

Original article :

Evaluation of Psychiatric Disorders among Industrial Population at a Tertiary Care Teaching Hospital

Dr. Bijoy Pratim Chaudhuri

Associate Professor, Department of Psychiatry, Srinivas Institute of Medical Sciences and Research Center, Mangalore, Karnataka, India.

Corresponding Author: Dr. Dr. Bijoy Pratim Chaudhuri, Associate Professor, Department of Psychiatry, Srinivas Institute of Medical Sciences and Research Center, Mangalore, Karnataka, India.

Abstract

Background: Mental health disorders are among the most burdensome health concerns. The present study was conducted to assess psychiatric disorders among industry population.

Materials & Methods: The present study was conducted on 114 patients with psychiatric disorders of both genders. All subjects were given a questionnaire and suggested to respond accordingly. All subjects were asked to reflect their global impressions on job satisfaction, job stress, interpersonal relationships in the workplace and perceived family support as positive or negative. The subjects were screened by the General Health Questionnaire (GHQ-12) screening instrument.

Results: Out of 114 patients, males were 46 and females were 68. Various psychiatric disorders were Opium dependence seen in 26, Schizophrenia in 28, Depressive episodes in 14, Caffeine dependence in 17, Somatoform disorders in 13, Dissociative disorder in 10 and Adjustment disorders in 6. The difference was significant ($P < 0.05$). 76 subjects had education upto school level, 30 had college level and 8 had university level, 84 were married and 30 were unmarried, 70 had joint family and 44 had nuclear family, 68 had income < 4000 / month, 42 had 4000- 8000/ month and 4 had > 8000 /month. The difference was significant ($P < 0.05$).

Conclusion: Psychiatric disorders among industry population was mostly seen in subjects with joint family, low education status, subjects with low income and married.

Keywords: Psychiatric disorders, General Health Questionnaire, Screening.

INTRODUCTION

Mental health disorders are among the most burdensome health concerns. Work environments are known to influence the psychological functioning of the individual. In comparison with the general population, industrial workers have the added risk of physical, chemical, biological and other specific psychosocial factors of their occupational environment. In addition, there are indications that modern mechanisms of production and methods of trade are contributing to an increase in stress risks in industry. Psychiatric disorders

constitute the leading occupational health problems with one-third of all workers reporting adverse psychological effects.^{1,2} Mental disorders in the elderly often go untreated due to the misperceptions that these disorders are a normal part of aging and a natural reaction to chronic illness, loss of family members, and social transition occurring with age. The burden of late-life psychiatric disorder on physical health, social support systems, and overall functioning is considerable, making mental disorders a leading cause of burden in elderly adults. Additionally,

mental disorder is a preventable risk factor for mortality, particularly suicide attempts.³ The reported prevalence rates of psychiatric morbidity in the Indian industrial population range from 14-37% and can be up to as high as 74% in Western reports. Most of the prevalence studies in industry noted above were conducted without the use of any specific diagnostic criteria for psychiatric disorders. Prevalence rates for psychiatric disorders according to epidemiological studies vary from 0.95% to 13%.⁴ Hence; under the light of above mentioned data, the present study was conducted to assess psychiatric disorders among industry population.

MATERIALS & METHODS

The present study was conducted in the Department of Psychiatry, Srinivas Institute of Medical Sciences and Research Center, Mangalore, Karnataka, India. It comprised of 114 patients with psychiatric disorders of both genders. Patients were informed regarding the study and written consent was taken. Ethical

clearance was obtained from institutional ethical committee. Patient information such as name, age, gender etc was recorded. All subjects were given a questionnaire and suggested to respond accordingly. All subjects were asked to reflect their global impressions on job satisfaction, job stress, interpersonal relationships in the workplace and perceived family support as positive or negative. The physical diagnosis was made. The subjects were screened by the General Health Questionnaire (GHQ-12), which is a widely utilized screening instrument. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I shows that out of 114 patients, males were 46 and females were 68. Table II, graph I shows that various psychiatric disorders were Opium dependence seen in 26, Schizophrenia in 28, Depressive episodes in 14, Caffeine dependence in 17, Somatoform disorders in 13, Dissociative disorder in 10 and Adjustment disorders in 6. The difference was significant (P<0.05).

