 3-5% of jobs are reserved for disabled



Rationale of the study:

An Occupational Therapist plays an important role in disability evaluation of patients with mental illness. This study will throw light on how disability evaluation is done secondary to mental illness and what are the different purposes for which his certificate is sought. This study will be helpful to others in the field of disability evaluation secondary to mental illness.

Aims & Objectives:

To analyze how many patients every year seek disability certificate secondary to mental illness along with type of illness (diagnosis), severity or percentage of disability, type of evaluation done and the purpose of the patients to apply for disability certificate.

Review of Literature:

Balhara YP, Verma R, Deshpande SN in their study stated that majority of patients with schizophrenia seeking disability certificate were males and levels of disability are also comparable among males and females. Also the work related disability is relatively higher among males and females continue to be financially dependent on the family members.⁹

Yadav A, Rastogi R, Udey B in their study stated that majority of the cases were males and cases of Mental Retardation outnumbered patients with Mental illness seeking disability certificates reflecting a greater number of Mental illness cases seeking treatment early in the course of illness and availability of better treatment options. They also stated that 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.¹⁰

Design: Retrospective Study

Place of study: Occupational Therapy Department, L.T.M.M.C., Sion, Mumbai.

Proposed Duration of study: 2 months (Record of reports of patients with Mental Illness of past five years 2015 - 2019)



Sample size: The number of subjects will be taken from record of reports of patients with Mental Illness of past five years 2015 - 2019) around 30-50 patient reports.

Sampling method: Convenient sampling

Inclusion criteria: Reports of all the patients of past five years referred from Psychiatry or Neurology for disability assessment secondary to mental illness including intellectual disability.

Exclusion Criteria: Nil

Material and Methods

This is a retrospective study of patients who were issued disability assessment reports from Occupational therapy department for mental retardation and mental illness during January 2015 to December 2019.

Patients evaluation for disability certificate will be viewed for age, sex, psychiatric diagnosis, severity of disability (percentage of disability mentioned in the evaluation for disability certificate in mental retardation and mental illness), the purpose to apply for disability certificate and the type of evaluation. The evaluation for subjects with mental retardation was done using VSMS and for mental illness using IDEAS.

- The Vineland Social Maturity Scale (VSMS), the Indian (Nagpur) adaptation by A.J. Malin (1965) was used. It measures the differential social capacities of an individual and provides an estimate of social age and social quotient and shows high correlation (0.80) with intelligence. It is designed to assess social maturation in eight social domains as given below tentatively:
 1. Self-Help General (SHG): Activities like grooming, skills like washing, brushing, haircombing, toileting, personal hygiene, food preparation, budgeting, home safety, daily living skills, etc.
 2. Self-Help Eating (SHE): Self-eating and self-drinking.
 3. Self-Help Dressing (SHD): Dressing and undressing.
 4. Self-Direction (SD): Ability to complete day-to-day tasks without guidance.
 5. Occupation (OCC): Ability to maintain gainful employment and learning vocational skills.
 6. Communication (COM): Ability to comprehend and express information through spoken words, written words, graphic symbols, sign language, and manually coded



English or non-symbolic behaviors such as facial expressions, body movements, and gestures.

7. Locomotion (LOC): Controlled movement of muscle groups, such as buttoning a shirt, walking, or throwing a ball.
8. Socialization (SOC): Ability to interact with others.¹¹

VSMS scoring

- VSMS score 0 - 20: Profound = 100%
- VSMS score 21 - 35: Severe= 90%
- VSMS score 36-54: Moderate= 75%
- VSMS score 55- 69: Mild= 50%
- VSMS score 70-84: Borderline=25%

- IDEAS (Indian Disability Evaluation and Assessment Scale) is a well validated instrument and is being used across the country for disability evaluation of psychiatric disorders. The alpha value of scale has been found to be 0.8682, indicating good internal consistency between the items. It has good criterion validity and face validity. Criterion validity of the scale has been established by comparing ideas with schedule for assessment of psychiatric disability which has been standardized in India.¹⁰

Items –

- I. Self Care: Includes taking care of body hygiene, grooming, health including bathing, toileting, dressing, eating, taking care of one's health.
- II. Interpersonal Activities (Social Relationships): Includes initiating and maintaining interactions with others in contextual and social appropriate manner.
- III. Communication and Understanding: Includes communication and conversation with others by producing and comprehending spoken/written/non-verbal messages.
- IV. Work: Three areas are Employment/Housework/ Education Measures on any aspect.
 1. Performing in Work/Job:Performing in work/employment (paid) employment/selfemployment/ family concern or otherwise. Measure ability to perform tasks at employment completely and efficiently and in proper time. Includes seeking employment.



