FREQUENCIES OF PSYCHIATRIC MORBIDITIES IDENTIFIED IN EMPLOYEES OF PUBLIC SECTOR ORGANIZATIONS PRESENTED TO PSYCHIATRIC SERVICES

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ABSTRACT

OBJECTIVE

To determine the frequency of psychiatric disorders in employees of various public sector organizations that presented to Psychiatric services of tertiary care hospital in Karachi.

STUDY DESIGN

Cross sectional study

PLACE AND DURATION OF STUDY

Cases presented to Department of Psychiatry and Behavioural Sciences, JPMC, Karachi during 23 months duration, from January 2014 to November 2015 were included.

SUBJECTS AND METHODS

Data of all government employees diagnosed with Psychiatric disorders at setting in studied duration was collected from hospital record and analysed.

RESULTS

The employees diagnosed with psychiatric disorder were from 20 different departments which were later categorized as Law Enforcement departments 1284 (76.42%), Health departments 291 (17.32%), and Civil departments 105 (6.25%). Their mean age was 32.7 ± 10.13 (S.D). Mood Disorders found to be among 718 (42.74%) cases with Depressive Disorder in 468 (27.85%) cases. Anxiety disorders had been diagnosed among 435 (25.89%) of the cases followed by Psychotic disorders (24.4%), Obsessive Compulsive Disorder 39 (2.32%), Stress related disorders (2.14%) and Substance use disorders (2.08%).

CONCLUSION

Depressive Disorder was the most frequent diagnosis among all the referrals of government employees. Most of the referral were from Law Enforcement departments and Pakistan Rangers department being the most common. Young employees are most vulnerable age group to stress and developing psychiatric issues.

KEY WORDS

Workplace, Psychiatry, Law enforcement, Pakistan, Mood disorder

INTRODUCTION

Mental Health at workplace is crucial to address as mental health issues usually arise in productive working age regardless of educational status, income levels and employment categories [1-3]. Timely interventions at workplace can assist recovery of those suffering from mental illnesses and can prevent mental health problems[4,5]. Many studies have been conducted internationally to look for the risk factors at workplace causing metal health problems, which only provided the indicators of occupation related risks but failed to give more information regarding role of workplace factors in mental health[3,6].

Many workplace factors influence in causing mental health issues including long working hours[7,8] regular overtime,[9] high job demands with less decision-making rights[10], bullying, violence, and discrimination at workplace[11,12] and job insecurity[13,14]. A review of the effects of the psychosocial environment on risk of stress-related disorders (SRDs) concluded that high job demands, low job control, low co-worker support, low supervisor support, low procedural justice and a high effort-reward imbalance may be the predictors of SRDs[15]. In working population, depression and simple phobia found to be most prevalent disorders[16]. Overtime at work was found to be slightly associated with elevated risk of depressive disorder more among women[17] while in men, high job strain increased the risk of major depressive disorder in those who worked over 35-40 hours per week[18]. Major depressive disorder can be predicted in males with job insecurity and family to work conflict[18] as strongest factor associated with mental disorders found out to be the imbalance between work and family life in either gender[19]. Female employees have more frequent and longer sickness absences due to psychiatric disorders. Male employees are at a high risk of disability due to psychiatric disorders[20].

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Some jobs are more stressful as employees are often away from families, homes and sources of social support and workplace characteristics are the modifiable factors that may become the focus of interventions to reduce the risk of mental health problems[21,22]. This study was conducted to determine the frequency of psychiatric disorders among employees of various government organizations presented to Psychiatric services of public sector tertiary care hospital in Karachi, so that strategies may be formulated to prevent the sequelae of work-related stress.

SUBJECTS AND METHODS

Participants

It is a cross sectional study of 23 months duration from January 2014 till November 2015 conducted at Department of Psychiatry and Behavioural Sciences, JPMC, Karachi. All Government employees that were diagnosed as case of Psychiatric disorders after presenting to the Department of Psychiatry and Behavioural Sciences, JPMC, either referred from their departments or consulted on their own, whether managed on outdoor (outpatient) or indoor (admitted in the ward) basis were included in the study. Patients with psychiatric illness attributable to another medical condition were excluded from the study. Total of 1680 employees participated in the study.

Instruments

Demographic information was noted along with particulars of the consultancy such as gender, age, psychiatric diagnosis, presenting month, and type of employment of each case. Age was further categorized into groups as 15-25 years, 26-35 years, 36-45 years, 46-55 years and 56 years and older. Type of employment was categorized on the basis of departments as Law Enforcement departments, Health department and Civil departments. Law enforcement departments included all those departments that work to maintain law and order situation of the country in various aspects and include weapon handling by the employees. Health departments included employees working as medics, paramedics and other staff at hospitals. Civil departments included all other departments that mainly involve office work with fixed duty hours.

