Analysis of Psychiatric Evaluation of Employees Referred after Unauthorized Absenteeism in a Tertiary Level Railway Hospital

Nitin B Raut¹, Priyanka Banokar², Charles Pinto³

¹Specialist Psychiatry, Department of Psychiatry, Lady Harding Medical College, New Delhi.
²Resident, Department of Psychiatry, Jagjivanram Western Railway Hospital, Mumbai Central, Mumbai.
³Honorary Specialist, Department of Psychiatry, Dr. B.R. Ambedkar Memorial Central Railway Hospital, Byculla, Mumbai and Jagjivanram Western Railway Hospital, Mumbai Central, Mumbai.

DOI: https://doi.org/10.24321/2581.5822.202001

INFO

Corresponding Author:
Nitin B Raut, Specialist Psychiatry, Department of Psychiatry, Lady Harding Medical College, New Delhi.

E-mail Id: drnitinraut84@gmail.com
Orcid Id: https://orcid.org/0000-0002-8331-6777

How to cite this article:

ABSTRACT

Background: As for most of the industries, unauthorized absenteeism (long or frequent) is the most common cause of man-days lost in railway employees. Psychiatric illnesses and substance use disorders are major contributory factors.

Aims and Objectives: To study socio-demographic, job-profile and psychiatric and substance use related factors in employees referred for psychiatric-evaluation due to absenteeism or otherwise.

Materials and Methods: Retrospective study with a descriptive design, using a semi structured proforma for the data of 100 employees sent for psychiatric evaluation at two tertiary care hospitals due to either absenteeism or abnormal work-place behaviour. DSM 5 criterion used for diagnosis wherever required.

Result: Most of the subjects were male (97%), educated below graduation level, belonged to group D>C (68 & 30%, from either of the engineering fields and had low risk job profile (78%). Frequent and long absenteeism (51% & 50%) were the most common causes of referral. The most common reason claimed by employee was ill health (51%) followed by depressive or anxiety symptoms (19%). 56% were found to have alcohol use disorder while 17% had evidence of other psychiatric illnesses (depression 10%>psychosis5%>anxiety 2%). The presence of alcohol use was associated with male gender, age more than 36 years, and education below graduation. (Chi-square-25.002, 130.557, 101.784, respectively and p-0.000** for all), while age more than 51 to 60 years and female gender was associated with depression and psychosis (p-0.000*).

Conclusion: Psychiatric illnesses including substance use disorders contribute to majority of cases of absenteeism, suggesting immediate measures to fulfil these unmet needs of railway employees pertaining to mental health. There is need of increasing awareness, early identification and referral to appropriate services to deal with these preventable or treatable challenges.

Keywords: Psychiatric Evaluation, Absenteeism, Railway
**Introduction**

Indian Railways is considered one of the largest transportations and logistics network of the world, which manages running of around 19,000 trains to carry more than 23 million passengers to 8,000 railway stations across the subcontinent. It is also considered one of the biggest employer industries of the world.¹

Like in other industries, absenteeism is the single most important cause of lost labour time in railways too. Absence is an employee’s non-availability or work when work is available for that employee. The Labour Bureau (1962) defines absenteeism as the total man shifts lost because of absence of employees, as percentage of the total number of man shift scheduled to work.²

The problem of absenteeism in industry is faced by almost every country in the world. In India, its magnitude is far greater than in the Western countries. Considering railways, the magnitude is even higher due to larger employee population. In the year 2011-12, about 65,24,029 man-days were lost due to absenteeism caused by various reasons.³

According to the Labour Investigation Committee (1946), there were many reasons that caused the absenteeism of the industrial workers which include general factors like poor health, high working hours, shifting shifts of work, difficulty in transport, etc. Personal factors like age, poor experience, problem drinking, gender also was contributory. Work place related factors included stress at work, job satisfaction, etc., have also been seen to contribute.⁴ In addition co-morbid anxiety/ depression, and alcohol abuse were significantly associated with absenteeism. Absentees also complained of more fatigue and interpersonal relationship issues with colleagues than employees regular at work.⁵

Absenteeism from work has been one of the crucial reasons preventing optimum use of available human resources. It is an industrial condition adversely affecting not only investments and gains for industries but also productivity and welfare of the absentee employees themselves. Thus, an increasing rate of absenteeism considerably raises the production cost of an industry and halts industrial progress.⁶

