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Original Article

* PROFILE OF PARAMILITARY PERSONNEL REFERRED TO A PSYCHIATRIC HOSPITAL IN EASTERN INDIA

SURESH KUMAR P.N.,
SAJI S. DAMODARAN,
R. KHANNA, S.S.RAJU

Central Institute of Psychiatry,
Ranchi - Bihar

Abstract

Sociodemographic factors, illness characteristics, diagnosis, follow-up and outcome data were analyzed for 40 consecutive patients attending psychiatric O.P.D. of C.I.P., Ranchi from various paramilitary forces, majority were in the age group 21-30 yrs with M : F ratio 3 : 1. Most of them were employees, educated, married, Hindus and of average socio-economic status. A significant proportion did not have family history of psychiatric morbidity. Half of the patients had a past history of psychiatric morbidity. Schizophrenia was the most frequent current diagnosis followed by bipolar disorders. Majority of the patients had good outcome with adequate follow-up. The implications of the findings are discussed.

Introduction

Mental diseases are major health problem of this country, with more than 14 million of people suffering from various types of mental illnesses (National Mental Health Programme for India. Progress Report, 1982-86). However studies on the incidence and prevalence of mental disorders in the general population in India are very few. Available studies show varying prevalence rates (Elanagar et al 1971, Sethi et al 1967, Verghese et al 1973, Sethi et al 1972). It is difficult to make an exact incidence of psychiatric disorders owing to the underreporting of cases and the dif

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ficulty in timing the onset of illness. Because of cost effectiveness and the non-feasibility of using community surveys, a number of studies have been done on psychiatric referrals from general hospitals (Singh 1974, Prabhakaran 1968, Parekh et al 1980, Kelkar et al 1982, Malhotra 1984, Bhatia et al 1988). However studies on some specified groups like military, police etc. are found to be limited. One such study done by Chatterjee and Kutty (1977) was performed on military personnel. It is reasonable to expect a significant proportion of military population to be suffering from various degrees of mental ill health. The environment to which they are exposed to and the nature of their work predispose them to both physical, social and psychological stress. Since this profession occupies a unique position in society and the interaction and services of these personnel have far reaching consequences, effects of an undiagnosed form of mental illness in this group will be very serious. There are studies on psychological problems among soldiers exposed to undesirable/hostile conditions (D'Netto 1967, Jetley 1964, Singh 1967, D'Netto 1971). However the authors are not aware of any of such studies conducted in paramilitary forces. Paramilitary forces also have to undergo rigorous training, patrolling duty, serving in border, guarding industries and to keep pace in internal constraints of society which require significant amount of stress. Hence studying psychological aspect of this population will help in early detection, treatment, rehabilitation and the most important, prevention of mental morbidity. Such a study has important implication especially in the safety of country and the society. Considering all these a study on psychiatric refferals from paramilitary forces was planned.

Aims

- To find out the referral pattern from paramilitary forces.
- To study the sociodemographic profile, diagnoses, management,outcome and follow-up pattern of these patients.
- To compare these patients with the general population.

Methodology

This study was conducted at the Central Institute of Psychiatry, Ranchi which receive patients from a wide catchment area including the referral from all government organisations. The institute maintains elaborate outpatient register which contains the local and permanent addresses of the patient and their source of referral, if any. The admission register from 1991 January to 1993 October were scanned and patients with addresses of any paramilitary organisations or referred from such organisation were taken up for study. These patients were either referred for psychiatric consultation by their concerned units or consulted by themselves.

