

Nature And Types of Delusion In Schizophrenia And Mania – Is There A Difference?

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Abstract

Background: Delusions have been regarded as a core sign of psychosis and can be found in various psychiatric illnesses including Schizophrenia and Mania and considerable overlap between the types of delusion have been observed in both Schizophrenia and Mania

Aims: This study therefore aims at examining and comparing the nature and types of delusion in schizophrenia and mania

Methods: a total of 60 patients (30 each in Schizophrenia and Mania) were selected by systematic random sampling from the patients admitted in the Department of Psychiatry, Assam Medical College, Dibrugarh. Nature and types of the delusions were assessed by using Present State Examination -10 (PSE -10) of Schedule for Clinical Assessment in Neuropsychiatry (SCAN)

Results: Delusion of reference was by far the most common delusion in schizophrenia and as many as 25 patients had Delusion of reference. 23 patients had Delusion of persecution. Delusion of Grandiose Identity and Delusion of Grandiose Abilities were found to be significantly high in Mania as compared to Schizophrenia ($p=.000$). As compared to Schizophrenia; in Mania the delusions were mostly monothematic at the significance level of $p=.000$.

Conclusion: Delusion as a prominent feature of the clinical picture compared to other symptoms was seen in both the diagnostic groups with no statistically significant difference between themselves. However Delusions in mania were more mood congruent and are mostly monothematic as compared to those in schizophrenia

Keywords: Psychosis, Monothematic Delusion, SCAN, PSE-10 Nature and Types of Delusion

I. Introduction

A plethora of disorders of thought content may be observed in neuropsychiatric diseases and delusion is regarded as one of the principal manifestations of psychosis.

The English word delude is derived from Latin and implies playing or mocking. The German equivalent is 'Wahn' which means a whim, false opinion, or fancy.(1) It has been accepted that delusion is one of the core features of any psychotic illnesses and its presence excludes the category of neurotic disorders. The term has been used frequently in both the nosological systems including ICD-10 and DSM-5. ICD-10 and it has been the area of interest for researchers focussing on psychopathology. A delusion is a false, unshakeable idea or belief which is out of keeping with patient's educational, cultural and social background; it is held with extraordinary conviction and subjective certainty.

According to Jaspers (1959) delusions are the incorrigibly held perverted view of reality and have got three components (2):

- They are held with unusual conviction
- They are not amenable to logic
- Absurdity or erroneousness of their content is manifest to other people

Delusions can be found in many psychiatric disorders including (a) psychotic disorders such as Schizophrenia, Schizoaffective disorder, Schizophreniform Disorder, Delusional Disorder, shared psychotic disorder, brief psychotic disorder and substance induced psychotic disorders, (b) Bipolar Affective disorder, (c) Major Depressive Disorder with Psychotic Features (d) Delirium and (e) Dementia and its presence indicates an abnormality in the affected person's content of thought.(1)

Though studies regarding various aspects of thought disorder has been the area of interest to various investigators since the days of Kraepelin unfortunately such type of studies are very few in our part of the country. According to Lucas et al (1962) the symptoms of patients can be more meaningfully related to their socio-cultural background than to the diagnosis of their disorder. It is generally agreed that the socio-cultural beliefs and values influence the content of various psychopathological patterns.(3, 4) In our part of the country where most of the people still live below the poverty line with lots of misconceptions and superstitious beliefs

governing their thinking. Therefore current study attempts to investigate the nature of delusions in two major psychotic disorders namely Schizophrenia and Mania in patients attending the psychiatric services of Assam Medical College and Hospital, Dibrugarh.

Aims and Objective of the Study

- i. To examine the nature and types of delusion in Schizophrenia and Mania
- ii. To compare the nature of such delusions in both the study groups

II. Methodology

Place of Study: department of Psychiatry, Assam Medical College and Hospital, Dibrugarh

Type of the study: Cross sectional study

Duration of the study: One year

Sample selection: The sample for the study was collected from the patients admitted to the Department of Psychiatry Assam Medical College and Hospital, Dibrugarh. The cases were selected by using systematic random sampling i.e. every 3rd case was selected for the study

Sample size: The sample size for each group were

- Schizophrenia:30
- Mania: 30

Inclusion Criteria:

- Patients meeting ICD-10 criteria for schizophrenia
- Patients fulfilling the ICD-10 criteria for diagnosis of manic episode and bipolar affective disorder current episode manic
- Only patients not having altered level of consciousness were included in the study
- Patients who were able to cooperate and complete the procedure were taken up for the study
- Age; 18 years and above
- Sex: Both the sexes

Exclusion Criteria:

- Schizoaffective disorder
- Rapid cycling Affective Disorder
- Induced Delusional Disorder
- Schizotypal Disorder
- Co-existing systemic physical illness e.g.- Septicemia or Other Acute Infection
- Mental sub normality
- Co-morbid substance use disorder
- Uncooperative, unmanageable patients

Tools Used

- Semi structured proforma for socio-demographic variables
- The ICD-10 Classification of Mental and Behavioral Disorders *Clinical descriptions and diagnostic guidelines* (1992)
- PSE-10 (Present State Examination-10) of SCAN (Schedule for Clinical Assessment in Neuropsychiatry) (1998)