As said before loss occurs to both employees as well as employers. As the tendency of absenteeism increases, it results in a loss of income to workers. Similarly, the employer has to bear greater loss due to loss of efficiency and discipline in the industry which reduces overall production and profit. The employer also has to bear additional labour cost to make up for the absent employees. Increasing absenteeism thus is hazardous for both the employee and the employers and results in loss to the industry as a whole.⁴

Apart from the loss suffered by employer and employee, absenteeism further reduces the confidence and discipline of the workers as a unit. It causes a delay in production deadlines, leads to the wastage of resources like time and money. It has been seen that absenteeism usually starts with a genuine reason which initiates a temptation to be absent more frequently, sometimes even on minor reasons which further results in chronic absenteeism. Thus, the absentee suffers loss of daily earning which results in poor living standards of the employee along-with his family members. Thus, absenteeism is a major concern affecting everyone in the industry including the employer, the other employees and individuals involved in absenteeism themselves.⁶

Though Indian railways is such a huge industry having approximately 14,00,000 employees, there is hardly any research assessing absenteeism in railway employees more so from psychiatry point of view. In this study, we will make an attempt to explore the psychological and socio demographic factors in employees sent for psychiatric evaluation due to absenteeism or otherwise, which will help in identifying and developing effective strategies to control the same.

**Aims and Objectives**

- To study the socio-demographic factors of railway employees referred after unauthorized absenteeism.
- To study the causes of absenteeism in the railway employees of railway employees referred after unauthorized absenteeism.
- To study psychological and substance use related factors contributing to absenteeism or referral.
- To study association between socio-demographic, work-related factors and absenteeism.

**Materials and Methods**

This was a retrospective study performed in two tertiary care teaching railways medical institutes in Mumbai after the approval of Institutional Ethics Committees and permissions of Head of the Institutes. (i.e. Dr. B.R. Ambedkar Memorial Central Railway Hospital, Byculla, Mumbai. And Jagivanram Western Railway Hospital, Mumbai Central, Mumbai.) Record of 100 consecutive patients referred for psychiatric evaluation from various departments who were ready to give informed consent were included. Information regarding socio-demographic and work-related factors was obtained with the help of a semi-structured proforma.

The usual evaluation of these employees involved:

1. Detailed history regarding absenteeism and evidence of mental illness.
2. Three serial Mental Status Examinations (MSE) in all patients.
3. Hamilton depression/anxiety rating scale and Rorschach tests done in indicated patients.
4. Work report was sought from department in which the patient worked which enquired about
   • Patients work behaviour
   • Obedience
   • Leaves taken in last 3 years
   • Behaviour with superiors and subordinates
   • Frequent absenteeism and
   • Any disciplinary actions taken against
Based on above and consultation with senior psychiatrist further decisions were taken. Treatment was advised as needed and asked to follow up. Patients diagnosed with psychiatric illnesses even after remission, are given jobs which are unlikely to endanger the life of their own or that of others.

Diagnostic and Statistical Manual of Mental Disorders (DSM-5) was used for diagnosis purposes.

SPSS version 21 was used to statistically analyse the data obtained. Descriptive methods were used to study the demographical variables and frequency of other variables. Cross-tabulation and Chi-square test was used to find association between different variables.

**Result**

Socio-demographic details of the patients were as in Table 1.

**Table 1.** Socio-demographic details of the subjects

<table>
<thead>
<tr>
<th>Gender</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>97 (97)</td>
</tr>
<tr>
<td>Female</td>
<td>3 (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-35</td>
<td>26 (26)</td>
</tr>
<tr>
<td>36-50</td>
<td>39 (39)</td>
</tr>
<tr>
<td>51-60</td>
<td>35 (35)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-graduate</td>
<td>73 (73)</td>
</tr>
<tr>
<td>Graduate</td>
<td>14 (14)</td>
</tr>
<tr>
<td>Post-graduate</td>
<td>13 (13)</td>
</tr>
</tbody>
</table>

Average age of the employees under study was 40.2. And they were on average educated up to 10th standard. Most of the employees belonged to group D (68%) and C (30%); only 2% were from group B and no employee from group A.

Department-wise distribution revealed that 67% were from engineering department, 9% from commercial, 7% operating, 5% store, 5% signal and telecom, 4% medical and 3% parcel. Most of them worked in low-risk job (non-track related) (76%). Average duration of absenteeism was 284 days.

On analyzing the work report most of the reports had remark ‘good’; however, 6 had disciplinary action cases pending, 3 had abnormal behaviour with colleagues.

The reason for referral in various subjects were as in Table 2. Frequent absenteeism was the most common cause followed very closely by long absenteeism; few were also referred in view of abnormal behaviour at work place.