2. Performing in Housework: Maintaining household including cooking, caring for other people at home, taking care of belongings etc. Measures ability to take responsibility for and perform household tasks completely and efficiently and in proper time.

3. Performing in school/college: Measures performance education related tasks.

Scores for each item:

- 1- NO disability (none, absent, negligible)
 - 1- MILD disability (slight, low)
 - 2- MODERATE disability (medium, fair)
 - 3- SEVERE disability (high, extreme)
 - 4- PROFOUND disability (total cannot do)

TOTAL SCORE

Add scores of the 4 items and obtain a total score

Additional Weightage for Duration of illness (DOI): DOI:

< 2 years: score to be added is 1

2-5 years: add 2

6-10 years: add 3

> 10 years: add 4

Global Disability Total Disability score + DOI score = Global Disability Score Percentages:

0 No Disability = 0%

1-6 Mild Disability = < 40 %

7-13 Moderate Disability = 40 - 70 %

14-19 Severe Disability = 71-99%

20 Profound Disability = 100%

Cut off for welfare measures = 40 %

➤ Guidelines for assessment of physical impairment in Neurological conditions:

1. Assessment in neurological conditions is not the assessment of disease but is the assessment of the effects, i.e., clinical manifestations.



2. Any neurological assessment must be done after six months of onset. 3. These guidelines will only be used for central and upper motor neurone lesions.

Subjects are evaluated for:

- Altered sensorium
- Intellectual Disability
- Speech defect
- Cranial nerve disability
- Sensory system disability
- Bowel/Bladder Involvement
- Post head injury fits and epileptics
- Ataxia (sensory or cerebellar)
- Motor system disability: Hemiparesis

Neurological Involvement	Physical Impairment
Mild	25%
Moderate	50%
Severe	75%

- For Post Head Injury Fits & Epileptic convulsions
 - Mild Occurrence of one convulsion only = Nil
 - Moderate 1-5 convulsions/month on adequate medications = 25%
 - Severe 6-10 convulsions/month on adequate medication =50%
 - Very Severe more than 10 fits/month on adequate medication =75%

Proforma A (coordinated activities) and B (stability component) will be utilized for assessment of lower motor neurone lesions, muscular disorders, and other locomotor conditions.

Additional weightage of 4% is given for dominant upper extremity.



Additional 10% can be given for loss of sensation in each extremity.

The total percentage of disability is calculated using the combining formula,

$$A + B - \frac{A \times B}{90}$$

Where,

A= will be a higher score and B= will be a lower score

However, the maximum total percentage of disability shall not exceed 100%.

Depending on the diagnosis of the patients referred for disabilities, the percentage of disability calculation is done:

- According to direct neurological assessment
- According to coordinated activities and stability components.

Data Analysis:

This retrospective study analyses data of disability evaluation secondary to mental illness, from January 2015 to December 2019.

In the above mentioned five years total 35 patients were assessed for disability evaluation secondary to mental illness. Table 1 and Graph 1: According to age group 8 patients (22.8%) of total patients were under 20 years, 17 patients (48.5%) of total patients were of age group 20-40 years and 10 patients (28.5%) were from age group 41-60 years. According to the gender, 27 were males (77.14 %) of total patients and 8 were females 22.85% of total population

Table No.1: Demographics

Age Group	< 20	8 (22.8 %)
	20-40	17 (48.5 %)
	40-60	10 (28.5 %)
Gender	Male	27 (77.14 %)
	Female	8 (22.85 %)



Graph No 1: Sample Demographics(age and gender)