Months of the year were categorized as cooler months, warmer months and warmest months. Cooler months included October, November, December, January, and February. Warmer months included March, April and September while Warmest months included May, June, July, and August. Psychiatric diagnosis had been made by consultant Psychiatrists of the department using either ICD

10 (International Classification of Disease version 10) or DSM- 5 (Diagnostic and Statistical Manual version 5) criteria. Psychiatric Diagnosis was classified into Mood Disorders, Anxiety disorders, Psychotic Disorders, Obsessive- compulsive disorder (OCD), Substance Use Disorders, Neurotic & stress related disorders and deliberate self-harm or suicidal attempts.

Mood Disorders included Depressive disorder and Bipolar affective disorder. Anxiety disorders included Generalized Anxiety Disorder (GAD), Panic disorder, Phobic Anxiety disorder and Mixed anxiety & depressive disorder. Psychotic Disorders included Acute Psychotic disorder and Schizophrenia. Stress related disorders included Adjustment disorder, post-traumatic stress disorder and conversion disorder.

Procedure

After ethical approval data of all consecutive patients who were government employees and presented to Psychiatric services of studied hospital either new or follow up cases during studied duration was collected from hospital record, keeping all patient's related information confidential. Data were analysed using SPSS v.22 (Statistical Program for Social Sciences version 22). Central tendencies including mean, range and standard deviation of quantitative variable i.e. age were computed. Frequencies and percentages of all categorical variables were calculated.

RESULTS

Over the period of 23 months, among all government employees presented to the setting 1680 were diagnosed as having psychiatric disorder, including 1361 (81.01 %) males and 319 (18.99 %) females. Among them, 1480 (88.09%) were managed on outdoor basis while 200 (11.9%) got admitted to indoor facility. Mean age (in years) of the patients was 32.7 ± 10.13(S.D.). Out of them, 420 (25%) were of 15-25 years of age, 588 (35%) were between 26-35 years, 504 (30%) were between 36 – 45 years, 99 (6%) were 46-55 years old, and 69 (4%) were of 56 years and older.

Employees working at 20 different departments of government organizations consulted at the setting that were categorized as Law enforcement departments, health departments, and civil departments. Among them, 7 departments considered as Law enforcement agencies that included Sindh rangers, Coast guard, Sindh police, Airport Security Force (ASF), Frontier Constabulary (FC), Pakistan Navy, Pakistan Air force. There were four Health departments of Karachi that included Jinnah Postgraduate medical Centre (JPMC), Central Health Establishment (CHE), National Institute of Child Health (NICH), Pakistan Medical and Research Council (PMRC). While 9 departments were considered as Civil departments that included Pakistan Post, Public Works Department (PWD), Ministry of Law, Water Board, Pakistan Railways, Education department, Pakistan International Airline (PIA), Pakistan Railways and Accountant General of Pakistan (AGPR). Among all registered cases, 1284 (76.42%) were the employees of Law enforcement departments, 291 (17.32%) were of Health Departments and 105 (6.25%) of Civil departments as shown in Figure 1. Details of Frequencies of Employees of each department that with various psychiatric disorders has shown in Table 1.

Table 1
Frequencies of patients belonging to various government departments

Type of Employment	Government Departments	Number of cases	Percent
Law Enforcement Departments	Sindh Rangers	885	52.70
	Coast Guard	106	6.30
	Sindh Police	100	5.95
	ASF (Airport Security Force)	92	5.50
	FC (Frontier Constabulary)	67	3.99
	Pakistan Navy	27	1.61
	PAF (Pakistan Air Force)	7	0.41
	Total	1284	76.46
Health Departments	JPMC	175	10.40
	NICH	53	3.15
	CHE (Central Health Establishment)	55	3.27
	PMRC (Pakistan Medical & Research Council)	8	0.48
	Total	291	17.30
Civil Departments	AGPR (Accountant General of Pakistan)	30	1.79
	Pakistan Post	15	0.90
	PWD (Public Works Department)	13	0.77
	Ministry of Law	12	0.71
	Water Board	11	0.65
	Pakistan Railways	9	0.54
	Karachi Cantonment Board	7	0.41
	PIA (Pakistan International Airlines)	5	0.29
	Education Department	3	0.18
	Total	105	6.24
Total		1680	100