Procedure

Patients admitted to In-patient Department of Psychiatry Assam Medical College and Hospital, Dibrugarh were assessed and diagnosed as per ICD-10 (5) diagnostic guidelines and meeting the inclusion criteria were recruited for the study. The confirmation of the diagnosis was made after discussing the cases with consultant psychiatrists. Informed consent was taken from each case and after obtaining the consent the cases were assessed for thoroughly by using Present State Examination-10 (PSE-10) of Schedule for Clinical Assessment in Neuropsychiatry (SCAN) (6) . For the purpose of evaluation of nature and types of delusion, whenever possible speech samples were recorded in patients own verbatim either in the form of written speech or by process recording. All the cases were discussed with the consultant psychiatrists for confirmation.

III. Results and Observation

Socio-demographic variables: Each study group consisted of 30 systematically selected random samples of Schizophrenia and Mania. Most of the cases were from the rural area and were predominantly male with religion mostly being Hindu. The sample characteristics are summarized in the following table.

Table: 1: Sample characteristics

Variable	Schizophrenia	Mania
Age (Mean ±SD)	29.83±9.067	33.03±11.476
Income(Mean ±SD)	3896.67±2331.269	3623.33±1823.351
Years of formal education(Mean ±SD)	8.17±4.170	8.37±3.615
Sex		
Male	24	25
Female	6	5
Religion		
Hindu	28	28
Muslim	2	2
Others	0	0
Domicile		
Urban	6	8
Rural	24	22
Marital Status		
Married	15	21
Unmarried	15	9
Divorce/Widow	0	0
Occupation		
Employed	8	8
Self employed	8	11
Household duties	12	6
Unemployed	1	3
Student	1	2

The nature and types of Delusions across the three study groups have been shown in the Table: 2 – 7

Table: 2: Delusions in all the study groups

Delusion	Schizophrenia (N=30)	Mania (N=30)	P value
Delusion of reference	25	7	.000
Delusion of being spied upon	8	0	.003
Delusion of misinterpretation	4	0	.040
Quotation of ideas	2	1	.557
Delusional misidentification	1	0	.317
Familiar people impersonated	1	0	.317
Delusional perception	1	0	.317
Delusional ideas of reference based on guilt	0	0	1.000
Delusional ideas of reference based on expansive mood	0	6	.010
Delusion of persecution	23	7	.000
Delusion of conspiracy	12	4	.021
Delusional jealousy	5	1	.046
Delusion that others accuse of homosexuality	1	0	.317
Delusional memory	1	0	.317
Delusional lover	3	7	.169
Religious delusion	8	7	.767
Delusional paranormal explanations	3	2	.643
Delusional physical explanation	2	0	.154
Delusions of grandiose abilities	2	24	.000
Delusions of grandiose identity	3	21	.000

Delusion of reference was by far the most common delusion in schizophrenia and as many as 25 patients had Delusion of reference and 23 patients had Delusion of persecution. In Schizophrenia Religious delusions were found in 8 cases and Delusion of grandiose identity and abilities in 3 and 2 patients respectively. In Mania Delusion of Grandiose abilities was the found to be the commonest delusion in mania and it was seen in 24 cases of mania. Delusion of Grandiose identities was found in 21 cases. Delusion of reference, Delusion of persecution and Religious delusion was found in 7 patients with mania.

Table: 3: Monothematic Delusions in all the study groups

Monothematic Delusion	Schizophrenia (n =30)	Mania (n= 30)	P value
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No Delusion	2	2	1.000
Delusion are not monothematic	13	0	.000
Monothematic delusion only	15	28	.000

15 of the schizophrenia patients had monothematic delusions whereas in 13 cases the delusions were not monothematic. In Mania monothematic delusions were found in 28 cases while in 2 cases there were no delusions. In Mania most of the delusions were monothematic and a significant difference of $p = .000$ was noted when compared to Schizophrenia

Table: 4: Systematization of Delusions in all the study groups

Systematization	Schizophrenia (n =30)	Mania (n =30)	p
No Delusion	2	2	1.000
No Systematization	13	0	.000
Some systematization	9	17	.039
Close systematization	5	11	.082
Complete systematization	1	0	.317

In cases of Delusions in Schizophrenia some systematization was noticed in 9 cases while in 5 cases there were close systematization and complete systematization was observed in only 1 case. In Mania 17 patients with Delusions showed some systematization while close systematization of delusion was noted in 11 patients. In significantly greater proportion of patients in Schizophrenia showed no systematization in their delusions as compared to mania ($p = .000$). In case of Manic Delusions some systematization were noticed to a significance level of $p = .039$ when compared to Schizophrenia. In case of Close systematization no significant differences were noted across the study groups

Table: 5: Prominence of Delusions in all the study groups

Prominence of Delusion	Schizophrenia (n =30)	Mania (n =30)	p
No delusion	2	2	1.000
Delusion present but not the central feature	1	4	.165
Delusions are a prominent feature	27	24	.282

As many as 27 cases of Schizophrenia had Delusions as their prominent feature of the clinical picture compared to other symptoms.

