Sociodemographic and Service Profile of Cases Diagnosed as Psychiatric Investigation NAD in Armed Forces

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ABSTRACT

This study was conducted in a general psychiatric unit of a zonal hospital of armed forces. 50 consecutive individuals, referred for psychiatric evaluation and sent back with diagnosis of Psychiatric Investigation NAD from 01 Jan. 1998 to 31 Dec. 1999, constituting 21.4% of total 234 first psychiatric referrals were included with an aim to study the sociodemographic and service profile of these individuals. Majority of them were other ranks from army, married, with mean age of 31.9 years and service 11.6 years Medical officers and military units referred individuals almost equally. Majority of them had earned unsatisfactory unit reports. The reasons for referral as perceived by individuals were most frequently unit-related problems followed by health related and domestic problems. It was also found that while units referred individuals when perceived to be undisciplined, medical officers referred individuals with concurrent physical disease or personal problems. The implications of these findings are discussed in the paper.

Key Words: Psychiatric investigation; NAD; Armed forces.

Introduction

In military psychiatric practice, in addition to treating psychiatric conditions seen by his civilian colleagues, the military psychiatrist encounters a unique group of individuals, who are referred to him for psychiatric evaluation and are sent back from hospital with the diagnosis of Psychiatric Investigation No Abnormality Detected, commonly called Psychiatric Investigation NAD. It implies that these individuals do not suffer from any known psychiatric disorder and are fit to serve in the armed forces in the role assigned to them. It is included under the head Observations and Evaluation for Suspected Conditions, V-71 of ICD-9 (WHO,1978) and Medical Observation and Evaluation of suspected diseases and conditions, Z-03 of ICD 10 (WHO,1992).

In the armed forces, a serving personnel has to be evaluated by a psychiatrist when referred by medical officer, or when brought to hospital by relatives, friends, responsible member of public, and civil or military police with signs and symptoms suggestive of a psychiatric disorder. A serving person involved in a disciplinary case, suspected to be having a psychiatric disorder can be referred for psychiatric evaluation (DGAFMS, 1987; 1999). These guidelines are similar to what are laid down in Indian Mental Health Act (GOI MHA, 1987). In addition, there is one very unique and significant input to a military psychiatrist from the unit, whereby head of unit can refer any individual under his command with a report on his behavior for evaluation by psychiatrist.

For making a definitive diagnosis, at the disposal of a military psychiatrist is available the unit report, patient’s account and a referral note by a medical officer, unlike in civil practice where a vital detailed history by significant others is almost always available. Moreover, problem of social stigma associated with a label of psychiatric diagnosis exists in the armed forces also, as in the civil setting. The fear exists that being a psychiatric patient precludes future promotions and it makes one subject of ridicule of others (Ursano & Holloway, 1985). On the other hand, there exists in Armed Forces a group of patients, who while under the care of medical officers report physical symptoms incongruent with physical examination, laboratory findings or any other known condition.

They refuse to give up their symptoms because either they genuinely believe in their sickness or for associated gains of being sick (Marrison, 1977; Goel, 1975). These associated gains come out of unique aspect of treatment in the services which is capacity to offer it in a sheltered environment without any loss of pay or benefit (Ursano & Holloway 1985).

So input to a military psychiatrist has to be analyzed in the light of these facts. He has to keep interests of both the individual as well as the organization in mind, at the same time, remaining open to the possibility of abuse of each by other while also not missing out a serious psychiatric disorder.

The study of Psychiatric Investigation NAD can bring to light and unique aspects of military psychiatry. These are...
the individuals who are grouped together on the basis of common end result i.e. they exhibit no psychiatric morbidity and require no psychiatric intervention.

**This study was planned with following aims:**

1. To study sociodemographic and service profile of individuals diagnosed as Psychiatric Investigation NAD.

2. To find out whether there was any difference between the individuals referred by medical officers and units.

**Material and Methods**

This prospective study was conducted in a 15-bedded general psychiatric unit of a zonal military hospital. All consecutive subjects, who were referred for psychiatric evaluation for the first time and were sent back with a diagnosis of Psychiatric Investigation NAD from 01 Jan 1998 to 31 Dec 1999, were included in this study. Relevant data was collected on a proforma, designed for this study. Comparison was done between the cases referred by medical officers and unit. Unit reports of these two groups were also compared.

Student-t test was used for analysis of continuous variables. Categorical variables were analyzed by Chi square test, or Fisher exact test if numbers were small. P <0.05 was considered probability level to reflect significant differences. Statistical software Epi Info 2000, version 1.1.2 (Center for Disease Control and Prevention Atlanta, Georgia, USA) was used for statistical analysis of data.