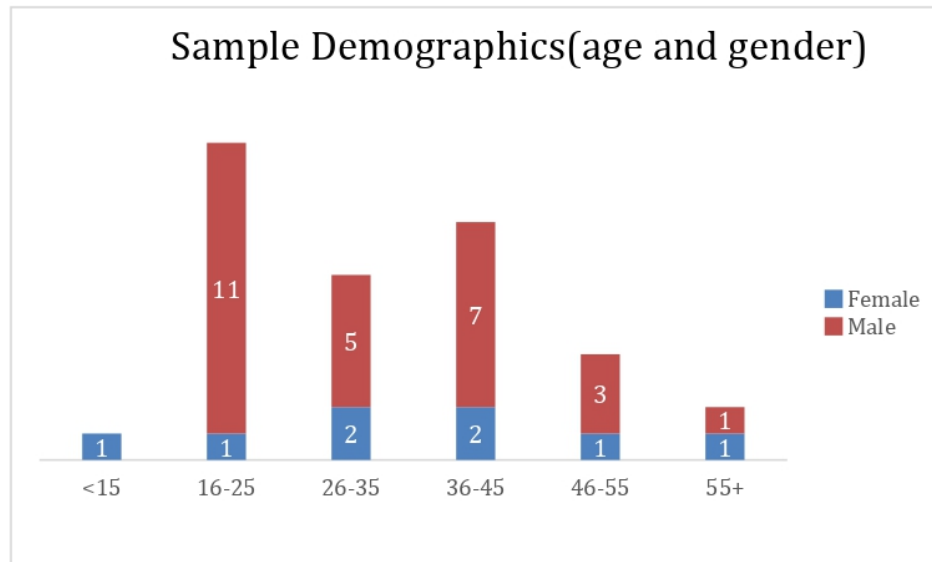


Table 2- According to the diagnosis referred for disability certificate, out of total 35 patients, 11 patients (31.42%) were diagnosed as Schizophrenia, 1 patient (2.85%) as Schizophrenia with Mental retardation, 1 patient (2.85%) as Schizophrenia with Neurological disorder, 8 patients (22.8%) as Mental Retardation, 9 patients (25.71%) as Mental Retardation with seizures, 3 patients (8.57%) as Mental retardation with Neurological disorders and 2 patients (5.71%) as Alcohol Use disorder. Age-wise distribution is represented by grouping the diagnosis as Schizophrenia, Mental Retardation(MR) and Alcohol use in Graph 2.

Table No 2. Diagnosis-wise Distribution

Diagnosis	Percentage	Count
Schizophrenia	31.42%	11
Schiz + MR	2.85%	1
Schiz + Neuro	2.85%	1
MR	22.80%	8
MR + Seizures	25.71%	9
MR + Neuro	8.57%	3
Alcohol use	5.71%	2

Graph No 2: Representation of patient count by diagnosis and Age

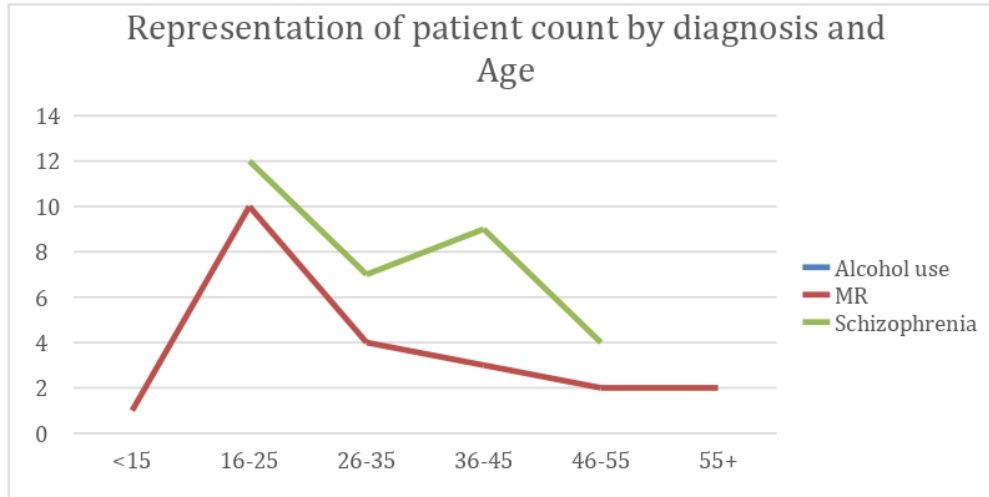


Table 3 and Graph 3- Out of total 35 patients, 20 patients (57.14%) were referred from psychiatry, 13 patients (37.14%) were referred from medicine and 2 patients (5.7%) were referred from both psychiatry and medicine.