**Table 2.** Reasons for referral in various subjects

<table>
<thead>
<tr>
<th>Reason for referral</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal behaviour</td>
<td>6 (6)</td>
</tr>
<tr>
<td>Frequent absenteeism</td>
<td>51 (51)</td>
</tr>
<tr>
<td>Long absenteeism</td>
<td>50 (50)</td>
</tr>
<tr>
<td>Multiple of above</td>
<td>7 (7)</td>
</tr>
</tbody>
</table>

![Figure 1. Reasons given by employees for their absenteeism](image1)

On assessing the reasons given by patients for their absence, ill health of self (medical) was the reason in 51%, ill health of self (psychological) 19%, family issue 18%, ill health/death of relatives 11%, financial problems/debts/property issue 10%, work stress 6% and multiple of above causes in 15% (Figure 1).

After full psychiatric evaluation and necessary testing, the subjects were found to have associated psychological reasons for absenteeism as shown in Figure 2.

![Figure 2. Associated psychiatric co-morbidities found after evaluation](image2)

For analyzing relationship between socio-demographic, work-related and absenteeism-related factors, cross-tabulation and chi-square test was used. It was found that
male referral was associated with frequent absenteeism while females were more likely referred for long as well as frequent absenteeism (Table 3).

On assessing association between age and reason for referral, it was found that subjects in the age group 20 to 50 years were more likely referred for frequent absenteeism while 51 to 60 years were mostly referred in view of long absenteeism (Table 3).

Similarly, considering education, it was seen that all the subjects referred for abnormal work behaviour were educated up to less than graduation (Table 3).

**Table 3.** Factors associated with reason for referral

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>41.090</td>
<td>.000**</td>
</tr>
<tr>
<td>Age groups</td>
<td>88.339</td>
<td>.000**</td>
</tr>
<tr>
<td>Education</td>
<td>41.090</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Considering the reasons given for absence, gender was found to have association with reason claimed for absenteeism, where most of the males claimed to be ill themselves, female absenteeism was associated with ill-health of family member (Table 4).

Also, the reasons given for absenteeism varied greatly across age groups, where in group 20 to 35 years, reason most commonly given was family issues, in group 36 to 50 years, was ill health of self (medical) and in group 51 to 60 years ill health (psychological) (Table 4).

Reason given by subjects also varied as per education, as most of those educated less than graduation claimed to be absent due to medical illnesses, while from other two groups due to psychological stress/symptoms (Table 4).

**Table 4.** Factors associated with reason given for absence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>67.444</td>
<td>.000**</td>
</tr>
<tr>
<td>Age groups</td>
<td>134.681</td>
<td>.000**</td>
</tr>
<tr>
<td>Education</td>
<td>86.222</td>
<td>.000**</td>
</tr>
</tbody>
</table>

After thorough evaluation, we came at certain conclusions regarding associated psychological reasons in subjects. 57.7% males had alcohol use disorder while 2 out of 3 females had associated depression (Table 5).

On studying association with age, it was found that, in the group 20 to 35 years, almost 99% had no active psychiatric morbidity, further all the subjects found to have alcohol use disorder were in the age group 36 to 50 years and all subjects having depression and psychosis were in the 51 to 60 year age group (Table 5).

Finally, education was also found associated with psychiatric comorbidity as those educated up to or below graduation had more of associated alcohol use disorder, while depression was more associated in those educated above graduation (Table 5).

**Table 5.** Factors associated psychiatric comorbidities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>25.002</td>
<td>.000**</td>
</tr>
<tr>
<td>Age groups</td>
<td>130.557</td>
<td>.000**</td>
</tr>
<tr>
<td>Education</td>
<td>101.784</td>
<td>.000**</td>
</tr>
</tbody>
</table>

**Discussion**

97% of employees were males. Average age of the employees under study was 40.2 and they were on average educated up to 10th standard. Most of the employees belonged to group D and C and worked in engineering department. Though there is dearth of research on railway employees, the majority of group C, D employees and males can be explained by overall statistics from ministry of railways 2011-12 which shows that out of total 14,00,000 employees only 78,39 were females and about 13,00,000 belonged to group C and D; this structure of man-power also explains the lower average education in the subjects. 

Frequent absenteeism was the most common cause for referral, followed very closely by long absenteeism. Few were also referred in view of abnormal behaviour at work place. Though there is no data available for comparison, in railways, employees are sent for evaluation to ensure that they have not been affected by any psychiatric illness during the absence period, which might affect their work capacity and also may endanger their or other’s lives. This is especially applicable to employees involved in train running or track-related job.

