

# SYMPTOMATIC AND GENERAL FUNCTIONING IN SCHIZOPHRENIC PATIENTS: FIVE YEARS FOLLOW UP AT OUTPATIENT DEPARTMENT

Zahid Nazar, Mian Mukhtar ul Haq, Fazle Rabbani, Nazish Zahoor, Naila Riaz Awan

## ABSTRACT

**Objective:** To compare the level of global assessment of functioning and scores on PANSS of schizophrenic patients with 5years follow up.

**Design:** Descriptive observational study.

**Place and Duration of the study:** This study was conducted at department of Psychiatry Lady Reading Hospital Peshawar from March 2007 to May 2012.

**Subject and Methods:** A sample of 44 patients diagnosed as schizophrenics were included through consecutive sampling. All patients were enrolled in SMI (i.e. Severe Mental Illness) they came for regular assessment once in a month. All patients were assessed on Positive and Negative Syndrome Scale(PANSS) and Global Assessment of Functioning(GAF) at baseline and at five years follow up.

**Results:** Statistically significant difference was found between scores of PANSS and GAF at baseline and follow up.

**Conclusion:** We concluded from our study that there is negative correlation between the score on PANSS and the level of GAF at baseline as well as at five years follow up.

**Key Words:** Schizophrenia, Positive and Negative Syndrome Scale(PANSS), Global Assessment of Functioning (GAF), Severe Mental Illness(SMI)

## INTRODUCTION

Schizophrenia is a psychotic disorder characterized by loss of contact with reality, by noticeable dysfunctions in everyday life, and by breakdown of personality expressed as disorder of feeling, thought (as delusions), perception (as hallucinations), and behavior<sup>1</sup>. It usually has an onset in early adulthood and is often associated with persistent or relapsing symptoms and a range of other adverse outcomes<sup>2</sup>. Schizophrenia is a chronic and disruptive mental disorder, for the people affected and their family members<sup>3</sup>.

Illnesses are usually defined in terms of clinical presentation course and outcome<sup>4</sup>. A very bleak view of outcome in schizophrenia and recovery was rare and deterioration almost inevitable. Like other clinical and psychiatrist Kraepelin's perspective was shaped by insti-

**Zahid Nazar:** Associate Professor, Psychiatry Department Lady Reading Hospital, Peshawar

**Mian Mukhtar ul Haq:** Assistant Professor, Psychiatry Department Lady Reading Hospital, Peshawar

**Fazle Rabbani:** Medical Officer, Psychiatry Department Lady Reading Hospital, Peshawar

**Nazish Zahoor:** Internee Clinical Psychologist, Psychiatry Department Lady Reading Hospital, Peshawar

**Naila Riaz Awan:** Senior Clinical Psychologist, Psychiatry Department Lady Reading Hospital, Peshawar.

**Correspondence:**

Naila Riaz Awan

E-mail: nailariazawan@yahoo.com

tutional experience where patients who did not recover or partially recovered and was ignorant of those who got well and moved on<sup>4</sup>. In contrast Bleuler spent long periods in conversation with patients (including discharge and recovered patients) and took a less gloomy view of the disorder, but careful follow up studies has challenged the bleak outcome of the disorder<sup>5</sup> The main point at fore front is symptomatic change. In Response to treatment whether pharmacological or other (although it's no longer the only outcome)<sup>6</sup>.

Despite the demonstrated efficacy of antipsychotic medication in the short term, previous goals of treatment of schizophrenia were frequently modest, with clinicians intentions for control of behaviour', 'symptom control', or 'stability' as outcome. There are few reasons for the expectations of improved outcome although there is evidence of the longitudinal studies that confirm unfavorable outcome in schizophrenic patients. First reason is the better understanding of the course of the illness. Second pharmacological and psychosocial advances the focus have raised outcome expectations. Mainly, attention has focused on a possible lasting beneficial effect of early intervention programmes.<sup>1</sup> Third, there is a concern that ongoing psychotic symptoms may indicate an ongoing pathological process that may result in progressive deterioration<sup>7</sup>.