Table No 3. Reference wise Distribution

Psychiatry	20 (57.14 %)
Medicine	13 (37.14 %)
Psy + Medicine	2 (5.7 %)

Graph No 3: Reference wise Distribution

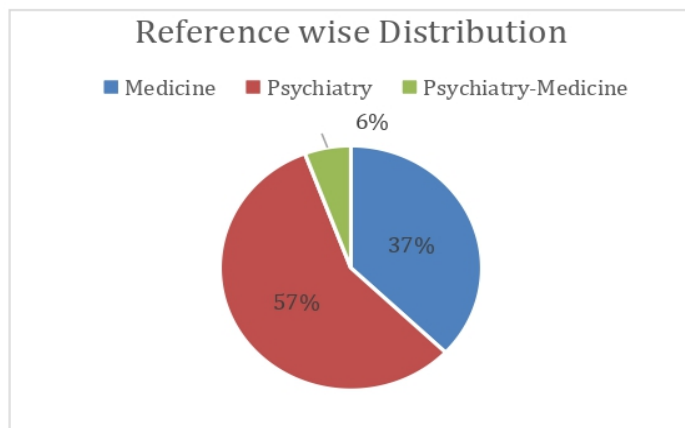


Table 4 and Graph 4- Out of total 35 patients, 6 patients (17.14%) were employed, 19 patients (54.28%) were unemployed and 10 patients (28.57%) were students by occupation.

Table No 4. Occupation wise Distribution

Employed	6 (17.14 %)
Unemployed	19 (54.28 %)
student	10 (28.57 %)

Graph No 4: Occupation wise Split

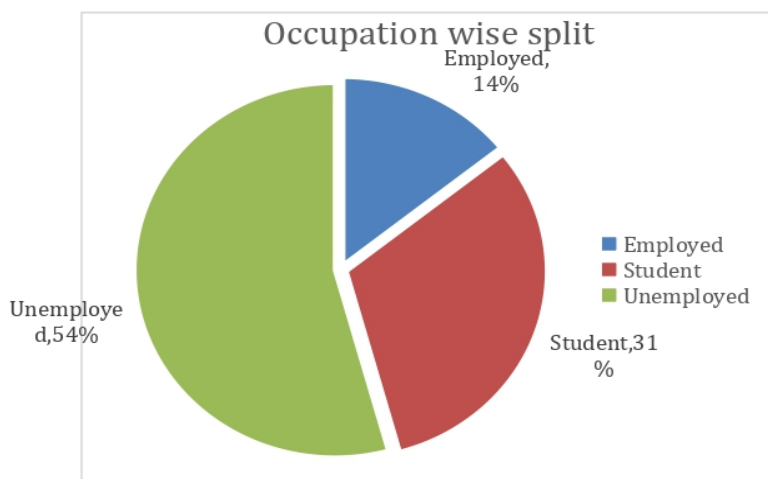


Table 5 and Graph 5- Out of total 35 patients, 2 patients (5.71%) sought the disability certificate for concessions in education, 11 patients (31.43 %) sought it for disability evaluation, 10 patients (28.57) for job fitness, 1 patient (2.86%) sought it for railway concession, 1 patient (2.86%) for traveling and 10 patients (28.57%) sought it for unknown reason.