**Results**

Out of a total of 234 first psychiatric referrals during the study period, 50 (21.4%) individuals were sent back with a diagnosis of Psychiatric Investigation NAD. Mean age and service were 31.9 years (SD 7.0) and 11.6 years (SD 6.3) respectively .84% of the patients were married, but 62% of them were staying without families. They belonged mostly (64%) to nuclear families and 52% were matriculate. Majority were from army 41(82%), belonged to arms 30 (60%), and were either other ranks 27 (54%) or non-commissioned officers 22 (44%). Most of them were referred by medical officers 25 (50%) and units 23 (46%), as compared to relatives 2 (4%). 34(68%) were serving in peace location at the time of referral. Concurrent medical disease was present in only 10 (20%) cases. Poor health (28%) was the most common reason perceived by individual for which, they were referred for psychiatric evaluations, followed by harassment in the unit (24%), domestic stress (16%) and disciplinary problems in the unit (12%). Mean hospitalization period was 12.3 days (SD 6.5) (Table 1).

The individuals referred by medical officer and units were Table 1

| Variable                              | Number (N=50) |
|---------------------------------------|---------------|
| 1. Age (Yr)                           | 31.9 (7.0) #  |
| 2. Service (Yr)                       | 11.6 (6.3) #  |
| 3. Marital Status                     |               |
| Marital Status                        |               |
| Married                               | 42 (84)       |
| Staying with family                   | 16 (38)       |
| Separated family                      | 26 (62)       |
| Unmarried                             | 08 (16)       |
| 4. Family                             |               |
| Nuclear                               | 32 (64)       |
| Joint                                 | 18 (36)       |
| 5. Education                          |               |
| Non-matriculate                       | 08 (16)       |
| Matriculate                           | 26 (52)       |
| Graduate                              | 16 (32)       |
| 6. Service                            |               |
| Army                                  | 41 (82)       |
| Air force                             | 08 (16)       |
| Para Military                         | 01 (02)       |
| 7. Type of Service                    |               |
| Arms                                  | 30 (60)       |
| Services                              | 20 (40)       |
| 8. Rank                               |               |
| Officer                               | 0 (0)         |
| JCO                                   | 01 (02)       |
| NCO                                   | 22 (44)       |
| OR                                    | 27 (54)       |
| 9. Referred By                        |               |
| Unit                                  | 23 (46)       |
| Medical Officer                       | 25 (50)       |
| Relatives                             | 02 (04)       |
| 10. Serving in                        |               |
| Peace                                 | 34 (68)       |
| Field                                 | 16 (32)       |
| 11. Presence of Concurrent Disease    |               |
| Present                               | 10 (20)       |
| Absent                                | 40 (80)       |
| 12. Reason Given By Individual        |               |
| Harassment                            | 12(24)        |
| Disciplinary                          | 06(12)        |
| Poor Motivation                       | 05(10)        |
| Domestic Stress                       | 08(16)        |
| Poor Health                           | 14(28)        |
| Others                                | 05(10)        |
| 13. Hospitalization Period (days)     | 12.3 (6.5) #  |

Note: # Mean (SD), Figures in parentheses indicate percentage compared to find out any difference between the two groups. There was no difference between the groups in terms of age, service, marital status, whether staying with family or not, type of family, educational status, type of service and rank at the time of referral. There was no difference in the referrals from peace location or field...
There was significant presence of concurrent medical disorder in the cases referred by medical officers. However, none of these were psychosomatic disorders. Period of hospitalization was also significantly less in the latter group. There was significant difference in the reason for referral as perceived by the individual, with harassment and disciplinary case in the cases referred by units and ill health and domestic stress in cases referred by medical officers (Table 2).