Figure 1
Frequency of Psychiatric Cases from Various Government Organizations
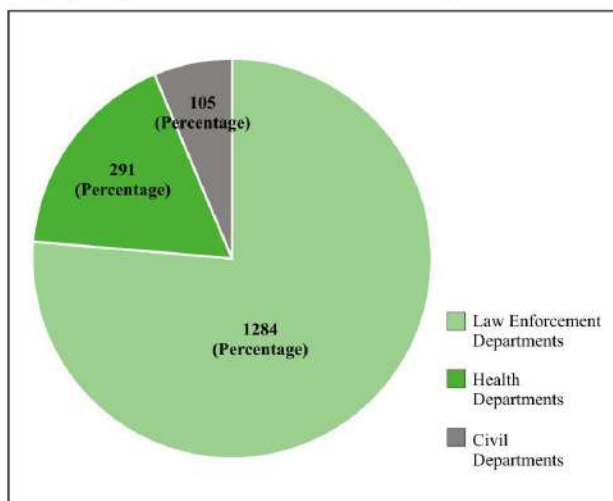
Over the years, 752 (44.76%) patients presented in the cooler months while 451 (26.84%) in Warmer months and 477 (28.4%) in the warmest months of the years. Mood disorder was the diagnosis of 718 (42.74%) patients, 435 (25.89%) had Anxiety Disorders, 410 (24.4%) had Psychotic disorders, 39 (2.32 %) had Obsessive-compulsive disorder (OCD), 36 (2.14%) had Stress related disorders, 35 (2.08%) had Substance use disorder and 7 (0.42%) had presented with deliberate self-harm or suicidal attempts. Among 718 cases of Mood disorder, 468 (27.85%) had Depressive disorder and 250 (14.88

%) had Bipolar disorder. While 435 cases of Anxiety disorder constituted 288 (17.14%) of Generalized anxiety disorder, 47 (2.8%) of Phobic anxiety disorder, 31 (1.84%) of Panic disorder, and 69 (4.1%) of Mixed Anxiety and Depression. Psychotic Disorder was the diagnosis of 410 cases, included 40 (2.38%) cases of Acute Psychotic disorder and 370 (22.02%) of Schizophrenia. In total, 36 (2.14%) cases who had diagnosis of Stress related disorders included 18 (1.07%) patients of Conversion disorder, 9 (0.54%) of Post-traumatic Stress disorder and 9 (0.54%) of Adjustment disorders.

DISCUSSION

Mental illnesses are on increasing verge throughout the globe including developing countries like Pakistan regardless of any gender or employment category but in our study, majority of the cases with psychiatric disorders were males constituting 81.01% of the total sample which could be because our sample population was from male dominant occupations. Majority of them were young adults (25-36 years); this working age group in our society has so many socio-economic responsibilities and it is most vulnerable group of population to develop psychiatric issues[23]. As many of the patients were young, might had association of other psychosocial factors other than characteristics of occupation or workplace could be a confounding factor and its effects can't be denied. Highest number of cases presented were from law enforcement departments (76.46%) which could be due to several reasons including lack of sufficient mental health facilities available in those departments, high demand job work, stressful working environment and Jinnah postgraduate medical centre (JPMC) being a public sector tertiary hospital is main referral centre for professional care for them. Law and order situation of the state was also stressful at that time which could be a factor too as terrorism undoubtedly possess major psychological impact on people of all ages[24,25]. While military services have got increase risk of suicide as seen in a study[26] on US army and thus people working in such services need assessment for their psychological health on regular basis.

In line with our findings, mood disorder as the most frequently diagnosed psychiatric illness being Depressive disorder the most common and Anxiety disorders constituted the second most frequent issue for psychiatric referrals, an other study from Pakistan done on general population showed that every third person was suffering from either anxiety or depression or both[27].

Majority 752 (44.76%) of the cases found to be presented in cooler months that was contrary to the study at Vietnam where majority of psychiatric admission done in warmer months specially June[28].

Universally delivered workplace mental health interventions can reduce the level of depressive symptoms among workers. A meta-analysis has showed more effectiveness of CBT based programs than other interventions on mental health of workers[29].

Awareness should be incorporated for employees about healthy and balanced life style including exercise and balance between personal and professional life. Healthy lifestyle programmes instigation by several employers have shown results in improving employee health and work attendance and is also important for better productivity. As more incidence of psychiatric disorders may lead to more absentees of employees from work and lesser interest with adequate capabilities in their work[30].

There is need to provide appropriate services, including reducing potential workplace exposures, improving detection and developing treatment strategies for workers with psychiatric disorders. Care must be taken for employees suffering from psychiatric issues and screen for psychiatric symptoms in all employees on regular basis, attempts to reduce stigma and raising awareness may lead many individuals with otherwise transient minor symptoms, having their distress get medical professional help before getting it worsened.

LIMITATIONS

- It was a retrospective study from hospital data of reported cases, not the true representative of burden of psychiatric illness in population, so the results can't be generalized.
- Risk factors and associated factors at workplace leading to development of psychiatric illnesses were not considered.

CONCLUSION

The commonest psychiatric condition identified was Depressive Disorders followed by Generalized Anxiety Disorders and was mostly found among age group of 26-35 years. The most common presentation was from Rangers as the department of psychiatry and behavioral sciences, JPMC is the main referral centre for them. Mental health is a pressing issue in today's fast paced and often unexpected circumstances. Government employees are prone to mental health issues in the same way as the general public. The data obtained in this study can help develop more qualitative prospective studies in future. Preventive strategies at workplace should target the prevention of short-term consequences and long-term impact of mental disorders in employees.

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