

## Original research article

# A comparative study of insight between patients with schizophrenia and mania with psychosis

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## ABSTRACT:

**Introduction:** Lack of awareness of the disease has been known for hundreds of years, In 1604 in his play , “The Honest Whore”, Thomas Dekker has a character says: “That proves you mad because you know it not”. the term “Anosognosia” – Lack of insight was first used by the French Neurologist Joseph Babinski. Schizophrenia and mania with psychosis patients lack insight at early stage, but it improves with treatment and this is important for drug adherence.

**Methodology:** This is a descriptive study done in inpatients of the department of Psychiatry in Theni Medical College and Hospital. Patients who were admitted in the psychiatry ward are included in this study. Study period was between January 2019 to June 2019. There were 30 Schizophrenia patients and 30 mania patients was taken up for study and they were analysed and the results were discussed..Statistical analysis was done by SPSS package. students,t-test,chi-square test were applied. Statistical significance was assumed at a p value <0.05.

**Results:** Impaired insight has been linked to the poor treatment compliance.Poorer global functioning,Severity of psychopathology , recurrence and poorer outcome.

**Conclusion :** Our findings suggest that Insight is strongly associated with drug adherence and good treatment outcome. Impaired insight is one of the important reason why individuals with schizophrenia and bipolar disorder do not take their drugs regularly. Without medications , the person’s symptoms become worse.

**Key words :** insight,schizophrenia,mania, anosognosia, psychosis, awareness and attribution.

## INTRODUCTION

Insight is a complex multidimensional construct which is shaped by individual psychology(i.e. motivation and denial) and the constraints of biology ( as in cognitive impairment and anosognosia) and is influenced by social constructions of illness and culturally specific explanatory model.<sup>1</sup> The component of dimensions of insight are continuous rather than a dichotomous phenomenon. In other words one can have a partial insight.

In our clinical settings, some patients with schizophrenia accepts that, they have something wrong in them, even though they refuse to accept that they have a mental illness. The possible reasons could be because of their sociocultural and religious matrix colours their expression.At times even if the patient denies their mental disorder, they accepts distress and accepts drugs without protesting or arguing. So, here the question is whether the insight is an all (or) none phenomenon. Insight consists of an awareness and attribution. Awareness is the recognition of signs or symptoms of illness, while attribution refers to the explanations about the cause or source

of the signs and symptoms. The relationship between the schizophrenia and poor insight was identified even when the disorder was first named by Eugen Bleuler as cited by Wciorka<sup>2</sup>. As early as 1934 impaired insight was argued to arise from a neuropsychological deficit. Impaired insight is associated with the impaired functioning of prefrontal cortex, which subserves mental flexibility, abstract reasoning, concept formation and self reflection. Insight assessment is involved with a lot of controversies. Insight is assessed as a part of Standard Mental State Examination, but no guidelines exist as how to quantify or qualify it<sup>3</sup>.

## **MATERIALS AND METHODS**

This was a descriptive study, done in inpatients of the department of Psychiatry in Theni Medical College and Hospital. Patients who were admitted in the psychiatry ward are included in this study. Study period was between January 2019 to June 2019.

### **Inclusion criteria:-**

1. Patients who satisfied ICD-10 criteria for Schizophrenia.
2. Patients who satisfied ICD-10 criteria for Mania with psychotic symptoms.
3. Patients who willing to give an Informed consent for study.

### **Exclusion criteria:**

1. Patients with Substance induced psychosis.
2. Bipolar disorder – Depressive phase.
3. Severe Medical illness.
4. Patients who are not communicating.
5. Patients with severe cognitive dysfunction.

During their stay in hospital, patients were treated mainly by the biological methods (Pharmacotherapy – anti psychotics for schizophrenic subjects, mood stabilizers and antipsychotics for manic subjects and benzodiazepines for both).

### **Instruments used:-**

1. A Semi structured Proforma for social demographic variables.
2. Brief Psychiatric Rating Scale (BPRS).
3. Young Mania Rating Scale (YMRS).
4. Global Assessment of Functioning scale (GAF).
5. Schedule for the Assessment of Insight-Expanded (SAI-E).