Table I: Distribution of patients

Gender	Number of patients	Percentage of patients
Male	46	40.35
Female	68	59.65

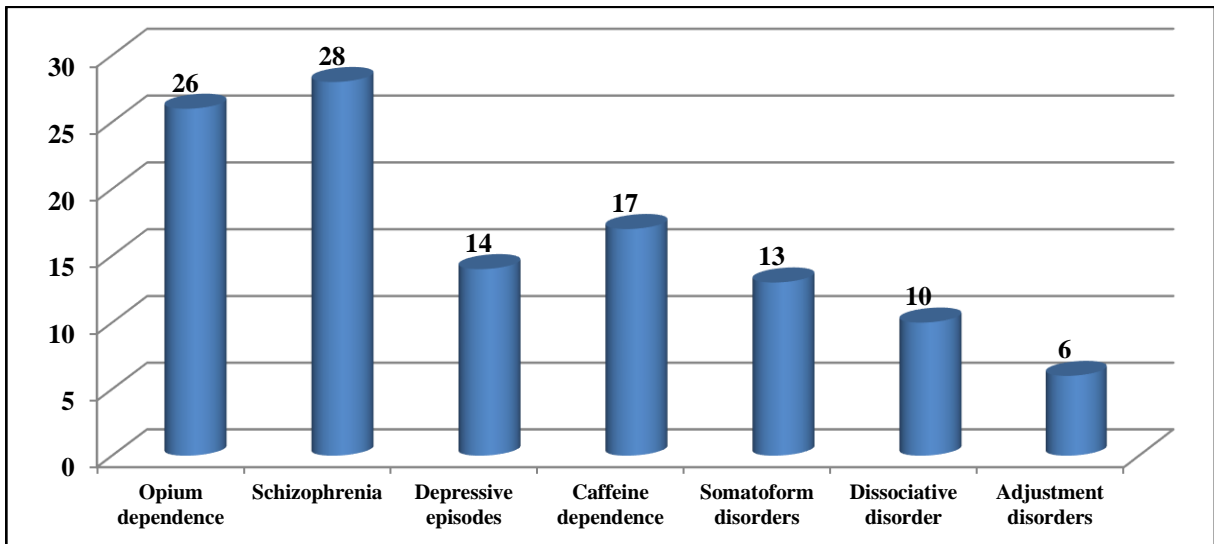
Table II: Type of psychiatric disorders

Psychiatric disorders	Number	P value
Opium dependence	26	0.02
Schizophrenia	28	
Depressive episodes	14	
Caffeine dependence	17	
Somatoform disorders	13	
Dissociative disorder	10	
Adjustment disorders	6	

Table III: Demographic associates of psychiatric morbidity

Variable		Number	P value
Education	School	76	0.01
	College	30	
	University	8	
Marital status	Married	84	0.02
	Unmarried	30	
Family	Joint	70	0.01
	Nuclear	44	
Income	<4000	68	0.05
	4000-8000	42	
	>8000	4	

Graph I: Type of psychiatric disorders



Graph II: Demographic associates of psychiatric morbidity

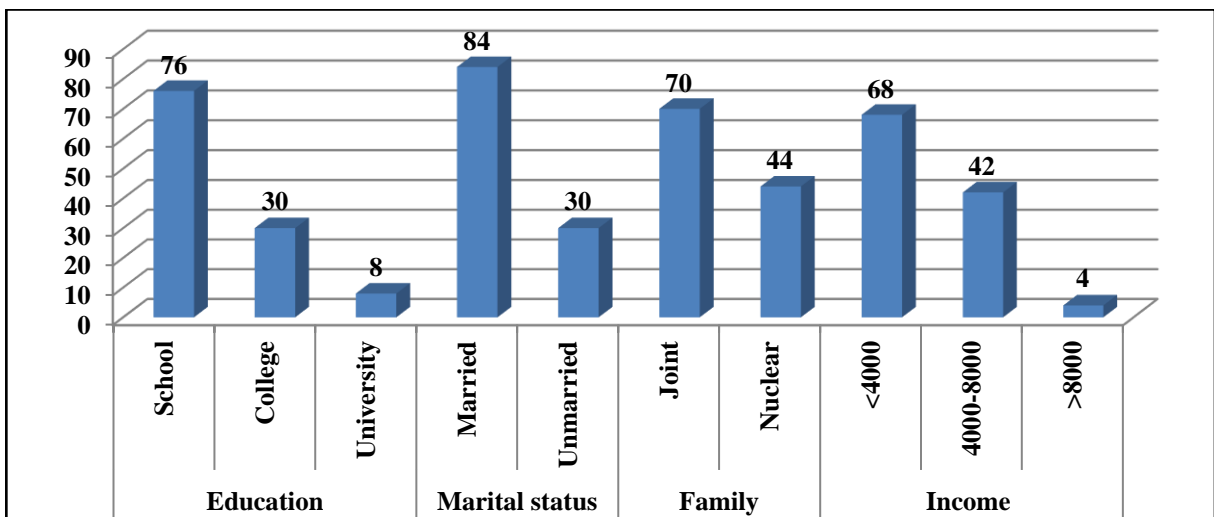


Table III, graph II shows that 76 subjects had education upto school level, 30 had college level and 8 had university level, 84 were married and 30 were unmarried, 70 had joint family and 44 had nuclear family, 68 had income <4000/ month, 42 had 4000- 8000/ month and 4 had >8000/month. The difference was significant ($P < 0.05$).

