

Prevalence of Negative Symptoms in Chronic Long Stay Schizophrenic Patients at AL-Rashad Mental Teaching Hospital

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ABSTRACT:

BACKGROUND:

The phenomena of negative symptoms of long stay schizophrenic patients were studied at AL- Rashad Mental Teaching Hospital for three hundred patients one hundred fifty females and hundred fifty males.

OBJECTIVE:

To identify the prevalence of negative symptoms in long stay schizophrenic patients, and to study the relationship of negative symptoms with sociodemographic factors.

PATIENTS AND METHODS:

A cross sectional study and semi –structured psychiatric interview based on ICD 10 criteria together with a symptoms check list were used to assess the negative symptoms among our sample, during seven months from first January to first August 2007.

RESULTS:

The results revealed that all those patients had negative symptoms ,and the commonest one in male patients was poor self care (83%) , followed by marked apathy(66.7%) ,while in female patients ,the commonest was non verbal communication(80%),followed by blunted affect(74%) .

CONCLUSION:

The negative symptoms were very common in long stay schizophrenic patients. And there is different gender distribution.

KEY WORDS: negative symptoms, chronic schizophrenic patients

INTRODUCTION:

Schizophrenia ⁽¹⁾ is a clinical syndrome of variable, but profoundly disruptive, psychopathology that involves cognition, emotion, perception, and other aspects of behavior. The expression of these manifestations varies across patients and over time, but the effect of the illness is always severe and is usually long lasting. The disorder usually begins before age 25, persists throughout life, and affects persons of all social classes ^(2,3,4). Both patients and their families often suffer from poor care and social ostracism because of widespread ignorance about the disorder. Although schizophrenia is discussed as if it is a single disease, it probably comprises a group of disorders with heterogeneous etiologies, and it includes patients whose clinical presentations, treatment response, and courses of illness vary. Clinicians should appreciate that the diagnosis of schizophrenia is based entirely on the psychiatric history and mental status examination ⁽⁵⁾. Long stay schizophrenic patients in

this study referred to the period of admission more than 2 years duration ⁽⁶⁾ there is no laboratory test for schizophrenia. There are no similar studies conducted to study the negative symptoms in chronic schizophrenic patients in such huge number.

AIMS OF THE STUDY:

1-To identify the prevalence of negative symptoms in long stay schizophrenic patients.

2-To study the relationship of these symptoms with sociodemographic background of the pat

PATIENTS AND METHODS:

A cross sectional study of 300 in patients(150males, 150 females) with an age ranging between (17-69years) diagnosed as chronic schizophrenia by psychiatrists at AL-Rashad Mental Hospital.

The period of study was seven months from first January to first August 2007.

A form was prepared for general information about each patient sociodemographic characteristics were obtained then a semi structured interview schedule based on international classification of disease (ICD10).

Al-Rashad Mental Teaching Hospital.

The patients included in this study were those who:

1. Had no informant at time of interview.(because the patients admitted in the ward without relative according to the hospital policy.
2. Were treated by oral antipsychotic, depot therapy and ECT.
3. All of them were unemployed due to prolong institutionalization. Seventeen male patients and twenty female patients in the sample had no complete data regarding duration of the illness and their address, as a results of rioting and looting of the hospital which followed the invasion of Iraq in 2003, so that such data were obtained from their caring nurses .

The normal requirement for a diagnosis of schizophrenia is that a minimum of one very clear symptom (and usually two or more if less clear – cut)belonging to any one of the groups listed as(a)to (d)in appendix2⁽⁷⁾, or symptoms from at least two of the groups referred to as (e) to (h),should have been clearly present for most of the time during a period of 1 month or more .Conditions meeting such symptomatic requirements but of duration less than 1 month (whether treated or not)should be diagnosed in the first instance as acute schizophrenia-like psychotic disorder and are classified as schizophrenia if the symptoms persist for longer periods.

Viewed retrospectively ,it may be clear that a prodromal phase in which symptoms and behavior, such as loss of interest in work ,social activities, and personal appearance and hygiene, together with generalized anxiety and mild degree of depression and preoccupation, precede the onset of psychotic symptoms by weeks or even months .Because of the difficulty in timing onset ,the 1 month duration criterion applies only to the specific symptoms listed in appendix 2 and not to any prodromal non psychotic phase.