Table No 5. Reason wise Distribution

Reason for disability	Count of patients	Distribution
Concession	1	2.86%
Disability Evaluation	11	31.43%
Education	2	5.71%
Fitness for job	10	28.57%
Traveling	1	2.86%
Unknown	10	28.57%

Graph No 5: Reason for disability group

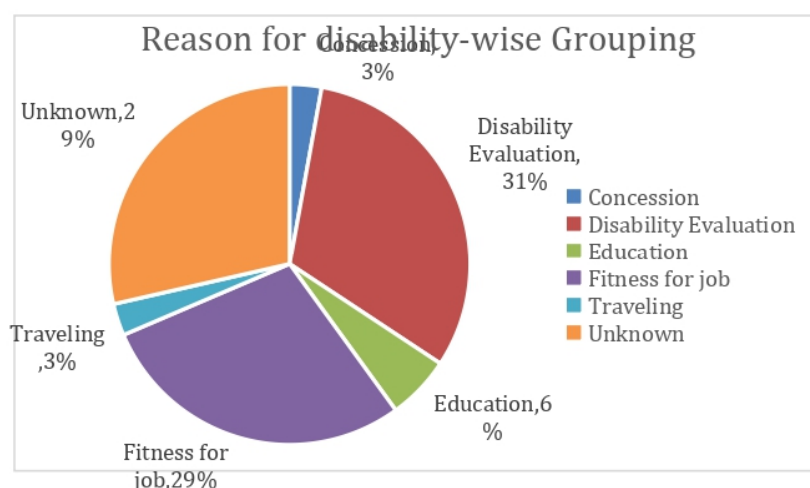


Table 6 and Graph 6- Out of total 35 patients, 9 patients (25.71%) were assessed using VSMS/KBI, 15 patients (42.85%) were assessed using IDEAS and 11 patients (31.42%) were assessed using Government Gazette addition formula for more than one disability.

Table No 6. Assessment wise Distribution

VSMS/ KBI	9 (25.71 %)
IDEAS	15 (42.85 %)
Formula	11 (31.42 %)

Graph No 6: Assessment wise Distribution

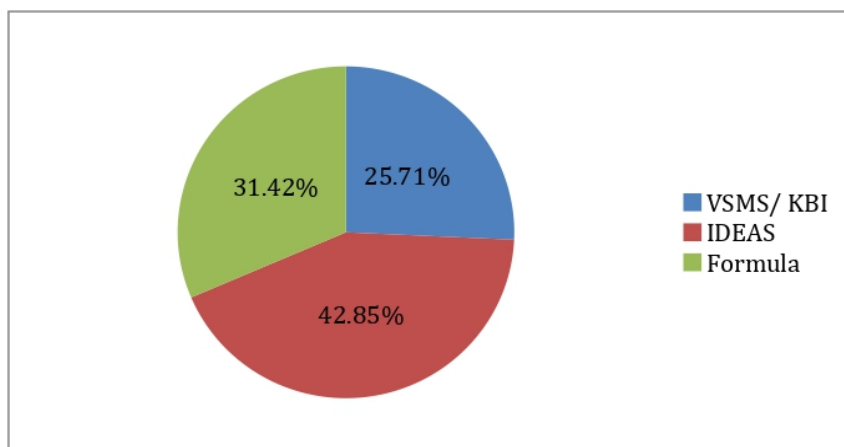


Table 7 and Graph 7- Out of total 35 patients, 22 patients (62.85%) scored disability ranging from 40-70% and 13 patients (37.14%) scored disability ranging more than 70%.

Table No 7. Percentage wise disability Distribution

40- 70%	22 (62.85 %)
>70 %	13 (37.14 %)

Graph No 7: Percentage wise disability Distribution

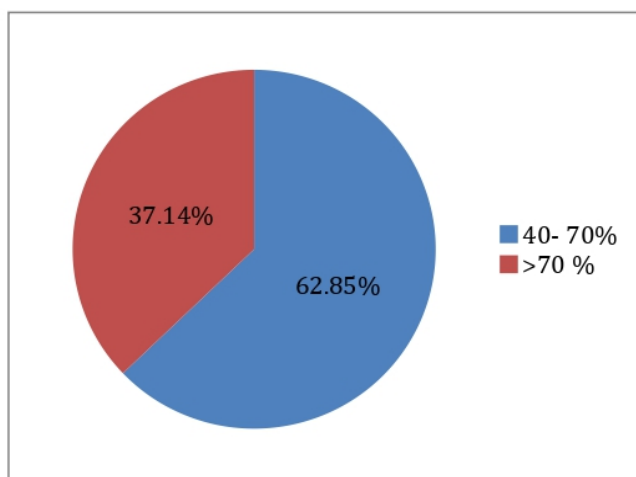


Table 8 and Graph 8

Reason for disability was assessed according to the references. It reveals that patients referred from Psychiatry units were mainly for disability evaluation and fitness for job whereas patients referred from Neurology or Medicine units were mainly referred for job fitness followed by unknown reasons.