Table 2

| Variable                        | Unit (N=23)   | Medical Officer (N=25) | Remarks |
|---------------------------------|---------------|------------------------|---------|
| 1. **Age (Yr)**                 | 31.8 (7.6)*   | 32.2 (6.7)             | P=0.84 NS* |
| 2. **Service (Yr)**             | 11.3 (6.5)*   | 12.1 (6.4)             | P=0.65 NS* |
| 3. **Marital Status**           |               |                        |         |
| Married                         | 20 (87)       | 20 (80)                | P=0.70 NS^1 |
| Unmarried                       | 03 (13)       | 05 (20)                |         |
| 4. **Family**                   |               |                        |         |
| Nuclear                         | 16(69.5)      | 14(56)                 | X^2 = 0.94 |
| Joint                           | 07(30.5)      | 11(44)                 | P=0.33 NS |
| 5. **Married & Staying**        |               |                        |         |
| With family                     | 08(40)        | 06(30)                 | X^2 = 0.44 |
| Separated                       | 12(60)        | 14(70)                 | P=0.50 NS |
| 6. **Education**                |               |                        |         |
| Non-matriculate                 | 02(8.8)       | 05(20)                 | X^2 = 3.90 |
| Matriculate                     | 14(60.8)      | 11(44)                 | P=0.14 NS |
| Graduate                        | 07(30.4)      | 09(36)                 |         |
| 7. **Service**                  |               |                        |         |
| Army                            | 22(95.7)      | 18(72)                 | X^2 = 4.90 |
| Air force                       | 01(4.3)       | 06(24)                 | P=0.09NS |
| Para military                   | 0             | 01(4)                  |         |
| 8. **Type of Service**          |               |                        |         |
| Arms                            | 14 (60.9)     | 15 (60)                | X^2 = 0.00 |
| Services                        | 09 (39.1)     | 10 (40)                | P=0.95 NS |
| 9. **Serving in**               |               |                        |         |
| Peace                           | 14 (60.9)     | 18(72)                 | X^2 = 0.67 |
| Field                           | 09 (39.1)     | 07(28)                 | P=0.41 NS |
| 10. **Rank**                    |               |                        |         |
| JCO                             | 01 (4.3)      | 0                      | X^2 = 2.92 |
| NCO                             | 08 (34.8)     | 14 (56)                | P=0.23 NS |
| OR                              | 14 (60.9)     | 11 (44)                |         |
| 11. **Presence of Concurrent Disease** |       |                        |         |
| Present                         | 0             | 10 (40)                | P=0.0007 ^1 |
| Absent                          | 23 (100)      | 15 (60)                |         |
| 12. **Reason Given By Individual** |            |                        |         |
| Harassment & Disciplinary case  | 14 (60.7)     | 03 (12)                | X^2 = 14.83 |
| Poor Motivation                 | 03 (13.1)     | 02 (08)                | P=0.002 |
| Health                          | 03 (13.1)     | 11 (44)                |         |
| Domestic Stress & Others        | 03 (13.1)     | 09 (36)                |         |
| 13. **Hospitalization (days)**  | 14.3(7.1)*    | 10.4(5.5)              | P=0.04* |

Note: *Mean (SD), *Student T test, 'Fisher exact test, NS Not significant, Figures in parentheses indicate percentage

Unit report was not available in 12 and 1 case referred by medical officer and unit respectively. The difference between the two groups on unit report as well as recommendation for retention was significant; the group referred by medical officer had earned more satisfactory remarks. Similarly, the unit reports of the group referred by unit revealed significantly more indiscipline related remarks. There was no significant difference in terms of duration of working in the unit prior to referral (Table 3).
In the present study, 50 (21.4%) individuals were sent back with a diagnosis of Psychiatric Investigation NAD out of a total 234 first psychiatric referrals during the study period. Thus implying that Psychiatric Investigation NAD cases constitute a significant workload to a military psychiatrist. The sociodemographic and service profiles of these individuals revealed that majority of them were other ranks from army and were married. Most of them had finished 10 years of service and were above 30 years of age. In both the groups, most of the soldiers were not at the beginning of service, but were relatively senior in service as well as age. In the beginning of service, besides specter of unemployment and perhaps patriotic feelings being fresh in the memory, the very structure of the demands of services provides a greater emotional protection and creates a holding environment that allows quite an acceptable performance (Ursano & Holloway, 1985). Also, in armed forces the individuals exhibiting severe psychiatric morbidity early in the service are filtered out, as they are not considered fit for further military service. In later part of the service, the soldier experiences heightened stress because of increased commitments in personal as well as professional spheres.

When unit report was available, indiscipline was most common reason for referral. Many were either not recommended for retention or there was an equivocal remark. The individuals perceived the reason for referral to a psychiatrist as unit related problems, which was reported highest, followed by health related problems, and domestic problems.

But why these individuals are referred for psychiatric evaluation? The reason for this can be traced to the input to military psychiatrist that comes mainly from medical officers and unit; notwithstanding, referral initiated by unit is also routed through medical officer. So, by comparing the individuals referred by these two sources, the reasons for referral can be better conceptualized.

In the group referred by unit, their behavior was reported to be unsatisfactory, were either not recommended or there was equivocal remark regarding retention in service. Units had referred these individuals mainly for indisciplinary behavior. Conversely individuals perceived harassment in the unit as most common reason for referral. In the group primarily referred by medical officers, unit reports were satisfactory and quoted ill health as reason for referral. Many had concurrent diseases for which they were in low medical category. Most individuals quoted health and domestic problems as reasons for referral. So, probably the individuals perceived to be troublemakers were referred by units whereas the medical officers referred individuals already in low medical category or with personal problems.

