*Original Article*

# Fitness to re-join job: Neuropsychiatric perspective

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## ABSTRACT

**Objectives:** Evaluating “Fitness to Re-join Job” and certification in persons with Neuro-Psychiatric Disorders is an indispensable professional responsibility. However, there is little documented guidance on clinically approaching this particular issue. This study aimed to study the sociodemographic, clinical, and employment profile of patients who sought fitness to re-join their job from the tertiary neuropsychiatric center.

**Materials and Methods:** This study was carried out at the National Institute of Mental Health and Neurosciences in Bengaluru, India. A retrospective chart review was adapted for the purpose. One hundred and two case files referred to medical board for fitness to rejoin the duty were reviewed from January 2013 to December 2015. Apart from the descriptive statistics, the Chi-square test or Fisher exact test was used to test the association between categorical variables.

**Results:** Patients’ mean (standard deviation) age was 40.1 (10.1) years; 85.3% were married, and 91.2% were male. Common reasons for seeking “fitness certification” were work absenteeism (46.1%), illness affecting the work (27.4%), and varied reasons (28.4%). The presence of neurological disorders, sensory-motor deficits, cognitive decline, brain damage/insult, poor drug compliance, irregular follow-ups, and poor or partial treatment response were associated with an unfitness to rejoin the job.

**Conclusion:** This study shows that work absenteeism and the impact of illness on work are common reasons for referral. Irreversible neurobehavioural problems and deficits impacting work are common reasons for unfitness to rejoin the job. There is a need for a systematic schedule to assess the fitness for the job in patients with neuropsychiatric disorders.

**Keywords:** Fitness for re-join job, Psychiatric disorder, Absenteeism, Profile, India

## INTRODUCTION

“Fitness for work” means assessing whether an individual is fit enough to perform a designated task without risk to themselves or others in a time-bound manner.<sup>[1]</sup> Evaluation of fitness for a job in a person with a physical disorder with or without a disability is an important legal, administrative, and professional responsibility. It should be performed with excellent knowledge, caution, and objectivity.<sup>[2-5]</sup> There are guidelines available to assess fitness for a job for pre-employment purposes from the Ministry of Railways and Defense (GOI), Indian Oil, and others.<sup>[6-8]</sup> A study on pre-employment medical examination for non-gazetted railway services conducted in 2001 showed that 6.15% of the candidates were declared “unfit” for an appointment.<sup>[9]</sup>

During employment, an individual’s physical health and mental health can negatively impact work performance and overall productivity. These may pose a safety risk to

themselves or others in the workplace and may be associated with sickness and work absenteeism.<sup>[10,11]</sup> Long-term sickness absence due to mental disorders was linked to increasing age, male gender, low income, and a diagnosis of psychosis, which led to permanent disability and an inability to return to work in populations in Norway and Sweden.<sup>[12-15]</sup>

In such long-term sickness absence cases, the organization may ask for an employee who has a long-standing physical or mental disorder or substance use disorder to be assessed for fitness to rejoin the job. However, there are no consensus or guidelines on fitness to rejoin or return to a job during employment following an illness. It may vary from country to country and from industry to industry. The following domains will be considered in the assessment for fitness to rejoin or continuation of the job. (a) Health condition of an individual, (b) job specification and requirements: employee’s ability to perform the specific tasks and requirements of