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Both employees and their first degree relatives were taken up for the study. All patients regardless of their age and co-existing physical problems were included in this study. Diagnoses were based on D.S.M.-III-R. Detailed case records were available for all patients treated either as inpatients or outpatients during the study period. Data was collected in a specially designed proforma containing socio-demographic variables, illness characteristics, outcome and follow-up details (using these case notes). The paramilitary forces included in the study were Central Industrial Security Force (CISF), Central Reserve Police Forces (CRPF), Railway Protection Force (RPF), Bihar Military Police (BMP), Central Security Forces (CSF), Armed Forces Constabulary (ASC) and any other paramillitary forces declared so by the Central Government. Outcome of the patients was defined as the stable condition at the time of last follow- up assessment. It was categorised to three types with 'good' as good social and clinical remission and no psychopatholog, moderate (intermediate) with impairment in social functioning, but regular activities and social contacts preserved and poor outcome with a chronic psychotic state with poor self care marked with a chronic psychotic state with poor self care and marked symptoms (Kolakowska et al 1985).

Results

During the study period a total of 40 patients from various paramilitary forces attended the psychiatric outpatient department. Majority of the patients belonged to the age group 21-30 yrs with a distribution of M : F = 3 :1. Majority were married, Hindus and employees. Half of them had an income between Rs.1000 - 15000. A significant proportion had inpatient treatment with an average duration of 54 days of hospitalisation. Average duration of follow-up for both outpatients and inpatients was 8.4 months. 40 % of patients had good outcome with treatment (Table 1). The average education of the total sample was 8.2 yrs and duration of service was 10.8 yrs. Table 2 shows the source of referrals with a significant proportion belonging to CISF (30 %) followed CRPF (CSF) BMPI etc.

A positive family history of psychiatric morbidity was obtained in only one fourth of the total sample (22.5 %) with suicide, bipolar illness, major depression and alcoholism as the common diagnoses. Physical morbidity was insignificant (12.5%), majority having minor ailments such as migraines, hemorrhoids peripheral neuropathy etc. Half of the patients reported a past history of psychiatric morbidity, the common ones being bipolar illness, schizophrenia and major depression. When the current psychiatric diagnosis was assessed a significant propor-

tion was found to be suffering from schizophrenia (45 %) followed by bipolar affective disorder, major depression and alcoholism. Personality disorders, dysthymia, somatoform disorders and sexual dysfunction were the other psychiatric disorders detected.

Discussion

Psychiatric helpseeking is a complex process involving patient, environment and institutional factors (Khanna et al 1992). In the case of employees, early detection is possible thanks to the health care costs being met by the employer. Early detection and effective treatment of a specialised population like industrial workers, police personnel, armed force personnel will have tremendous impact on the preservation of trained man power. The present study is an attempt to delineate the profiles of paramilitary personnel who attend the outpatient department of a psychiatric hospital.

The preliminary study reveals certain interesting trends. The rate of referral to our hospital was only 0.42 % and the majority of patients were schizophrenics in the age range 21-30 yrs. The rate of referral from paramilitary forces is too low when compared with referrals from a general hospital which varies from 0.66 to 1.54% (Prabhakaran, 1968, Parekh, 1980, Kelkar, 1982, Malhotra, 1984, Bhatia, 1988). Psychiatric referral rate from a police hospital was 1% (Chatterjee et al, 1977) and that of a military hospital was 1.54% (Bhattacharya, 1992). Our low referral rate raises a few questions. Is the incidence of psychiatric disorders low in the paramilitary forces or are they managed in the primary source itself ? It has been reported by Kirpal Singh (1984) that as the selection of persons in the Armed Forces is subjected to strict selection procedures based on criteria of education, physical health and mental aptitudes, the incidence of psychotic behaviour is lower than the general population. The other probable reasons could be, since our hospital is a tertiary centre only patients who could not be managed at the primary source might have come for consultation. Underreporting also might have contributed to a significant extent. Another possibility is that the few patients visited our hospital might be reflecting only the tip of the iceberg.

The majority of our patients belonged to the age range of 21-30 yrs and was comparable with that of Chatterjee and Kutty's study (1977). In a general population study conducted in the same institute, the majority belonged to the age range of 20-29 yrs where as the industrial workers were 30-39 yrs of age (Khanna, 1992, Sharma et al 1992) which suggest that the age range of paramilitary personnel does not differ significantly from the other patient groups. The sex ratio, family and past history data were also comparable with the general population and industrial workers. These factors give more credence to the proposition that given the

same set-up the sociodemographic pattern holds true for most of the patient population.