**1. Semi structured proforma for sociodemographic and relevant clinical data:-** The proforma was used to collect data such as name, age, sex, marital status, employment status, details of occupation, religion, education, socioeconomic status, type of family and handedness. Clinical data that were recorded include the duration of illness and number of episodes, prior treatment details and the details of current treatment

**2. The Brief Psychiatric Rating Scale:-** The BPRS was developed by J.E. Overall and D.R. Gorham. This scale is relatively brief and widely used that measures major psychotic and non-psychotic symptoms in individuals with a major psychiatric disorder particularly schizophrenia. This 18 item scale was very well researched in psychiatry

The limitations include some of the items with potentials for overlap that are broadly defined. Strengths of the scale include its brevity, ease of administration, wide use and well researched status.

A reliability coefficient of 0.56 to 0.67 has been reported by Overall and Gorham et al., 1962.

### **1. Young Mania Rating Scale:-**

The Young Mania Rating Scale (YMRS) is one of the most widely used rating scale to assess the manic symptoms. Developed by Vincent E Ziegler and popularised by Robert Young. The scale has 11 items and is based on the patient's subjective report of his / her clinical condition over the past 48 hours. Additional information is based upon the clinical observations made during the course of the clinical interview.

### **2. Global Assessment of Functioning Scale:-**

This one is the fifth axis in DSM-IV. It has its origin in Health sickness rating done by Lucborsky in 1962 and considered to be the first effort to evaluate psychological health and illness, utilizing a 100 – point scale. Later the scale was divided into groups called levels in the global assessment scale and in 1987, after some modifications, became the global assessment of functioning scale and Axis-V of DSM-IV. The GAF is used to assess the psychiatric patients at the time of admission to an inpatient or outpatient program as a part of multi-axial evaluation as recommended by the American Psychiatric Association-DSM classifications.

### **Results:**

A group of 30 patients who fulfilled the ICD-10 criteria for Schizophrenia and 30 patients who fulfilled the ICD-10 criteria of Mania with psychotic symptoms were hospitalised, and both groups were compared and analysed on sociodemographic and clinical variables. Statistically we found that both groups were similar in most sociodemographic variables. Validated scales were used to assess insight, psychotic severity and overall functioning at admission and at discharge. It was found that insight in schizophrenia and mania did not have substantial differences. The study found that insight improves during hospitalization and treatment in both the groups. The study also concluded that some aspects of insight may be state dependent in both these groups. It was also observed that better insight is associated with lower psychotic symptoms in mania and schizophrenia. The study found that better the insight, better the psychosocial functioning in schizophrenia and mania. The study did not find any association between level of education and insight. The study did not find any association between insight and duration of illness in schizophrenia. In mania, I found that patients with greater number of episodes had better insight when compared those with less number of episodes. In schizophrenia patients, the study did not find any association between prior treatment and insight. In mania patients, the study found that patients with prior treatment had better insight as compared to those who had no treatment.

There were 30 Schizophrenia patients and 30 mania patients was taken up for study and they were analysed and the results were discussed then and there.

**Table 1: Sociodemographic variables of the 2 groups of patients**

Sociodemographic variable		Schizophrenia	Mania	p value
Age – mean		28.6	33	0.078
Sex	Males	15(50.0%)	15(50.0%)	1.00
	Females	15(50.0%)	15(50.0%)	1.00
Marital status-Married		8(26.7%)	12(40.0%)	0.39
Religion – Hindu		27(90.0%)	25(83.3%)	0.08
Handedness- Right		27(90.0%)	30(100%)	0.08
Family type-joint		16(15.3%)	10(33.3%)	0.12
Prior treatment-Nil		9(30.0%)	9(30.0%)	1.00

The differences in these sociodemographic variables were not statistically significant between these two groups.

**Table 2: Employment status of the 2 groups of patients**

Employment	Schizophrenia	Mania	Total
	Count (%)	Count(%)	Count(%)
Unemployed	22(73.3%)	17(56.7%)	39(65.0%)
Employed	8(26.7%)	13(43.3%)	21(35.0%)

\*P<0.001

This difference was statistically significant with a p value <0.001, when analysed by using the chi-square test.