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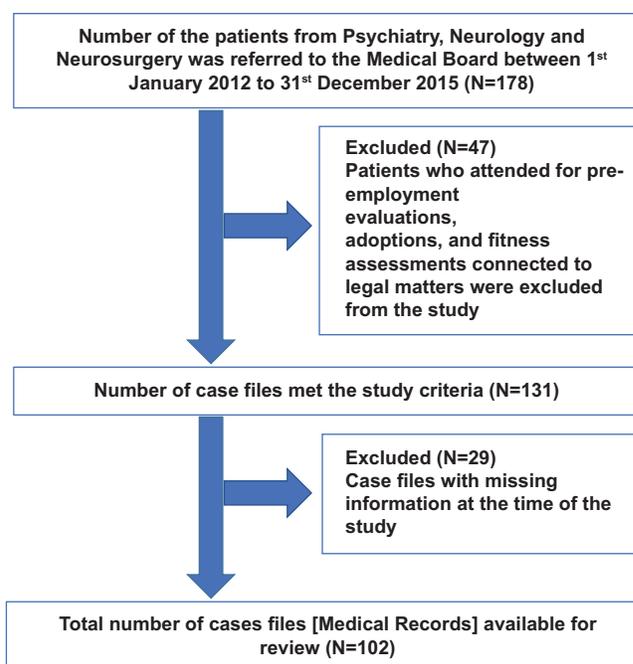
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their job, (c) risk assessment: the potential risks to the employee's safety and well-being, as well as the safety and well-being of others in the workplace, (d) feasibility for reasonable accommodations: modifying the employee's work schedule, providing special equipment, or adjusting the work environment, (e) determination of predicted performance and absenteeism, and (f) confidentiality, ethical, legal, and economic considerations.<sup>[5,16,17]</sup>

A study conducted in Saudi Arabia found that 52% were fit for work, 27% were recommended for modified work, and 20% of participants were declared unfit to return to work. The lack of fitness was linked to increased hospitalizations, prolonged illness, schizophrenia and other psychotic disorders, and coexisting comorbidities.<sup>[18]</sup> Another study from a tertiary-level psychiatric hospital found that 68% were fit for work. Fitness for work was negatively correlated with a longer duration of illness and a diagnosis of an organic mental disorder. Some of the most frequently cited reasons for delayed return to work include severe untreated mental illness, significant neurological damage, prolonged absence, and job requirement-related factors.<sup>[19,20]</sup> Even in countries like India, there are limited studies and a lack of clear guidelines and standardization in assessing fitness to rejoin a job, which may lead to subjectivity in evaluations and may pose legal and social issues. Hence, it is crucial to carry out a study. The study aimed to examine the following: (a) the sociodemographic, clinical, and employment profile of patients who sought fitness evaluations to rejoin or continue on the job, (b) the association between "fitness for the job" and the patients' sociodemographic, clinical, and employment profile, and (c) the predictors of "fitness for the job."

## MATERIALS AND METHODS

The study's design was a retrospective file review conducted at the National Institute of Mental Health and Neurosciences (NIMHANS) in Bengaluru, India. The study included referrals sent to medical board (psychiatry, neurology, and neurosurgery departments) of NIMHANS from the government and government undertaking organisations/institutions for assessment of "fitness to rejoin the job" from January 1, 2012, to December 31, 2015. Individuals of either gender, who were over 18 years old and referred for fitness by an organisation/institution, were included. Individuals who came for pre-employment assessments, adoption, court-related issues, and with missing case file details were excluded from the study. During 3 years, 178 patients were referred to the Medical Board for fitness assessment and certification. After excluding certain cases [Figure 1: Flow Chart], 102 case files were reviewed using a structured "fitness to rejoin duty" assessment proforma developed using existing literature. It comprehensively looks into demographics, employment and work profile details, illness and treatment history, occupational history, and clinical assessments.



**Figure 1:** Study sample flow diagram.

The Medical Board of the Institute consists of a specialist (the patient's consultant), a Medical Superintendent, and heads of departments from Psychiatry, Neurology, and Neurosurgery. The decision about fitness was made by reviewing case notes, conducting clinical interviews with patients and caregivers, evaluating the physical and mental status, analyzing occupational history and diagnostic tests, and considering other performance or clinical reports provided by employers. The team also collected information from the referring authority/organisation/work place. It analyses work environment characteristics, behavior at the workplace, relationships with colleagues, work productivity, sick leave, critical incidents, and work-related accidents. In specific cases, the specialist consultant also assessed the risk of physical hazards at work, the level of public communication needed, the handling of finances, the degree of supervision, workload, and the public and personal safety due to the neuropsychiatric disorder. Based on a case file review, NIMHANS proforma to collect information from referring authority/organisation/work place [Appendix 1] was developed.

