A STUDY OF AGGRESSION IN PSYCHOTIC ILLNESS

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ABSTRACT

There are clearly documented evidence concerning violence by the mentally ill. The violence may be committed on the basis of delusional beliefs or exacerbation of symptomatology. Family members have been the object of violence in more than 50% of the cases.

It is not surprising, therefore, that patients are brought restrained to the psychiatric treatment units. This study was thus conducted to find out whether the perceived aggression by the guardians was the same as the manifest aggression by the patient.

53 consecutive, drug free, psychotic patients attending the C.I.P. O.P.D. for the first time were rated on Social Dysfunction and Aggression Scale (SDAS-9) to measure quantum of aggression and the Brief Psychiatric Rating Scale (BPRS) to assess the psychopathology. The patients were diagnosed using the criteria laid down in ICD X.

BPRS score was significantly higher in schizophrenics as compared to other diagnoses (one way ANOVA, p=0.005). Although there was no difference in the aggression scores in different diagnostic categories, manics were significantly more likely to be restrained (χ² test, p=0.04).

Key words: Aggression, restrain, violence, mental illness, psychosis.

The idea that some individuals with serious illness may become violent was prevalent throughout the 19th century. The stereotype of mentally ill individual as a "homicidal maniac" has been an often repeated theme in the movies. This stereotype continues to be wide spread. 52% of college students believed that aggression, hostility and violence was attributable to mental illness (Wahl,1987) and perceived dangerousness was the most important factor contributing to the stigma of mental illness (Link et al.,1987). Stigma and negative stereotype create major problem for individual with serious mental illness and their families in various aspects of living and earning. It is for this reason it has been asserted, argued and propagated that a mentally ill person is not significantly more likely than anyone else to be violent (Brown,1985).

Although there are clearly documented reports of violence by the mentally ill committed on the basis of delusional belief and heightened symptomatology (Taylor, 1982; Wessley et al.,1991) mentally ill as a group did not have significant correlation with the community violence (Rabkin, 1979; Mulvey et al.,1986). Recent data, however, suggests that there appears to be some relationship between mental illness and violent behaviour (Monahan,1992). 20% of patients in psychiatric emergency came with a history of violence (Tardiff & Sweillam, 1980) and more than 50% of the outpatients showed hostility and aggression (Bartels et al.,1991). Among the patients admitted to
psychiatric hospitals who had physically attacked someone, family members had been the target in more than 50% of the cases (Straznickas et al., 1993, Tardiff & Sweillam, 1980).

It appears that there is a relationship between violent behavior and a subgroup of psychiatrically ill. The public stereotype that links psychiatric illness and violence is not based on stigma but on some hard realities. It is no wonder that psychiatric patients are restrained at their homes and brought to the psychiatric facility still chained and shackled. There seems to be a perceived danger of aggression, hostility and violence from these patients. If the current researches on violent acts committed by the mentally ill are any indicator (Taylor, 1982; Wessley et al., 1991; Monahan, 1992; Straznickas et al., 1993; Tardiff & Sweillam, 1980), restraining some of the mentally ill in order to protect themselves from possible harm, the community should not be entirely blamed for restraining these patients.

This study was conducted to: 1) study the degree of aggression across the various diagnostic groups of psychoses examined at the outpatient department (O.P.D.); 2) find out whether the manifest aggression of the patient is different than the perceived aggression by the relatives; 3) study the correlation between severity of psychotic symptoms and aggression, and 4) find out the demographic variables related to the aggressive acts.

MATERIAL & METHOD

This study was conducted at the outpatient department of Central Institute of Psychiatry (C.I.P.), Ranchi. This is a 643 bedded tertiary referral psychiatric centre.

The subjects included all patients attending the C.I.P. O.P.D. for the first time with psychotic features as defined in ICD-10 (WHO, 1992) that is presence of delusions, hallucinations, gross excitement & overactivity, marked psychomotor retardation and catatonic behaviour.

The patients had to be either drug naive or had been drug free for the previous one month if on oral preparation and previous six months if on parenteral preparation.

Patients with a comorbid diagnosis of personality disorder were excluded from the study. The patients were diagnosed using the criteria laid down in ICD-10 (WHO, 1992).

The patients were administered Social Dysfunction and Aggression Scale-9 (SDAS-9) (Wistedt et al., 1990). This scale contains nine items measuring outward aggression and is to be used on the basis of observation and other information. It has a good construct validity, concurrent validity and inter observer reliability (ERAG, 1992). This scale measures irritable mood (irritability, anger, dysphoria), social dysfunction (uncooperativeness, provocative behaviour), verbal aggression (specified and unspecified) and physical aggression against objects and persons. It is thus superior to the Overt Aggression Scale (Yudofsky et al., 1988) which has been used in other studies of aggression. The patients were also administered the Brief Psychiatric Rating Scale (BPRS) to assess the psychopathology. Demographic details were recorded in a proforma specially designed for this study.

RESULTS

The total sample size was 53. The demographic details are given in Table 1 and the diagnostic details are presented in Table 2.

| TABLE 1 |
| --- |
| DEMOGRAPHIC DETAILS OF THE SAMPLE |
| n=53 | male | female |
| Age (in yrs.) | 20.75±8.76 | 28.97±8.81 | 27.28±8.93 | t-test, NS |
| Religion | | | |
| Hindu | 35 | 6 |
| Moslem | 7 | 1 |
| Christian | 1 | 0 |
| Sikh | 3 | 0 |
| Education | | | |
| >10 | 21 | 1 |
| <10 | 19 | 3 |

The details of the patients brought
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restrained are shown in table 3.