Table No 8: Reference wise- split in terms of reason for disability



Reference	Concession	Disability Evaluation	Education	Fitness for job	Traveling	Unknown	Grand Total
Medicine	1	2	2	4	1	3	13
Psychiatry		7		6		7	20
Psychiatry-Medicine		2					2
Grand Total	1	11	2	10	1	10	35

Graph 8: Reference wise- split in terms of reason for disability

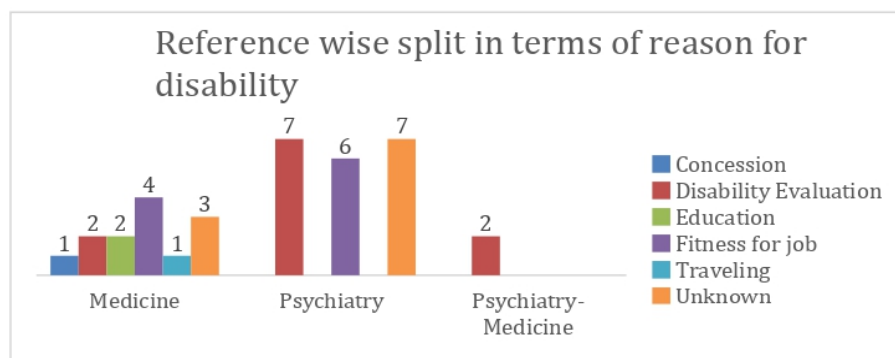


Table 9

On analyzing the correlation between diagnosis and reason for disability , it was found that reasons in MR patients were mainly for disability evaluation, education and fitness for work and in Schizophrenia was disability evaluation and fitness for job.

Table No 9: Visualizing Reason for Disability and Diagnosis

Diagnosis	Reason for Disability Concession	Disability Evaluation	Educ ation	Fitness for job	Travel ing	Grand Total
Alcohol use				2		2
MR	1	6	2	4	1	14
Schizophrenia		5		4		9
Grand Total	1	11	2	10	1	25

Graph No 9: Visualizing Reason for Disability and Diagnosis

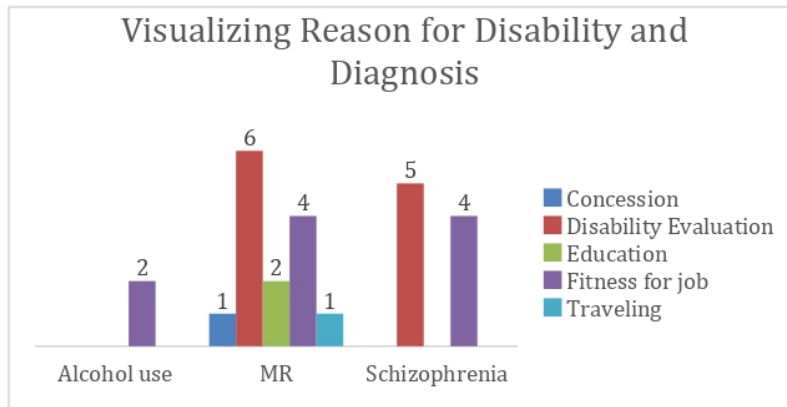


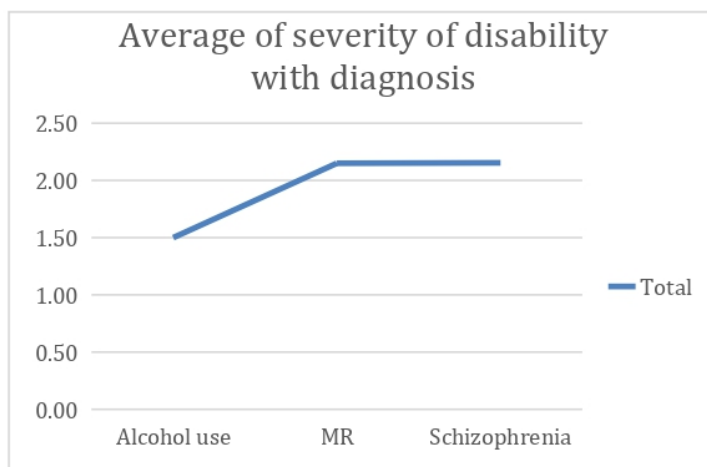
Table 10

This table assesses the correlation between severity of disability and diagnosis. It reveals that both schizophrenics and MR patients had average severity of disability as 2.15 whereas patients with alcohol use had severity as 1.5.