Many individuals who have been suffered by the disorder as schizophrenia, recovery from that disorder is

realistic outcome . To disperse the stigma of schizophrenia, recovery must be defined as by found improvements in both functional and symptomatic impairments so they no longer interfere in social and other activities of daily life of the individuals. An evidence-based, recovery-oriented and person-centered treatments has demonstrated that most of the schizophrenics can live , meaningful life and participate as an effective citizen in their communities-being employed, academic courses, voting and enjoying social and leisure activities in normative settings<sup>8</sup>

Literature lacks the area of long-term follow-up studies from the developing world, very few are available which conclude a pattern of course and functioning noticeably better than that found in many such studies from the developed nations<sup>9</sup>.

Reason for few follow up studies in low and middle income country are lack of money , man power and technical expertise So we planned a study which involved a structured and objective assessment and monitoring of symptoms change and functioning with standard instruments like PANSS, GAF. Our study aims to determine the long term outcome of schizophrenics at five years follow up with regards to their general functioning, through the use of psychometric tool to establish the course of Schizophrenia in this part of the world.. This study involved intervention in the form of education and atypical antipsychotic.

## SUBJECTS AND METHODS

This descriptive study was conducted at department of Psychiatry Lady Reading Hospital Peshawar, from 2011 to 2013 over a period of five years. A total of 44 out patients suffering from Schizophrenia were included in the study through consecutive sampling and were diagnosed on the basis of International Classification of Diseases (ICD-10) criteria<sup>10</sup>.

Those patients who belongs to the local area of Peshawar had been enrolled, which was based on the principal of Dots programme for tuberculosis and known as SMI specifically started for schizophrenic patients for which they visited psychiatry ward for their follow up on every Thursday of the week under the supervision of one of their family member or caregiver. Atypical antipsychotic i.e Risperidone (4mg to 6mg) was provided to them. Those suffering from mood, organic, and substance abuse were excluded.

Demographic information as age, gender, education, duration of illness, weight and B.P were recorded on a proforma.

A positive and Negative Syndrome Scale (PANSS)<sup>11</sup> A seven item scale and Global Assessment of Functioning (GAF axis V in DSM IV )<sup>12</sup> was used to rank the patients according to the severity of their conditions. Both assessment tools have been used at baseline as well as at 5 years follow up. The Positive and Negative Syndrome Scale (PANSS) is a standard measurement used in

many trials<sup>13</sup>. The 30-item PANSS was established as an operationalized, drug-sensitive instrument that provides objective representation of positive and negative symptoms and gauges their association to one another and to broad-spectrum psychopathology. It thus constitutes four scales measuring positive and negative syndromes, their differential and general severity of illness<sup>13</sup>.

The global assessment of functioning (GAF) is a numeric scale (0 through 100), which is used by mental health personals based on subjective rating of the social ,occupational ,and psychological functioning of adults e.g., how well or adaptively one is meeting various problems in living. The scale is presented and described in the DSM-IV. The score is given as a range.

This is a longitudinal study with OPD patients. Symptomatic improvement as functional, cognitive, as well as general has been shown after five years follow up assessment. Patients were observed with long term duration as monthly follow up visits; their psychological assessment and compliance with medicine were also observed.

## RESULTS

The study included 44 (n=44) patients ranging in age from 15-60 with a mean age of 28.82 ± 10.67. Mean age of male was 31.08 ± 9.66 and female was 25.84 ± 11.43 (table 1). The total duration of illness was shown in table 2. Total score of PANSS at baseline and follow up by using paired sample statistics shown in table 3. And GAF score at baseline and follow up after five years shown in table4.. The findings of the study indicate that scores on PANSS and level of GAF are inverse correlated, as scores of PANSS decreased level of GAF has been improved.