On analyzing the reasons claimed by employees for their absenteeism ill health of self (medical) was the most common reason, followed by ill health of self (psychological), family issue, ill health/death of relatives, financial problems/debts/property issue and work stress. Previous research shows that only 20% to 25% of absence from work attributed to sickness is due to illness sufficient to render the individual unfit to attend work. Further, it is also said that unauthorized absences and unpaid leave would be expected to involve disciplinary actions and/or loss of wages, it is understandable that anyone absenting themselves from work would attempt to ensure that the absences are shown as sickness-related, whether or not that is the case. Causes found in other studies include family problems, sickness, social or religious occasion, job hunting, elder or child care, harassment at work, etc.

About 56% had alcohol-related problems (23% dependence, rest abuse); only 25% were found to have no associated

---

**ISSN:** 2581-5822

**DOI:** https://doi.org/10.24321/2581.5822.202001

---
psychiatric morbidity. Depression, anxiety and psychosis were also found in few individuals. A study done in Karnataka industrial workers showed that most common reason for absenteeism was sickness, mainly musculoskeletal problems, gastrointestinal problems, hypertension and respiratory problems. The same study found that employees admitting to current or past history of alcohol consumption were more likely to be absent due to sickness. A review shows that although mental health problems cause just 25% of absences of less than seven days; they account for 47% of long-term absences. Compared with many common physical conditions, mental health problems are often gradual in onset and long lasting. Also, in attempt to conceal the problem from their employer, people with mental health problems may delay seeking help until the problem is severe and so more difficult to treat.

Further, for analysing relationship between socio-demographic, work-related and absenteeism-related factors, male referral was associated with frequent absenteeism while females were more likely referred for long as well as frequent absenteeism; further, subjects in the age group 20 to 50 years were more likely referred for frequent absenteeism while 51 to 60 years were mostly referred in view of long absenteeism. The reason for longer absenteeism in older subjects may be the fact that most of the health problems are common in this age.

The reason for absence given can vary as per individual characteristics. Our study found that females gender was more associated with absence claiming illness of family members while male gender with sickness of themselves. This can be attributed to our value system in which females are traditional care takers of both children as well as elders in family. Also younger subjects claimed to be absent due to family issues, while older adult’s absenteeism was claimed more often due to illness, also most of those educated less than graduation claimed to be absent due to medical illnesses, while from other two groups due to psychological stress/symptoms. As discussed already, it is common to claim medical illness as reason to avoid punishments and wages loss; ill health can be more acceptable reason in older age other than the fact that illnesses are actually more likely to occur in older individuals.

After thorough evaluation, we came to the conclusions that 57.7% males had alcohol use disorder while 2 out of 3 females had associated depression. Subjects in the age group 20 to 35 years almost 99% had no active psychiatric problems. Further, all the subjects found to have alcohol use disorder were in the age group 36 to 50 years and all subjects having depression and psychosis were in the 51 to 60 years age group. Finally, those educated up to or below graduation had more of associated alcohol use disorder, while depression was more associated in those educated above graduation. A study on the contrary showed similar incidence of alcohol use in employees (>32%), also 32.3% of current users were found positive for problem drinking using Alcohol Use Disorder Identification Test. The same study also reported that blue collar workers (like group D employees in our case, who are generally educated less than graduation), were more likely to have alcohol-related problems than white collar ones.

**Conclusion and Recommendation**

Mental illnesses and substance use associated disorders are common causes of chronic and recurrent absenteeism and often the reason for psychiatric evaluation. In our study done on railway employees, it was found that psychiatric illnesses more commonly alcohol use disorders followed by depression, anxiety and psychosis are associated with man-days lost due to absenteeism.

Considering the magnitude of absenteeism, it is advisable to the administration to take greater efforts in detecting and referring cases of alcohol use or suspected mental illness to mental health professionals for treatment. As male subjects from lower group jobs, in mid age are more likely to be involved in such cases, it will be fruitful to carry out screening in such individuals as done for physical illnesses which would help in early identification.

Many of the problems relating to sickness absence are caused by the abuse of the system by individual employees and by the lack of control over absenteeism exercised by management; the management has a key role to play to take efforts towards reducing absenteeism in the organization. Incentives and extra-monetary benefits, better relations of the employees with the management, and stricter disciplinary actions on those guilty would definitely help in reducing absenteeism.

**Conflict of Interest:** None

**References**

5. Chakraborty S, Subramanya AH. Socio-demographic and clinical predictors of absenteeism-A cross-sectional study of urban industrial employees. *Ind psychiatry J*