Pearson's correlation coefficient between the total of aggression score and the total of BPRS score was 0.4194 which was highly significant (p=0.002). Substance abuse was present in 21 cases of which 6 were restrained (p=0.97, NS). Police case was present in 4 cases (1 manic, 1 bipolar manic & 2 schizophrenics; p = 0.65). History of organic insult to the brain in the past was present in 3 cases (1 each in the manic, other psychosis and schizophrenic group; p=0.35). Criminal behaviour was present in 3 cases of which 1 was Schizophrenic and 2 had the diagnosis of other non organic psychosis (p=0.06).

A linear regression analysis with the total of aggression as the dependent variable and family history of mental illness, presence of organic factors, substance abuse, diagnosis, education and sex did not yield any significant factors.

DISCUSSION

There are large number of studies which suggest that psychiatric patients exhibit significantly more violent behaviour than the normal population (Taylor, 1982; Wessley et al., 1991; Manohan, 1992; Tardiff & Sweilam, 1980; Bartels et al., 1991). Among the diagnostic subtypes, aggressive behaviour has been reported in personality disorders (MacDonald 1967; Raperport & Larsen, 1965), Schizophrenia (Shader et al., 1977; Tardiff & Sweilam, 1980; Craig, 1982) and drug and alcohol dependence (Tuason, 1971; Zitrin et al., 1978). Only a few researchers (Carlson & Goodwin, 1973) have reported assaultive behaviour in affective disorders. Our study also underscores the fact that aggression is quite common in patients with affective disorders as seen by the high aggression scores of this diagnostic subgroup. However, most of the previous studies on aggression have been retrospective in design (Shader et al., 1977; Tardiff & Sweilam, 1980; Craig, 1982; MacDonald, 1967; Tuason, 1971). Most of them also did not use standardised diagnostic criteria for diagnosis (MacDonald, 1967; Tuason, 1971; Zitrin et al., 1976).

There has been a significant correlation between SDAS-9 score and the BPRS score which suggests that intensity of symptomatology has a bearing on the overt aggression of the mentally ill. This is in accordance with the study

| TABLE 2 | DIAGNOSTIC DETAILS OF THE SAMPLE |
|---------|---------------------------------|
| Manic episode | Bipolar mania | Other psychoses | Schizophrenia |
| male | 6 | 22 | 7 | 11 |
| female | 1 | 5 | 1 | 0 |
| BPRS total | 17.42±3.82 | 15.51±5.29 | 17.62±6.34 | 23.27±7.24 |
| SDAS total | 22.28±6.87 | 20.22±5.16 | 18.12±3.72 | 21.00±6.43 |

* - One way analysis of variance, F = 4.78. Post-hoc analysis using Bonferroni correction showed that the schizophrenic group was different from all the other groups at 0.05 level.

** - One way Analysis of variance, F = 0.98, p = 0.4.

| TABLE 3 | DETAIL OF THE PATIENTS BROUGHT IN RESTRAINT |
|---------|---------------------------------------------|
| Restrained | not restrained |
| male | 14 | 32 |
| female | 1 | 6 |
| Age (in yrs.) | 28.73±6.6 | 28.18±9.5 |
| BPRS total | 18.33±7.51 | 17.34±5.90 |
| SDAS total | 20.33±5.21 | 20.34±5.63 |
| manic | 1 | 6 |
| bipolar mania | 12 | 15 |
| psychosis | 0 | 8 |
| schizophrenia | 2 | 9 |

p = 0.01
of Link et al. (1992) which concluded that the only variable that did account in the difference was the current level of psychotic symptoms. Most of the studies in the west have found an association between substance abuse and violence. The reason for substance abuse not being associated with aggression in our sample may be due to the exclusion of personality disorder. Fortell (1980) reported increased violence among the females which has not been replicated by other studies (Craig, 1982). Although we had a small sample size which was over represented by males and consistent with other Indian studies (Khess et al., 1997), gender was not found to be significantly related to aggression.

There was no significant differences in score of SDAS-9 among the various psychoses. Though BPRS was significantly higher in the schizophrenics, more manics were brought restrained to the psychiatric facility. This was so despite the finding that these patients were less likely to commit a criminal behaviour. Similar findings were reported in an earlier Indian study (Akhtar et al., 1993). The reasons are not far to seek. The manics appear to be more aggressive due to the abrupt onset of the attack and the intrusive behaviour appears to be potentially harmful to himself and to others. The obvious hyperactivity, volubility, emphatic and forceful communication of manics apparently appears more dangerous than the self absorbed hallucinating and suspicious schizophrenic. There was no difference in BPRS & SDAS-9 score between the patients who were brought restrained and those who were not. There may be other confounding variables for restraining the patient viz. wandering tendencies, ease of transporting the mentally ill and unwillingness for treatment (Akhtar & Jagawat, 1993). In this study the patients were either drug naive or drug free for a considerable period of time and hence compliance with drug was not an issue.

It may be concluded that whereas some aggression may be inherent in manics, schizophrenics or other non organic psychoses, yet the aggression by the community is perceived more from the manics for reasons already discussed above. There being no difference of aggression between the manics and other psychosis, this anticipatory perception results in unnecessarily restraining the manics by the community which may be deemed to be unwarranted. On the other hand, the right of the community for the protection from aggressive and violent acts of the mentally ill, real or imagined, can not be rightfully ignored. The simple statement that all mental illnesses are not violent are unlikely to be fruitful. What is desirable is to find positive and negative predictors of violence from the researches conducted in this country and publicise the findings through the media which may result in more humane treatment of the mentally ill.

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