The diagnosis of schizophrenia should not made in the presence of extensive depressive or manic symptoms unless it is clear that schizophrenic symptoms antedated the affective disturbance .If both schizophrenic and affective symptoms develop together and are evenly balanced, the diagnosis of schizoaffective disorder should be made ,even if the schizophrenic symptoms by themselves would have justified the diagnosis of schizophrenia .Schizophrenia should not be diagnosed in the presence of overt brain disease or during states of drug intoxication or withdrawal.

When the diagnosis of schizophrenia was made the symptoms checklist was applied to identify the presence of negative symptoms in those patients

which was based on information taken during the interview.

RESULTS:

The sample consisted of (300) chronic schizophrenic patients, 150 males, 150 females.

Table 1: demonstrated social class of the patients, most of them where from low social class 94, 7 %(142) for female patients, 92.7 %(139) for male patients,

and only 2%(3) of male and 0.6%(1) of female of high social class other patients of intermediate class .

This classification was adopted according to occupation and educational standards (British Registrar General 1966). Though this may not be ideal for our society where substantial changes in various aspects of our life have been continuously taking place in recent years ⁽⁸⁾

However in analyzing various variables, it was found that factors, most helpful in segregating social classes were, occupational scale, level of education, house location and income (Al- Sabagh 1993) ⁽⁹⁾

Table 2: showed residence of patients as following: About 288 of the patient (96%) lived in urban areas (143 males and 145 females), 12 of patients lived in rural areas (7 males and 5 females), about 4% from total number of the sample.

Table 3 demonstrated ages of patients as follow:

The mean age for females was 40.7years with range (18-62 years), while mean age for males is 41.2 years with range (17-69years).

Table 4: represented family history of schizophrenic patients.

Family history of schizophrenia was presented in 24(16%) males while 126(84%) of them were without family history of schizophrenia in female patients only 28(18.7) presented with such history and122(81.3%) of them without family history.

Those without positive family history had more negative symptoms.

Table 5: demonstrated marital status of patients as following:7% of both sexes were married ,(11 males and10 females) while divorced patients were 43.3%(53 males,77 females) widows were only 4 patients and the separated were only 1 female , it was found that the percentage elevated in single patients 86(57.3%)males ,and 58(38.7) females.

Table 6: concerning with the level of education of the sample it was found that 22 of males (14.7%) were illiterate, and 56(37.3%) of females. At level of primary education the rate was 43(28.7%) males and 41(27.3%) for females.

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At level of a higher education the rate was (9.3%) 14 males and (4%) 6 females.

The negative symptoms were inversely proportional to level of education.

Table 7: showed frequency and percentage of negative symptoms in schizophrenic patients as following:

1-The most common symptom is poor self care (manifested by incontinence of urine, bad odor, dirty cloths) (125 males), (105 females) 76.6% from total sample

2-Non verbal communication it was found in (100 males and 120 female) patients 73.3% from both, this manifested by diminished fluidity and productivity of the verbal –interaction process during interview with them.

3-Marked apathy (103 males, 108 females) 70.3% from total sample.

4-Blunted affect (94 males and 111 females) 68.3% from both sexes, it presented through reduction in facial expression, modulation of feelings and communication gestures.

5-Social withdrawal (94 males, and 83 females) 59% from total sample.

6-Lack of will (69 males and 102 females), 57% from total sample.

7-Psychomotor slowing (84 males and 63 females), 49% from both sexes.

8-Poor social performance (70 males and 44 females) 38% from total sample, manifested by lack of interest in usual daily activity in the ward, and decreased involvement with other patients .

9-Poverty of speech (59 males and 29 females) ,29.3% from total sample, the poverty of speech presented through reduction in the normal flow of communication associated with apathy ,defensiveness ,and a volition.

Table 8: demonstrated frequency of schizophrenic patients according to the duration of illness in males and female patients in which mean duration of illness for males patient was 19.63 years and (range from 1-50 years).

And for females patients mean duration of illness was 21.43 years and (range from 1-60 years).

