# DURATION OF ILLNESS, SYMPTOMS AND FUNCTIONAL RECOVERY IN PATIENTS SUFFERING FROM SCHIZOPHRENIA

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#### ABSTRACT

**Objective:** To assess the symptomatic and functional recovery with long duration of illness of schizophrenics at baseline and after at 5 years follow up

Design: Descriptive observational study.

**Place and Duration of study:** This study was conducted at department of Psychiatry Lady Reading Hospital Peshawar from May 2008 to March 2013.

**Subject and Methods:** A sample of 44 patients diagnosed as schizophrenics and was included through consecutive sampling. These patients were part of a project known as SMI(i.e. Severe Mental Illness), they came for regular assessment once in a month. These 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 in both groups.

**Conclusion:** we concluded from our study that patient who had 1-5 and 6-10 years of duration of illness both showed significant improvement on PANSS and GAF at baseline and at follow up.

Key Words: Schizophrenia, PANSS, GAF, SMI

#### INTRODUCTION

Schizophrenia is a disorder as heterogeneous in nature with diverse history, symptoms, and subtypes. With respect to its prognosis, course or response to treatment these subtypes may be able to distinguish from each other. From a clinical perspective the the identification of the disorder is having utmost importance and great clinical concerns Initial investigative and diagnostic refinements involved the subdivision of schizophrenia into positive and negative syndromes. Delusions, hallucinations, and bizarre behavior were part of positive schizophrenia, while blunted affect, avolition, and attentional problems were significant features of negative schizophrenia<sup>1</sup>.

A variety and increasing rate of the studies have been documented that symptom remission and functional recovery can arise or takes place in persons with even severe and longstanding forms of schizophrenia.

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Functional improvement and possible capacities of the disabled persons of the disorder can occur by a range of person-centered psychosocial rehabilitations and, by so doing, enhance their possibilities for recovery. These psychosocial practices include social skills training, psycho-educational family therapy, illness management, , supported employment, and psychotherapy as cognitive-behavior therapy (CBT) and cognitive remediation<sup>2</sup>. Besides this Antipsychotic medications and adherence with these medication in a form of good compliance to them have contributed to reduced morbidity and relapse rates in schizophrenics<sup>3</sup>.

Factors effecting social functioning are important prognostic elements for remission in all regions Participants with a spouse/partner, in paid employment and who are socially active at the time of baseline assessment are more likely to achieve clinical and functional remission, it supports that better baseline social functioning is associated with recovery, defined as attaining symptomatic plus functional remission<sup>4</sup>.

One of the most exciting findings about the disorder of many cross-cultural studies was that of better outcome in developing countries, as indicated by data availability from the IPSS. A more recent publication, ISOS (international study of schizophrenia) examined this finding by the reassessment of the original WHO studies cohort, also reported evidence of an improved outcome and better course of illness in developing countries. Another recently published report of the 15- to 26-year follow-up study of earlier WHO studies, the International Study of Schizophrenia, also found a similarly favorable outcome in developing country settings<sup>5</sup>.

In this context the aim of our study was focused on the symptoms recovery and functional improvement in the disorder having diversity in nature and with regards to their total duration of illness. In this course it was tried to highlighted that patients who had long duration of illness has also shown good clinical outcome as they were assessed and examined by long term follow up periods in their lives.

### SUBJECTS AND METHODS

The present study was conducted at department of Psychiatry LRH Peshawar from 2008 to 2013 spanning over a period of 5 years. A total of 44 patients suffering from schizophrenia and schizoaffective were included through consecutive sampling and were diagnosed on the basis of ICD 10 criteria<sup>6</sup>. Those suffering from mood disorder organic or substance abuse and mental retardation were excluded

This sample was recruited for a service aimed at treating people with severe mental illness in a resource poor setting. These patients had regular follow up to psychiatry ward once in a month. They were assessed at time of enrollment at baseline in May 2008 and now reassessed after the time period of 5 years follow up in the March 2013 in which their physical and psychological assessment as well as adherence with medication has also observed.

History of present illness and total duration of illness has also been carried out along with the demographic details. Some patients had 1-5 years duration of illness while other had 6-15 years of prolong history of schizophrenia The symptomatic and general functioning were assessed with the help of standard instruments as GAF and PANSS at baseline and at 5 years follow up. The Positive and Negative Syndrome Scale (PANSS) is a standard assessment tool used in many trials<sup>7</sup> The 30 item scale constitutes four scales measuring positive and negative symptoms, their differential and general severity of illness Symptomatic and functional recovery have seen on PANSS about each positive and negative symptoms separately at time of enrollment and after 5 years along with the subjective rating on GAF of social occupational psychological problems in living8.

#### RESULTS

The study included 44 (n=44) patients ranging in age from 15-60 with the mean age of  $28.82 \pm 10.67$ .mean age of male was  $31.08 \pm 9.66$  and female was  $25.84 \pm 11.43$ . Total duration of illness of 22 patients was 1-5 years while rest of 22 patients had 6-10 years of duration.

The total score of PANSS at base line and follow up by using paired sample statistics shown in table 1, 2, 3 and 4. GAF score at base line and follow up after five years shown in table 5 and 6.The findings of the study indicate that score on a PANSS and the level of GAF are inverse correlated, as score of a PANSS decreased level of GAF has been improved.