Table No 10: Average of severity of disability with diagnosis

Diagnosis	Average of Severity
Alcohol use	1.50
MR	2.15
Schizophrenia	2.15
Grand Total	2.11

Graph No 10: Average of severity of disability with diagnosis



Discussion



The current study aimed at analyzing different types of evaluation done for assessing disability of patients with mental illness. An Occupational Therapist plays a vital role in this evaluation and has the ability to choose a particular evaluation method or combination of evaluations for a particular patient guided by government gazette for disability evaluation. Thus the study can guide as to which method of evaluation can be used for patients with different diagnosis.

In the present study majority of patients who sought disability certificate secondary to mental illness were in the age group of 20-40 years followed by patients in the age group of 41-60 years and the least in the age group <20 years. This may be explained by the fact that the age group of 20-40 years is the most productive age and so for any form of earning or concessions are sought specially in the same group.

According to gender almost 77.14% of patients were males as compared to 22.86% who were females. It can be justified by general attitude in which males are considered to be more productive in terms of earning and thus financial assistance, Scholarships and concessions are sought more for males.¹⁰

Maximum number of patients were diagnosed as schizophrenics, 25.71% as Mental retardation with seizures, 22.8% as Mental retardation followed by schizophrenia with Neurological conditions and Schizophrenia with mental retardation. Amongst mental illness, Schizophrenia is usually chronic and most disabling disease and thus maximum patients seeking disability were schizophrenics.

We are considering patients seeking Disability certificate secondary to mental illness, so the maximum number of patients were referred (57.45%) from psychiatry unit of hospital and 37.14% were referred from medicine probably with diagnosis of mental retardation with seizures and schizophrenia along with Neurological conditions.

The reasons for which disability was sought varied. The ranking was as follows at number one with 37.14% the reason was for reservation and concessions in occupation, at number two was 28.57% was concessions in education, at number three was 2.85% of patients sought it for railway concessions and comparatively a large percentage 31.4% did not specify the reason. So while maintaining the records it is important to ask patients or their caregivers if the reason for disability certificate exists and to note it down.



Obviously maximum number of patients (42.85%) were assessed using IDEAS scale, followed by 31.42% of patients using government gazette addition formula and finally followed by 25.71% of patients were assessed using VSMS/KBI.

Out of the total, 62.85% of patients scored disability from 40-70% and 37.14% scored more than 70%. So it can be conclude that those who seeked disability certification were genuine candidate and none of them scored less than 40%.

According to Table 8, by enlarge patients are referred for disability evaluation secondary to mental illness for reasons mainly as job fitness and concessions. It was found that the reasons were unknown in many patients. So the therapists should be careful in collecting the data from patients and insist to note the reason for disability.

Table 9 shows that the main purpose of disability evaluation is usually associated with concessions given to patients in terms of travelling, education and fitness for job.

Limitations

The study is from one centre, so cannot generalize the results. In retrospective study, poorly maintained records and incomplete information can come in the way of analysis.

Conclusion and Future Recommendations

In the current study patient diagnosed with schizophrenia seeked disability maximum followed by mental retardation. In the purposes for disability certification, reservation and concessions in occupation was with highest rank followed by concessions in education.

This study will throw light on how disability evaluation in patients with mental illness is done. Still the awareness of this disability certificate for patients with mental illness should be increased by educating the society s that maximum number of persons with disability can get benefits of government schemes.

A follow up study after 5 or 10 years can guide us whether number of patients seeking disability certificate secondary to mental illness has increased, reasons are different. The study can be performed at multiple centres to get a larger picture.



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