Table 1: Distribution of schizophrenic patients with negative symptoms according to social class

| Social class | males No. % | | females No. % | | total No.% | |
|---------------------------|----------------|------|------------------|------|---------------|------|
| High social class | 3 | 2 | 1 | 0.6 | 4 | 1.3 |
| Intermediate social class | 8 | 5.3 | 7 | 4.7 | 15 | 5 |
| Low social class | 139 | 92.7 | 142 | 94.7 | 281 | 93.7 |
| Total | 150 | 100 | 150 | 100 | 300 | 100 |

Table 2 : Distribution of schizophrenic patients with negative symptoms according to the residence.

| Residence | Males No. % | | Females No. % | | Total No. % | |
|-----------|----------------|------|------------------|------|----------------|-----|
| urban | 143 | 95.3 | 145 | 96.7 | 288 | 96 |
| rural | 7 | 4.7 | 5 | 3.3 | 12 | 4 |
| Total | 150 | 100 | 150 | 100 | 300 | 100 |

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Table 3: Distribution of schizophrenic patients according to the age and gender.

| Age/years | Males No. | % | Females No. | % | Total No. | % |
|-----------|--------------|------|----------------|------|--------------|------|
| 10-19 | 3 | 2 | 1 | 0.6 | 4 | 1.3 |
| 20_29 | 23 | 15.3 | 29 | 19.3 | 52 | 17.3 |
| 30_39 | 47 | 31.3 | 40 | 26.7 | 87 | 29 |
| 40_49 | 37 | 24.7 | 46 | 30.7 | 83 | 27.7 |
| 50_59 | 28 | 18.7 | 24 | 16 | 52 | 17.3 |
| 60-69 | 12 | 8 | 10 | 6.7 | 22 | 7.3 |
| Total | 150 | 100 | 150 | 100 | 300 | 100 |

Mean age for females 40.7y, range: 18-62y

Mean age for males:41,2y, range:17-69y

Table 4: Distribution of schizophrenic patients according to family history of schizophrenia.

| Family history | males No.% % | | females No.% % | | total% No. % | |
|-------------------------|--------------------|-----|----------------------|------|--------------------|------|
| Positive family history | 24 | 16 | 28 | 18.7 | 52 | 17.3 |
| Negative family history | 126 | 84 | 122 | 81.3 | 248 | 82.7 |
| Total | 150 | 100 | 150 | 100 | 300 | 100 |

Table 5: Distribution of schizophrenic patient according to marital status.

| Marital status | Males No. % | | Female No. % | | Total No % | |
|----------------|----------------|------|-----------------|------|---------------|------|
| Married | 11 | 7.3 | 10 | 6.7 | 21 | 7 |
| Divorced | 53 | 35.3 | 77 | 51.3 | 130 | 43.3 |
| Widow | 0 | 0 | 4 | 2.6 | 4 | 1.3 |
| Separated | 0 | 0 | 1 | 0.7 | 1 | 0.3 |
| single | 86 | 57.3 | 58 | 38.7 | 144 | 48 |
| Total | 150 | 100 | 150 | 100 | 300 | 100 |

Table 6: The Frequency of schizophrenic patients according to the level of education.

| Level of education | Males No.% | | Females No. % | | Total No.% | |
|---------------------|---------------|------|------------------|------|---------------|------|
| Illiterate | 22 | 14.7 | 56 | 37.3 | 78 | 26 |
| Elementary school | 43 | 28.7 | 41 | 27.3 | 84 | 28 |
| Intermediate school | 11 | 7.3 | 31 | 20.7 | 42 | 14 |
| Secondary school | 60 | 40 | 16 | 10.7 | 76 | 25.3 |
| Higher education | 14 | 9.3 | 6 | 4 | 20 | 6.7 |
| Total | 150 | 100 | 150 | 100 | 300 | 100 |

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Table 7: Comparison of negative symptoms in chronic schizophrenia between male and female patients.

| Negative symptoms | Males No. % | | Females No. % | | Total No. % | |
|----------------------------|----------------|------|------------------|------|----------------|------|
| 1-poor self care | 125 | 83 | 105 | 70 | 230 | 76.6 |
| 2-non verbal communication | 100 | 66.7 | 120 | 80 | 220 | 73.3 |
| 3-marked apathy | 103 | 68.7 | 108 | 72 | 211 | 70.3 |
| 4.blunting affect | 94 | 62.7 | 111 | 74 | 205 | 63.3 |
| 5.social withdraw | 94 | 62.7 | 83 | 53.3 | 177 | 59 |
| 6.lack of will | 69 | 46 | 102 | 68 | 171 | 57 |
| 7.psychomotor slowing | 84 | 56 | 63 | 42 | 147 | 49 |
| 8.poor social performance | 70 | 46.7 | 44 | 29.3 | 114 | 38 |
| 9.poverty of speech | 59 | 39.3 | 29 | 19.3 | 88 | 29.3 |

Table 8: Frequency of schizophrenic patients according to the duration of illness and gender of patient.

