

Negative Symptoms in Chronic Schizophrenia - A clinical study

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Abstract

This study examines the relationship between marked or prominent negative symptoms as Affective flattening, Alogia, Avolition, Anhedonia and Attentional schizophrenic (D.S.M. III) patients were rated on the scale for assessment of negative symptoms (SANS) and the association between those negative symptoms and age, sex and certain illness variables were evaluated. Marked negative symptoms were more in elderly age group. Attentional impairment was significantly more in patients with longer duration of illness and those continuing medications. No other significant correlation could be established between negative symptoms and age or sex, duration of illness, duration of hospitalisation or current medications.

Key words -

**Chronic schizophrenia,
Negative symptoms,
SANS,
Hospitalisation,
Medications**

Negative symptoms defined as deficits or losses in function though not considered as pathognomonic, they are currently schizophrenic syndromes [1], [2], [3], [4], [5], [6], [7]. Preliminary research suggests they may be useful in predicting long term outcome and response to treatment in distinguishing between mania and schizophrenia and in identifying patients with structural brain lesions [8], [9].

However, the exact association between various negative symptoms in schizophrenia and clinical or demographic variables is poorly understood.

This investigation examines the relationship between various symptoms in chronic schizophrenics and demographic and illness variables.

Material and Methods

This study was conducted at the National Institute of Mental Health & Neuro Sciences, Bangalore .

Thirty patients diagnosed as schizophrenia as per DSM-III [10] were selected at random as the sample. It consisted of 7 males and 23 females between the ages of 20 and 55 years. They were all long stay (more than 1 year) inpatients of this hospital. Patients with epilepsy, mental retardation, organic mental disorders and major physical diseases were excluded from the study. For the purpose of this study, patients with a duration of illness more than five years only were considered.

The negative symptoms in these patients were rated using the Scale for Assessment of Negative Symptoms (SANS) [11] by two psychiatrists. The scale has undergone tests for reliability, internal consistency and validation. We have also evaluated the inter-rater and test-retest reliability of the scale [12] and found it applicable in our setting. The assessment was made independently but at the same particular period of time. The time set of each of the components was made based on multiple sources of information including direct observation by the investigators and the nurse incharge of wards and from reports of the patients. Patients were rated on all the five sub-scales, Affective flattening, Alogia, Avolition-apathy, Anhedonia-Associability and Attentional impairment. For this study, patients having marked to severe degree of the negative symptoms on more than three items on sub-scales 2, 3 and 4 and more than one items on sub-scales 5 have been correlated with the patient's age, sex and certain illness variables as duration of illness, duration of hospitalization and status of current medication.

Results

The sample consisted of 7 males and 23 females, about 50 per cent of patients are above 41 years age, 7 patients between 20-30 years and 8 patients between 31-40 years age. 30 per cent of cases had a duration of illness between 5-10 years, 37 per cent between 11-15 years and rest 33 per cent had a duration exceeding 15 yrs. Nearly half the patients were of long stagy more than 10 years in the institute. About 9 patients (30 per cent) were not on any form of medications for the previous two years.

Table I - Correlation of various negative symptoms with age, sex and illness variables

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(on applying Chi Square test)
(others are NS-Not significant)

Table I displays the relationship between various negative symptoms and age, sex, duration of illness, duration of hospitalisation and status of current medications. It can be observed that 50-60 per cent of patients have marked to severe degree of various negative symptoms. Affective flattening, Alogia and Avolition-apathy are not significantly associated with any of the variables though affective flattening is slightly more in patients on medications at the time of the study. Anhedonia is significantly more in the elderly ($p<.05$) and Attentional impairment is also much more in elderly ($p<0.001$) those with longer duration of illness ($p<.05$). Attentional impairment also seems to be more in females and those with longer duration of hospitalisation, but these did not achieve statistical significance.

Discussion

It is necessary that the results should be evaluated in the context of the sample studied, and whether the results can be generalised for other schizophrenics needs to be examined. Only attentional deficits are closely associated with some of the variables as age, duration of illness and status of current medication. There is also some indication that age and duration of illness are related, as many elderly do have longer duration of illness. Elderly patients in general have exhibited more negative symptoms which indicates that structural brain degeneration as a result of aging could be exacerbating the severity of various negative symptoms. The relative preponderance of females in the older age group is probably responsible for the slight tendency of more attentional deficits in females.

Anhedonia and Associability are also more in older patients. That duration of hospitalisation or duration of illness have not affected either anhedonia-associability or avolition-apathy is contrary to observations of those clinicians who believe that negative symptoms increase as the illness becomes more chronic [13] or with institutionalisation [13], [14]. Some researchers have presented evidence for the responsiveness of negative symptoms to certain psychopharmacological methods of treatment [15], [16]. Here, on the contrary attentional deficits and to some extent, avolition are observed more in those continuing medications. However, no other negative symptom is affected by medications to any appreciable degree. Since the clinical status of some patients had remained stable and long term medications did not seem, to be affecting any improvement, these patients were off-medications. The possibility that Fluphenazine, which was the commonest drug given, aggravates to some extent some negative symptoms cannot be excluded. It certainly indicates the need for other modes of therapy, behavioural, occupational or psychological in combination, or alongwith psychopharmacological agents, to be tried for alleviating negative symptoms. It also indirectly reveals consequences of continuing medications without any adverse consequences in clinical status, as has been observed by some researchers [17], [18].

This study should provoke more interest in this vast and important theme of negative symptoms in chronic illness. The scarce literature in this area has made it difficult to compare the results of this research with any other study. One expects, in the near future, better understanding of various aspects of negative symptoms and its management.

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