**Table 3. Comparison of Insight score at admission in schizophrenia and mania (SAI-E item 1 to 5)**

SAI-E- Schedule for the Assessment of Insight-Expanded version;

These differences were not statistically significant with a p value of >0.05, when analysed by using the chi-square test.

**Table 4. Comparison of insight scores in schizophrenia Vs mania at discharge for SAI-E items ( 1 to 5 ).**

SAI-E items	Schizophrenia( n=30 )		Mania (n=30 )		Statistical significance
	Mean	S.D	Mean	S.D	
1.	1.30	0.702	1.63	0.556	T=2.038 Df=58 .046<0.05 <b>Significant</b>
2.	1.37	0.615	1.70	0.466	T=2.366 Df=58 .021<0.05 <b>Significant</b>
3.	0.83	0.531	1.17	0.592	T=2.296 Df=58 .025<0.05 <b>Significant</b>
4.	1.20	0.664	1.43	0.558	T=1.462 Df=58 .149>0.05 Not significant
5.	1.37	0.765	1.63	0.556	T=1.545 Df=58 .128>0.05 Not significant

On analysing the item 1 of SAI-E, using the t-test, it was found that schizophrenia patients had poor insight regarding the awareness of experiencing emotional or psychological changes ( higher the score, higher the insight) in compare with mania patients.

**Table 5. Insight in Mania at admission Vs discharge for total scores of SAI-E:**

	Mean	S.D	Mean	S.D	T	df	p value
<b>Admission</b>	5.4400	3.23202	14.9600	5.04836	16.231	29	<b>.000&lt;0.01 significant</b>
<b>Discharge</b>	20.4000	5.32139					

On comparing and analysing the total scores of SAI-E of the patients with mania at the time of admission and at the time of discharge showed, there was an improvement in insight at the time of discharge than at the time of admission (p<0.01).

**Table 6. Changes in BPRS and GAF during hospitalisation in Schizophrenia:**

Schizophrenia	Admission N=30		Discharge N=30		t	df	p value
	mean	S.D	mean	S.D			
<b>BPRS</b>	70.53	6.872	42.23	10.605	-14.294	29	<b>.000&lt;0.01 Significant</b>
<b>GAF</b>	27.17	8.433	60.87	17.098	-11.141	29	<b>.000&lt;0.01 Significant</b>

BPRS- Brief Psychiatric Rating Scale;

GAF- Global Assessment of Functioning.

On comparing and analysing the total scores of BPRS and GAF, at the time admission, showed that significant reduction in BPRS and improvement in GAF at discharge compared with at admission by using the t-test (p<0.01)

**Table 7. Changes in YMRS and GAF during hospitalisation in Mania:**

Mania	Admission N=30		Discharge N=30		t	Df	p value
	mean	S.D	mean	S.D			
<b>YMRS</b>	50.10	7.581	13.27	7.007	28.890	29	<b>.000&lt;0.01 Significant</b>
<b>GAF</b>	25.87	4.897	75.47	12.068	-28.243	29	<b>.000&lt;0.01 Significant</b>

YMRS- Young Mania Rating Scale;

GAF- Global Assessment of Functioning.

On comparing and analysing the total scores of YMRS and GAF, at the time admission, showed that significant reduction in YMRS and improvement in GAF at discharge compared with at admission by using the t-test (p<0.01).

**Discussion:**

Poor insight is a common feature of schizophrenia, and indeed of psychosis in general. Impaired insight has been linked to the poor treatment compliance<sup>10</sup>, Poorer global functioning, Severity of psychopathology, recurrence and poorer outcome, cerebral ventricular enlargement and reductions in regional blood volume.<sup>8</sup> Poor insight causes poor compliance with drugs and poor prognosis. When excessive it may be associated with depression and hence produce a poor outcome. This made us to think how much insight is necessary?

**Conclusion:**

In conclusion one can accept that insight is strongly associated with drug adherence and good treatment outcome. Impaired insight is one of the important reason why individuals with schizophrenia and bipolar disorder do not take their drugs regularly. Without medications , the person's symptoms become worse. This often makes them more vulnerable to being victimised and committing suicide. It is also often leads to rehospitalisation, homelessness, being incarcerated in prison and violent acts against others because of the persistent psychotic and behavioural disturbances.

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