| Duration of illness/years | females No. % | | males No. % | |
|---------------------------|------------------|------|----------------|------|
| 1-10 | 24 | 16 | 31 | 20.7 |
| 11-20 | 45 | 30 | 56 | 37.3 |
| 21-30 | 56 | 37.3 | 37 | 24.7 |
| 31-40 | 19 | 12.7 | 22 | 14.7 |
| 41-50 | 5 | 3.3 | 4 | 2.6 |
| 51-60 | 1 | 0.7 | 0 | 0 |
| total | 150 | 100 | 150 | 100 |

Mean duration of illness for females 21.43 years, range (1-60y)

Mean duration of illness for males 19.63 years, range (1-50y)

DISCUSSION:

The present study showed the prevalence of negative symptoms in chronic long stay schizophrenic patients at AL –Rashad Mental Hospital for 300 patients.

The mean age of the males was 41. 2 years, while for females was 40. 7 years and mean duration since last admission for males was 19.63 years while that for females was 21.43years , these differences were attributed to cultural factors as people in our society tend not to keep females long in the hospital ⁽¹⁰⁾.

The most frequent negative symptom for both sexes was poor self care (76.66%) ,followed by non verbal communication (73.3%) , marked apathy (70.3%) and least frequent symptoms was poverty of speech (29.3%).

The results of this study were in accord to the study done by Christopher et al (11) in 2006, but the

most frequent symptom was poverty of speech associated with concurrent worsening in mini-mental state examination scores .

The main causes of the differences between present study and that of Christopher et al ,were probably due to the criteria and instrument used (mini mental state examination and thought ,language and communication scale) other causes were the ages of the sample range(19-96) with mean(74.9) so probability of cognitive impairment was high .

Other causes were difference in ethnic group (exactly 77.7% of the patient were Caucasian,16.4% were African American,5.9% were Hispanic), all were English speaking, without sensory deficits cooperative with the assessment procedure with instrument.

Regarding transcultural comparison Edward et al in 2001 at the Jos university teaching hospital in

Nigeria studied 48 schizophrenic patient (70% of them male and 25% female) their age range were between 18 and 60 years most of them unmarried ,for period ranging from 19 months to108 months and found most prevalent negative symptoms were poor social performance ,poor self care ,and poverty of speech .

In present study most of chronic patients from low socioeconomic status 93.7% for both sexes.

Previously it was believed that schizophrenia was over presented among people of low socioeconomic status and they suggest that 50% of cases were from social class V, but a recent study done by Gold berg and Morrison ⁽¹²⁾ revealed that schizophrenic patients were from low social status than their father and that the changes had usually occurred after illness began.

Regarding to the living area, most of the sample, and most of patients with negative symptoms lived in urban areas (96% for both).

These findings were similar to the result of study done by Faris and Durham ⁽¹³⁾ in 1939 who studied the place of residence of mentally ill people in Chicago and found that both the incidence and prevalence of schizophrenia were over presented in disadvantage inner city areas.

There were sexual differences in distribution of negative symptoms as following:

Poverty of speech ,psychomotor slowing poor self care and social withdrawal were more common among male patients ,while non verbal communication, blunted affect, lack of will more among females patients, in comparison with other studies was shown in study of Hafner et al ⁽¹⁴⁾ in 1992 no such difference

The causes of these differences probably might be the following:

1. In our society the family of female patients usually delay to seek psychiatric consultation, and tend not to keep females for long period in hospital to avoid social stigma.
2. Prolonged institutionalization especially for male patients.
3. Smaller rehabilitation units for female patients in the hospital.
4. Large wards number concerning male patients and their huge number.
5. Absence of day center and day hospital in our country
6. Natural consequences of disease itself because schizophrenia tend to run in chronic course by years and lead to more negative symptoms.

In present study the negative symptoms of chronic schizophrenia were more common among unmarried patients, this is close to the study done

by Hare et al ⁽¹⁵⁾ in1956 in that study, it was found that most of schizophrenic patients live alone unmarried with few friends.

CONCLUSION:

1. The negative symptoms of schizophrenia nearly always presented in all chronic schizophrenic patients.
2. The most frequent symptom was poor self care and least frequent one was poverty of speech (approximately of equal distribution in both male and female patients).
3. The present study showed difference in distribution of other negative symptoms in both sexes, psychomotor slowing ,poor social performance, social withdrawal ,poverty of speech, and poor self care to be more in male patients while other symptoms(blunting affect ,marked apathy ,and non verbal communication) were more in female patients.

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