From the foregoing, the underlying reason for these referrals can be conceptualized at three levels. The unit finds the behavior of individual not congruent with the expected norms. Instead of dealing with it directly, he is sent out of unit on pretext of psychiatric referral. It serves dual purpose of giving time out to both individual and organization and also a covert punishment in the form of psychiatric label, which is perceived stigmatizing by both. Or else the referral might reflect a genuine desire for getting him treated.

### Table 3

| Variable                                      | Unit (N=22) | Medical Officer (N=13) | Remarks          |
|-----------------------------------------------|-------------|------------------------|------------------|
| 1. Unit Report                                |             |                        |                  |
| Satisfactory                                  | 04 (18.1)   | 10 (76.9)              | $X^2 = 11.75$    |
| Unsatisfactory                                | 18 (81.9)   | 03 (23.1)              | $P = 0.0006$     |
| 2. Reason For Referral in Unit Report         |             |                        |                  |
| Indiscipline                                  | 19 (86.4)   | 01 (07.7)              | $X^2 = 20.65$    |
| Poor Health & Not specified                   | 03 (13.6)   | 12 (92.3)              | $P = 0.00003$    |
| 3. Duration of Working Under Head of Unit Before Referral |             |                        |                  |
| < 6 Months                                    | 12 (54.5)   | 07 (53.8)              | $X^2 = 0.00$     |
| > 6 Months                                    | 10 (45.5)   | 06 (46.2)              | $P = 0.97$ NS    |
| 4. Recommendation for Retention in Service    |             |                        |                  |
| Recommended                                   | 04 (18.2)   | 08 (61.5)              | $X^2 = 7.86$     |
| Not Recommended                               | 09 (40.9)   | 01 (07.7)              | $P = 0.02$       |
| Equivocal                                     | 09 (40.9)   | 04 (30.8)              |                  |

Note: NS Not Significant, Figures in parentheses indicate percentage
Similarly a medical officer refers an individual to psychiatrist for the reasons such as; the individual is suspected to have psychiatric disorder, to get rid of a nagging patient with functional overlay who over reports symptoms and refuses to get all right despite repeated evidences of normalcy. A low medical category, in armed forces setup means sheltered appointment, that takes the individual away from harsh environment besides ensuring treatment and follow up. The individual, in this scenario, unable to find direct solution to his stresses first overcomes his fear for stigma of psychiatric labeling, reports real or fake psychological symptoms for either treatment or for overt or covert gains as explained earlier.

Considering these three, that is unit or organization, individual and medical officer as corners of a triangle with psychiatrist at the center, the conflicting needs, rights and demands of these three present a potential for abuse and it is the responsibility of the military psychiatrist that this does not occur. Military psychiatrist is influenced by potentially competing values systems and has to realistically assess factors that affect their treatment decisions (Camp, 1993). The psychiatrist in this setting is working for organization and yet is morally responsible to give the interest of patient paramount consideration. Also the lessons learnt by military psychiatry have led to important applications and can be generalized for the rest of medicine, especially in the fields of stress (Arthur, 1978).

The study hospital being in a peace station, most of the referrals were from peace location. Moreover amongst the referrals from the field locations, none of them were from units involved in counter insurgency or combat operations. ICD 10 was followed in the present study for diagnosis, as DSM IV is not followed in the armed forces. Although personality disorders were excluded in all the cases, detailed personality assessment was not done due to non-availability of clinical psychologist at the study hospital. Diagnosis of malingering was avoided as this may have harsh consequences for the individual in the armed forces. Also in the armed forces medical practice, diagnoses such as CNS (INV) NAD, CVS (INV) NAD etc are given when any patient presents with symptoms pertaining to a system, but is found after detailed clinical examination and investigation to have no abnormality. Long term follow up of these individuals though desirable, was not feasible due to migratory nature of the armed forces population because of frequent transfers every two to three years of both the study population as well as the psychiatrist.

Present study attempts to focus on individual and organizational responses to stressful environment in armed forces milieu by studying Psychiatric Investigation NAD cases. Here a referral to psychiatrist may be just a way out, sought by an individual or system in a stressful situation, which can, otherwise, be corrected without psychiatric intervention. A multicentric collaborative future study will help in identifying the real and fundamental issues underlying this significant input to military psychiatrist and thus modifying these through suitable preventive and remedial measures at all levels.

**Conclusion**

Psychiatric Investigation NAD, constituted 21.4 % of total first psychiatric referrals in a general psychiatric unit of an armed forces hospital. Majority of them were other ranks from army, married, were relatively senior in age and service at the time of referral for psychiatric evaluation. Unit reports were mostly unsatisfactory. The reasons for referral as perceived by individuals were most frequently unit related problems followed by health related and domestic problems. Units referred individuals perceived to be indisciplined while medical officers referred individuals with concurrent disease or personal problems.

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