Before constituting a medical board and undergoing the fitness to rejoin job assessment, the patient is given the following information: the formation of a medical board for the evaluation of fitness, the disclosure of clinical information to the board, a clinical interview/examination in front of the board, the purpose of the interview/examination, the confidentiality of communication between the employee and the board, and how the report may be used for or against the person's privacy and benefit. If the patient agrees to undergo the fitness assessment,

patient will sign the “Consent Form for Fitness to Rejoin Job Assessment.” During the medical board assessment, all findings of the case are presented by a specialist. The board then concludes the person’s fitness for the job and may suggest job modifications.

### Statistical analysis

Data were analysed using descriptive statistics. Tests of association between variables were examined using the Chi-square test or the Fisher exact test.

### Ethical considerations

This study was approved by the Institutional Ethical Committee and took administrative approval from the institute to carry out the study.

## RESULTS

[Table 1] shows the sociodemographic, clinical, employment profile, and fitness outcome of neuropsychiatric patients who sought fitness for job evaluation.

[Table 2] shows a bivariate association between fitness for a job and diagnosis and job profile. Neurological and combined neuropsychiatric disorders are associated with unfitness for a job, compared to patients with mental illness alone. Jobs associated with the risk to self or the public, such as those in transportation and national safety and security organisations, are associated with unfitness for a job compared to those that are not. Patients who have sensory-motor deficits, cognitive decline, and brain damage/insult reported in assessment, as well as poor drug compliance, irregular follow-ups, and poor or partial follow-up, are also associated with unfitness for a job.

## DISCUSSION

This study provides an overview of the sociodemographic, clinical, employment profile, and fitness outcomes of patients who sought fitness for their job from a tertiary care neuropsychiatric centre. The common sources of referral for fitness evaluations were the transportation sector and safety and national security due to frequent and long-term absenteeism, inappropriate or disruptive behaviours, and conflicts/violence at the workplace during their employment period. These findings on reason for referrals are comparable with the previous hospital-based studies on fitness among patients with psychiatric illness in South India and Saudi Arabia.<sup>[18,19]</sup> As expected, psychiatric disorder had a higher prevalence of sickness absenteeism and behavioural issues compared to neurological or neurosurgical disorders, which is consistent with the previous studies.<sup>[20]</sup> Other common reasons for referral include pre-employment evaluations for high-risk jobs, such as firefighting, military personnel, professional

**Table 1:** Sociodemographic and clinical profile of neuropsychiatric patients (n=102) who sought fitness for job evaluation.

Variable	n (%)
Age (in years)*	40.1 (10.1)
Age	
≤40 years	61 (59.8)
Age >40 years	41 (40.2)
Gender	
Male	93 (91.2)
Female	9 (8.8)
Marital status	
Single	15 (14.7)
Married	87 (85.3)
Diagnosis	
Neurological disorder	38 (37.2)
Psychiatric disorder	36 (35.2)
Neuropsychiatric disorder	24 (23.5)
Nil	4 (3.9)
Comorbid medical diagnosis	
Cardio metabolic syndrome	14 (13.7)
Multi-system disorders	9 (8.8)
Neuro endocrine disorder	3 (2.9)
Treatment response	
Good	42 (41.1)
Partial	37 (36.2)
Poor	16 (15.6)
Reason for referral	
Work absenteeism	47 (46)
Neuro-psychiatric disorder affecting the work	28 (27.4)
Indecent behaviour/violence at work place	11 (10.8)
Combination of above	29 (28.4)
Others	4 (3.9)
Working organisation	
The transport sector	55 (54.0)
Safety and national security	23 (22.5)
Others	42 (23.5)
Job Security	
Permanent	100 (98)
Temporary	02 (2)
Work associated safety	
No risk to self/public with current job	60 (60.7)
The risk to self/public with current job	42 (41.1)
Medical Board opinion on fitness for Job	
Unfit	38 (37.2)
Fit	29 (28.4)
Job modifications	35 (34.3)

\*Mean (standard deviation) reported

drivers, pilots, workers at toxic waste plants regulated by mandatory legislation, and during the redeployment of workers.<sup>[21]</sup> These were not included in our study.