Symptoms	Baseline	Follow up	Significance level
Delusions	3.89(.601)	1.89(1.17)	.000
Conceptual disorganization	3.44(.726)	1.56(.882)	.000
Hallucinatory behavior	3.67(1.12)	1.78(1.20)	.000
Excitement	2.89(1.05)	1.67(1.18)	.612
Grandiosity	2.89(1.05)	2.22(1.72)	.000
suspiciousness	4.00(1.00)	2.22(1.72)	.001
Hostility	3.22(.972)	1.89(1.36)	.001

# Table: 1 PANSS score of positive symptoms at baseline and at follow up 1-5 years duration of illness

Table:2 PANSS score of negative symptoms at baseline and at follow up

Blunted affect	3.56(.73)	1.22(.441)	.000
Emotional withdrawal	3.67(1.18)	1.00(.00)	.005
Poor rapport	3.33(.87)	1.00(.00)	.001
Apathetic social withdrawal	3.33(1.00)	1.33(.50)	.000
Difficulty in abstract thinking	2.56(.73)	1.11(.33)	.000
Lack of spontaneity and flow of conver- sation	3.56(.88)	1.22(.44)	.001
Stereotyped thinking	3.00(1.23)	1.67(1.13)	.016

#### Table 3: PANSS score of positive symptoms at baseline and at follow up 6-15 years duration of illness

Symptoms	Baseline	Follow up	Significance level
Delusions	3.67(.995)	1.90(1.33)	.000
Conceptual disorganization	3.48(.750)	1.76(1.14)	.000
Hallucinatory behavior	3.29(1.00)	1.76(1.18)	.000
Excitement	2.45(1.10)	2.30(1.53)	.716
Grandiosity	2.30(1.23)	1.50(.889)	.014
suspiciousness	3.90(1.22)	2.33(1.56)	.000
Hostility	3.62(1.20)	2.29(1.52)	.001

Blunted affect	3.33(1.07)	2.00(1.48)	.000
Emotional with- drawal	3.67(1.16)	2.17(1.75)	.000
Poor rapport	2.75(1.36)	1.83(1.64)	.001
Apathetic social withdrawal	3.25(1.23)	2.42(1.51)	.025
Difficulty in ab- stract thinking	2.42(1.62)	2.58(1.62)	.059
Lack of sponta- neity and flow of conversation	2.67(1.61)	1.92(1.78)	.005
Stereotyped thinking	2,25(1.06)	2.00(1.21)	.065

#### Table 4: PANSS score of negative symptoms at baseline and at follow up 6-15 years duration of illness

#### Table 5: GAF rating for 1-5 years

	Mean
Baseline	4.22 ±1.20
Follow up	6.22 ±1.39

#### Table 6: GAF rating for 6-15years

	Mean
Baseline	4.58 ±1.24
Follow up	6.00 ±1.28

# DISCUSSION

The present study was based on symptomatic recovery and 5 years of follow up assessment course which were study in great detail along with their total duration of illness. Improvement has been found by using standard instruments tools for assessment at baseline as well as at follow up .Those with total duration of illness form 1-5 years show statistically significant results.

Same findings emerged in a study conducted at The Schizophrenia Research Foundation India, pilot intervention programme for first-episode psychosis reported as the study sample of about total of 47 patients with the first episode of psychosis were followed up for 2 years. Scoring based on the Positive and Negative Syndrome Scale for schizophrenia and Global Assessment of Functioning Scale used as study instruments, the data divided into 2 groups . Complete data were available for 38 patients (28 patients in remission group and 10 patients in non-remission group) at 2 years. Significant difference not found between the scores of the groups at baseline. In the remission group, more than 50% achieved maximal improvement at 3 months, another 30% at 1 year, and the remaining 20% at 2 years. Maximal reduction was seen in the mean Positive and Negative Syndrome Scale score between 3 and 6 months after enrollment<sup>9</sup>.

Maximal improvement was seen at 3 months follow

up from baseline study. Studies revealed that short-term progressive outcomes in treatment-naïve schizophrenia patients were up to 62% in Indian settings<sup>10</sup>

Those with total duration of illness from 6-15 years also showed improvement in their symptoms. A systematic psychiatric follow-up study of 502 schizophrenics was carried out using the a well-defined criteria to assess the patients throughout the investigation. After an average time period of 22 years follow up assessment, 43% of the patients showed complete psychopathological non characteristic remission, and 35% suffered from characteristic schizophrenic deficiency syndromes.. On the whole of the entire sample, 56% were found to be "socially recovered"<sup>11</sup>.

Although shorter DUP could be a contributing factor for positive outcome, it is not the only reason for early improvement. In the same sample, patients with longer DUP showed significant improvement in the early stages between 3 and 6 months<sup>12</sup>.

Another 20 years longitudinal study conducted in Madras had obtained data from 61 subjects; 16 had died, and 13 could not be traced. After 20 years, 5 patients had recovered completely, and another 5 were still continuously suffered from the disorder Most of the cohort had multiple relapses with or without complete remission between them. The Global Assessment of Functioning Scale showed that symptoms recovery as well as social functioning in this sample approximated results from developing countries and were much better than those of developed nations, and the follow up ratio of this study was 68%<sup>13</sup>.

Follow up treatment of patients with schizophrenia showed good clinical outcome as they were assessed in great detail during their life span .Patients that have been treated for 1-5 years and those who had longer duration of illness as 6-10 years both have shown good clinical presentation of symptomatic recovery and significant improvement in developing countries than developed world. Adherence to medication appears to be a significant factor affecting improvement as well as family support.

# CONCLUSION

Results revealed that patient who had 1-5 years duration of illness while some others who suffered from the disorder for 6-10 years of their lives, showed significant improvement as they have been assessed at baseline and were reassessed after 5 years follow up on PANSS and GAF. It also indicated that prognosis of the disorder as schizophrenia having longer duration of illness is better in developing nations rather developed world.

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