Majority of our patients were found to be suffering from functional psychoses, mainly schizophrenia. However comparison with industrial referrals and general population shows excess of major depression and bipolar disorders than schizophrenia. Since mood disorders form major part of psychiatric diagnosis in general population the lower prevalence of the same in our sample is quite significant. This finding generates some doubts. Is mood disorders less prevalent in paramilitary population? The low prevalence of mood disorders was observed by Chatterjee and Kutty also. This question still remains unanswered in our study which needs further exploration in this area. Some of the possible reasons could be as schizophrenia is a chronic psychiatric condition, more referrals might have come for these patients. Other reason could be the preponderance of young adults in our sample, a vulnerable age group for the development of schizophrenia, which may be a coincidence.

Neurotic disorders were significantly less and only a minor proportion had diagnosis of alcoholism and drug abuse. This also denotes that since these disorders are mild comparing to psychosis where symptoms are quite prominent, either the patients deferred consultation or the referring authorities might have missed them. It was found that majority of patients had inpatient treatment which when compared to general population was almost double (Khanna, 1992). This again points to the fact that the consultee population was definitely suffering from severe psychological problems of such an intensity which required inpatient treatment. Another interesting finding was that majority of the patients had good outcome with adequate follow-up irrespective of the psychiatric diagnosis. It has been reported that marital status, employment, negative family history and good social support are good prognostic indicators in severe psychosis like schizophrenia (Verghese et al, 1990). To substantiate this, majority of our patients were married, employed, educated, had good socio-economic standard and a negative family history. It has been mentioned previously that as patients come for treatment early in Armed Forces, regular and prolonged follow-ups are easier than in civilian practice. Hence the results of psychiatric treatment in Armed forces are more satisfying (Singh 1977). With these findings the authors want to conclude that since the outcome and follow-up were good and majority were young adults which form the backbone of the Armed Forces, there should be facilities available at the primary source itself for the early detection and timely management, which will not only save the financial resources and manpower but also the mental strength of the saviours of our country which could otherwise seriously impair the competence of the force.

Table 1

Sociodemographic and Clinical Characteristics

	n	Percentage
Age (yrs)		
< 20	4	10.00
21 - 30	21	52.5
31 - 40	5	12.5
51 - 50	8	20.0
> 50	2	5.0
Sex		
Male	30	75.0
Female	10	25.0
Marital status		
Married	37	92.5
Unmarried	3	7.5
Relition		
Hindu	32	80.0
Christian	4	10.0
Muslim	4	10.0
Type of patient		
Employee	23	57.5
Dependant	17	42.5
Income (Rs.)		
500 - 1000	6	15.0
1001 - 1500	16	40.0
> 1500	18	45.0
Outpatients	14	35.0
Inpatients	26	65.0
Outcome		
Good	16	40.0
Moderate	11	27.5
Cannot assess	13	32.5

Mean duration of I.P. treatment : 53.85 days.

Mean duration of follow-up : 8.4 months

Table 2

Source of referral

	N	Percentage
C.I.S.F.	12	30.0
C.R.P.F.	7	17.5
C.S.F.	6	15.0
B.M.P.I	5	12.5
A.S.C.	5	12.5
OTHERS	5	12.5

Table 3

Diagnostic profile

	n	Percentage
Family history of psychiatric morbidity	9	22.5
Past psychiatric morbidity	18	45.0
Physical morbidity	5	12.5
Current diagnosis		
Schizophrenia	18	45.0
Bipolar disorder	9	22.5
Major depression	5	12.5
Alcohol dependence	2	5.0
Others	9	22.5

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Dr. Sureshkumar. P.N.

Central Institute of Psychiatry, Ranchi - 834 007, BIHAR