The evaluations for job fitness were conducted by a board composed of the hospital’s medical superintendent, domain experts, and treating physicians. This study shows that the board-certified 28.4% of patients were fit, while the rest

**Table 2:** Bivariate association between neuro-psychiatric disorders, job profile, neuro-psychiatric assessments, treatment response, follow-up, and fitness for job outcome (n=102).

Category	The outcome, n (%)		$\chi^2$	P
	Fit n=29 (28.4)	Unfit n=73 (71.6)		
Neuro-psychiatric disorder				
Neurological disorder	4 (3.9)	34 (33.3)	25.5	<0.001**
Psychiatric disorder	18 (17.6)	18 (17.6)		
Neuro-psychiatric disorder	3 (2.9)	21 (20.6)		
Nil neuro-psychiatric disorder	4 (3.9)	0 (0)		
Safety of self/public				
Safe	29 (28.4)	31 (30.4)	28.36	<0.001**
At-risk	00 (0)	42 (41.1)		
Working organisation				
Transport	02 (2)	24 (23.5)	11.22	0.003*
Safety and national security	7 (6.9)	23 (22.5)		
Others	20 (19.6)	26 (25.5)		
Sensory-motor deficits				
Present	1 (1)	13 (12.7)	3.57	0.106
Absent	28 (27.5)	60 (58.8)		
Cognitive decline				
Yes	0 (0)	23 (22.5)	11.68	<0.001**
No	28 (27.5)	49 (48)		
Judgment				
Intact	27 (26.5)	62 (60.8)	3.8	0.111
Absent	0 (0)	8 (7.8)		
Partial	2 (2)	3 (2.9)		
Psychological tests				
Yes	19 (18.6)	38 (37.3)	1.52	0.217
No	10 (9.8)	35 (34.3)		
Brain insult/damage				
Yes	2 (2)	29 (28.4)	10.57	0.001**
No	27 (26.5)	44 (43.1)		
Treatment response				
Good	28 (27.5)	21 (20.6)	40.95	<0.001**
Partial	1 (1)	36 (35.3)		
Poor	0 (0)	16 (15.7)		
Drug compliance				
Good	25 (24.4)	44 (43.1)	6.37	0.012*
Poor	4 (3.9)	29 (28.4)		
Regular follow-up				
Yes	20 (19.6)	29 (28.4)	7.11	0.008*
No	9 (8.8)	44 (43.1)		

(\* - Significant at 0.05, (\*\*) - Significant at 0.001

were declared unfit or advised to switch to desk work or undergo job modification based on their workability index. In comparison, higher rates of fitness to rejoin the job were reported in studies of individuals with mental illness in Pune (68%) and Saudi Arabia (52%).<sup>[18,19]</sup> The lower rate of fitness in our sample may be due to a coexist of neurological and neurosurgical disorders and the nature of jobs that pose a greater risk to the public (transportation and national security). The previous study from Pune also concurs with our findings regarding the reasons for permanent unfitness for the job, including the longer duration of psychiatric

illness and the presence of an organic mental disorder or psychotic disorder.<sup>[19]</sup>

Study findings differ from previous studies in some respects, particularly with regard to how fitness is associated with patient treatment compliance and attitude toward fitness in substance use disorders in different parts of the world. This could be due to differences in the assessment of illness, including subjectivity and the service rules of the state or referring authorities, as most of these evaluations were performed at the workplace rather than in institutions or

hospital-based studies.<sup>[10,11,14-17]</sup> Fitness for the job is not solely determined by recovery from a neuropsychiatric disorder, and many other factors, including self-safety, public safety, work safety, and the physical demands of the job, must also be considered. On the other hand, intact cognitive function, intact judgment and insight, a good response to treatment, and good medication compliance are favourable factors, and the absence of risk to the self or public with the illness are some predictors of fitness for the job. The person with a neuropsychiatric disorder was advised to change their job to desk work or modify their job based on their work ability index. They were also advised with a few tailored and personalized recommendations, such as altering working hours, accommodating sedation due to medications, allowing absences for treatment during working hours, providing adequate supervision for those who lack skills and ability due to illness, and reassigning responsibilities to areas that do not involve risk for physical harm (e.g., desk job for military personnel). The committee recommended reassessment to note the progress made in improvement or lack thereof, and recommendations should be modified accordingly in the best interest of the patient and their employer.