DISCUSSION

Under the coordination of the Ministry of Health Mental Health, 3% of the population suffer from severe and persistent mental disorder, 6% had severe psychiatric disorders arising from the use of alcohol and other drugs, and 12% require some mental health care either continuous or eventual.⁵ Recent studies indicate that about one out of every three to four adolescents is estimated to meet lifetime criteria for a Diagnostic and Statistical Manual of Mental Disorders (DSM) mental disorder. Furthermore, the risk of psychiatric disorder in children with physical illnesses is approximately double compared to the healthy children.⁶ The present study was conducted to assess psychiatric disorders among industry population. In this study, out of 114 patients, males were 46 and females were 68. Steadman et al⁷ found that two hundred thirty-eight individuals were selected by a stratified randomization technique and screened using the General Health Questionnaire-12 (GHQ-12), Johns Hopkins University Hospital Test for alcoholism and a semi structured questionnaire for other substance use, sleep problems and past psychiatric history. Following a detailed clinical interview, diagnoses were based on International Classification of Diseases (ICD), Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research (DCR). The prevalence rate for psychiatric disorder of one month's duration in the study population was 51.7%. Substance use,

depression, anxiety and sleep disorders were common. Comorbidities were found in 65% of the subjects. Both univariate analysis and stepwise multiple regression revealed that educational level, perceived stress, job satisfaction and stressful life events were the independent determinants of psychiatric morbidity. A significant proportion of industrial employees had psychiatric problems. We found that various psychiatric disorders were Opium dependence seen in 26, Schizophrenia in 28, Depressive episodes in 14, Caffeine dependence in 17, Somatoform disorders in 13, Dissociative disorder in 10 and Adjustment disorders in 6. We observed that 76 subjects had education upto school level, 30 had college level and 8 had university level, 84 were married and 30 were unmarried, 70 had joint family and 44 had nuclear family, 68 had income <4000/ month, 42 had 4000- 8000/ month and 4 had >8000/month. Banerjee and MacDonald⁸ found that depression was prevalent in 26.0% of their sample comprising persons aged 65 years and above. A significant finding of this study, which may have important implications for both social and psychological perspectives, is the high prevalence of psychiatric disorder amongst widowed people. Stressful factors such as isolation and low socioeconomic status are closely associated with widowhood. Poor mental health and stress can negatively affect employee job performance and productivity, engagement with one's work, communication with coworkers and physical capability and daily functioning. Mental illnesses such as depression are associated with higher rates of disability and unemployment. Depression interferes with a person's ability to complete physical job tasks about 20% of the time and reduces cognitive performance about 35% of the time. Only 57% of employees who report moderate depression and 40% of those who report severe depression receive treatment to control depression symptoms.⁹ The workplace is an optimal setting to create a culture of

health because communication structures are already in place. Programs and policies come from one central team. Social support networks are available. Employers can offer incentives to reinforce healthy behaviors. Employers can use data to track progress and measure the effects.¹⁰

Action steps employers can take include make mental health self-assessment tools available to all employees, offer free or subsidized clinical

screenings for depression from a qualified mental health followed by directed feedback and clinical referral when appropriate.

CONCLUSION

From the above results, it was found that psychiatric disorders among industry population was mostly seen in subjects with joint family, low education status, subjects with low income and married. However; further studies are recommended.

REFERENCES

1. World Health Organisation (WHO). Epidemiology of Occupational Health, Assessment of Occupational Health. WHO: Geneva; 1986.
2. Schottenfeld R. Psychiatric disorders. In : Levy BS, Wegman DH, editors. Occupational Health-Recognizing and Preventing Work-related Disease. 3 rd ed. Little Brown: Boston; 1995. p. 533-41.
3. Angold A, Erkanli A, Farmer EM. Psychiatric disorder, impairment, and service use in rural African American and white youth. Arch Gen Psychiatr. 2002;59:893-901.
4. Costello EJ, Mustillo S, Erkanli A, Keeler G, Angold A. Prevalence and development of psychiatric disorders in childhood and adolescence. Arch Gen Psychiatry. 2003;60:837-44.
5. Costello EJ, Compton SN, Keeler G, Angold A. Relationships between poverty and psychopathology: A natural experiment. JAMA 2003;290:2023-9.
6. Dutta S, Kar N, Thirthalli J, Nair S. Prevalence and risk factors of psychiatric disorders in an industrial population in India. Indian J Psychiatry 2007;49:103-8.
7. Steadman HJ, Osher FC, Robbins PC, Case B, Samuels S. Prevalence of serious mental illness among jail inmates. Psychiatr Serv. 2009;60(6):761-765.
8. Banerjee, MacDonald, Lindsay J, Briggs K, Murphy E. The Guy's/Age Concern survey. Prevalence rates of cognitive impairment, depression and anxiety in an urban elderly community. Br J Psychiatry. 1989;155:317-329.
9. Beekman AT, Copeland JR, Prince MJ. Review of community prevalence of depression in later life. Br J Psychiatry. 1999;174:307-311.
10. Rao AV, Madhavan T. Geropsychiatric morbidity survey in a semi-urban area near Madurai. Indian J Psychiatry. 1982;24(3):258-267.