**Table 1: Age of the Patient**

	No.	Mean Age	SD
Total	44	28.82	10.665
Male	25	31.08	9.665
Female	19	25.84	11.432

**Table 2: Total duration of illness**

		Frequency	Percent
Valid	1-5	22	50.0
	6-10	17	38.6
	11-15	5	11.4
	Total	44	100.0

**Table 3: Scores of PANSS at Baseline and 5 Years Follow up**

		Mean	N	Std. Deviation	Sig(2) Tailed
Pair 1	total score of PANSS on baseline	91.84	44	27.675	.000

	total score on PANSS on follow up	73.50	44	35.758	
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**Table 4: GAF Rating at Baseline and Follow up**

		Mean	N	Std. Deviation	Sig(2) tailed
Pair 1	GAF at baseline	4.59	44	1.282	
	GAF after 5 years follow up	5.82	44	1.618	.000

**Table 5: Correlation between PANSS and GAF**

	PANSS	GAF
PANSS Pearson correlation sig.(2- tailed) N	1	-.520**
		.000
	44	44
GAF Pearson correlation sig.(2- tailed) N	-.520**	1
	.000	

\*\* Correlation is significant at the 0.01 level (2 tailed).

## DISCUSSION

In this study long term follow up treatment was carried out in patients with schizophrenia. The findings shows symptomatic and general improvement in patients, through assessment with PANSS and GAF by comparing their scores on baseline and at 5 years follow up.

The symptomatic criterion includes score on PANSS as delusion, , hallucinatory behavior, conceptual disorganization unusual thought content, mannerism/posturing, blunted affect, social withdrawal, lack of spontaneity as well as symptoms severity on GAF.<sup>14</sup>

This was the pilot project which later helped in establishing first episode psychosis services on the model of DOTS.

A recent study reported that during acute phase of the disorder over 40% of the schizophrenics has shown periods of global improvement or recovery defining as no positive and negative symptoms, no hospitalization, satisfactory social relationship and at least half time influential performance in their life<sup>15</sup>. Many long-term follow-up studies in both the United States and Europe propose that after period of 5 years, the symptomatic representation in schizophrenia becomes stable and does not worsen<sup>15</sup>

Studies reported that the course of schizophrenia is more favorable in developing countries than developed societies<sup>16</sup>.

The strength of this study is the good outcome in this sample. As opposed to researchers claims that such good prognosis in developing countries due to acute psychoses (one month duration) which remits spontaneously<sup>17</sup> Cultural changes has also its affect on long

term follow up. The WHO study followed a large sample from general population with cultural diversity has been found for up to 15 and 25 years (finding showed, that outcome for the patients with schizophrenia was better in developing countries than it was in developed countries. This finding could be influenced, in part, by greater acceptance of schizophrenics by their their families in developing countries<sup>18</sup>.

Furthermore 75 patients in India who were treatment naïve and living with their families 60% had a duration of untreated psychosis over five years and 36% over 12 years following treatment for one year, with DUP of 5 years or less had shown good clinical outcome (Tirupah)<sup>19</sup>. All these were managed on outpatient level. Similar encouraging observation of treatment response like improvement in GAF in this sample also support the notion that in LAMI countries schizophrenia has been shown to have better outcome<sup>20</sup>. Usually measurement of social functioning is not given importance in the west, many patient reside in assisted living facilities whereas in LAMI countries majority live in community and are cared by family members<sup>21</sup>..

As Schizophrenia is functional disorder with organic etiology , takes long period of time and improve slowly and gradually. So follow up studies for schizophrenic are very helpful. As follow up studies carried out in naturalistic setting they yield meaningful clinical results. These findings are generalizable and outcomes can be used in routine clinical practice.

## CONCLUSION

Follow up assessment with schizophrenics has long term effective outcome. Symptomatic and general improvement has been found with the use of PANSS and GAF.

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