### Strength and limitation

Even though this study was a retrospective explorative chart review for 3 years with a small sample size, the records were well documented in the medical record department of the institute. The study provided important and clinically relevant findings on fitness in patients with neuropsychiatric disorders, which has useful for the assessment of fitness in clinical practice.

### CONCLUSION

This study shows that work absenteeism and illness affecting work performance are the main reasons for referrals. Only one-fourth of individuals were found fit to return to duty after a comprehensive evaluation. Unfitness for the job was strongly correlated with the presence of a neurological condition, neuropsychiatric condition, illness with sensory-motor deficits, cognitive impairment, brain damage/insult, and a longer period of illness with residual symptoms.

### Acknowledgments

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### Declaration of patient consent

The Institutional Review Board (IRB) permission obtained for the study.

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Nil.

### Conflicts of interest

Nil.

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## APPENDIX - NIMHANS Proforma to collect information from referring authority / organisation / work place

Employee information from referring Authority/Organisation/Work place	
Employee Profile	<ul style="list-style-type: none"> <li>• Name:</li> <li>• Age:</li> <li>• Gender:</li> <li>• Father's Name:</li> <li>• Reasons for Referral:</li> </ul>
Job-Related Information	Inter-Personal Relationship and Behaviour Related Questionnaires (*)
<ol style="list-style-type: none"> <li>1. Type of job - Government/Private/Semi-Government/ Autonomous</li> <li>2. Specify Job responsibilities – Provide information</li> <li>3. Employment Type: Temporary/Permanent/Contract</li> <li>4. Job Profile - Desk Job/Non-Desk Job</li> <li>5. The job involving public safety - Yes/No</li> <li>6. Number of years of experience –</li> <li>7. Work shifts - Yes/No</li> <li>8. Work performance before the Neuropsychiatric Illness - Good/ Fair/Poor</li> <li>9. Work performance after the Neuropsychiatric Illness - Good/ Fair/Poor</li> <li>10. Any recent decline in work performance? - Yes/No</li> <li>11. Does the work need a high level of communication with the public? - Yes/No</li> <li>12. Any work-related accidents/mistakes? - Yes/No</li> <li>13. Any Awards/Compliments for work performance? - Yes/No</li> <li>14. Any official procedure/pending enquiries against an employee at present– provide information</li> <li>15. Any official procedure/pending enquiries against an employee in the past – provide information</li> <li>16. Does the job involve handling weapons/arms and ammunition? - Yes/No</li> </ol>	<ol style="list-style-type: none"> <li>1. Communication with peers group at the workplace - Good/Fair/ Poor</li> <li>2. Any undisciplined behaviour in the workplace? - Yes/No</li> <li>3. Any episode of violence at the workplace? - Yes/No</li> <li>4. Any interpersonal conflicts in the workplace? - Yes/No</li> <li>5. Work Absenteeism in Job – Long-term/Frequent/Infrequent/ Absent</li> <li>6. Long-standing pattern of excess/unwanted behaviour – Anger Outbursts, Irritability, Suicidal Behaviour</li> <li>7. long-standing pattern deficit behaviour: Not meeting a deadline, Coming late to the office, Not their at the workplace</li> <li>8. Substance Abuse in the workplace? - Yes/No</li> <li>9. Is the employee is aware of the illness? - Yes/No</li> </ol> <p>(*) - If any behaviours are positive, please provide detailed information and any specific question to be answered by the medical board / doctor.</p>