24 cases of Mania had their delusions as prominent feature of the clinical picture compared to other symptoms while in 4 cases though delusions were found to be present it was not the central feature of the clinical picture. Delusion as a prominent feature of the clinical picture compared to other symptoms was seen in all the diagnostic groups with no statistically significant difference among themselves.

Table: 6: Conviction and Bizarreness of Delusions in the study groups

Conviction	Schizophrenia (n=30)	Mania (n=30)	p
No Delusion	2	2	1.000
Aware of Delusions but also aware of their abnormal delusional nature	0	0	1.000
Brief periods of doubt but generally convinced	0	1	.317
Unshakably convinced	28	27	.643
Bizarreness of Delusions	3	0	.040

All the 28 patients who had delusions in Schizophrenia group had delusions held with unshakably convinced and 3 of them had Bizarreness of Delusions.

1 patient in mania had brief periods of doubt but was generally convinced regarding his delusion and 27 were unshakably convinced regarding their delusions. However no bizarreness was noted in their delusions.

Table: 7: Congruence of delusions in all the study groups

Congruence of delusion with mood	Schizophrenia (n =30)	Mania (n =30)	p
Most delusions congruent	0	26	.000
Mixed congruent and Incongruent	0	2	.002
Mostly incongruent	16	0	.000

As shown in table: 7; mood incongruent delusions were seen in 16 cases of Schizophrenia. Most of the delusions in Mania were mood congruent. In 26 patients the delusions were mood congruent while in 2 it was mixed – both Mood Congruent and Incongruent.

IV. Discussion

Delusion of reference was by far the most common delusion in schizophrenia and as many as 25 patients had Delusion of reference. 23 patients had Delusion of persecution. This is in accordance with various previous studies. Kulhara, et al (1986) reported that Delusion of Persecution was the most common delusion (84.6%) followed by Delusion of reference (73.5%) and Delusional misinterpretation (44.9%)(4). Bhaskaran (1970) observed that the Delusion of persecution was the most common type of delusion (7). Chattarjee and Golechha (1975) found significant percentage of paranoid delusions and ideas of reference in their patients (8). Even IPSS studies had also revealed the similar kind of finding across the world.(9) In Mania Delusion of reference, Delusion of persecution was found in 7 cases. The presence of these delusions in Mania has been confirmed by other studies also. Rennie et al observed that about 24% of the manic patients had paranoid delusions (10). A significant difference was noted in delusion of persecution between Schizophrenia and Mania ($p=.000$). Similarly Delusion of being spied upon and Delusion of misinterpretation was found to significantly high in Schizophrenia as compared to Mania. Delusional lover was seen in 3 patients of Schizophrenia, and 7 of Mania. However no statistically significant differences in occurrence of such delusions were noted across the study groups. The presence of erotomanic delusions or delusion of love in schizophrenia, mania and in persistent delusional disorder had also been mentioned by Calil and Terra (2005) (11). Similarly no statistically significant difference was noted in case of Religious delusions across the study groups; - a finding similar to Appelbaum, Robbins and Roth (1999) (12).

Delusions of Grandiose Abilities were seen in 2 patients with Schizophrenia and 24 with Mania. Presence of Delusion of Grandiose Identity was noted in 3 patients with Schizophrenia and 21 with Mania. Delusion of Grandiose Identity and Delusion of Grandiose Abilities were found to be significantly high in Mania as compared to Schizophrenia ($p=.000$). The presence of Grandiose Delusions in Schizophrenia has been confirmed by various studies like Kulhara et al (1986) who observed that occurrence of Delusion of Grandiose Ability and Delusion of Grandiose Identity were 19.3% and 15.3% respectively (4). Presence of Grandiose Delusions in Schizophrenia had also been noted by Grunebaum et al (2001). (13) Appelbaum, Robbins and Roth (1999) also noted a similar finding where they observed a statistically significant difference in occurrence of Grandiose Delusions between Mania and Schizophrenia..

Monothematic Delusions:

As compared to Schizophrenia; in Mania the delusions were mostly mono thematic at the significance level of $p =.000$. This is in accordance to the already established finding that poly thematic delusions are seen in Schizophrenia and in Mania the delusions are mostly mono thematic.

Systematization of Delusions:

There were no significant differences in occurrence of closely systematized delusions across the study groups. In case of Manic Delusions some systematization were noticed to a significance level of $p = .039$ when compared to Schizophrenia. Hurst LA (1975) also observed systematization of the delusions in patients with Manic Depressive Psychosis (14)

Prominence of Delusions:

Delusion as a prominent feature of the clinical picture compared to other symptoms was seen in both the diagnostic groups with no statistically significant difference between themselves.

Conviction of Delusions:

No significant differences were noted across the groups with respect to their conviction about the delusions. This finding is similar to what Appelbaum, et al (1999) observed in their study “Dimensional Approach to Delusions: Comparison Across Type and Diagnosis” (12). Bizarre delusions were found to be significantly high in Schizophrenia as compared to Mania ($p = .040$). This finding reflects the very old notion that Bizarre Delusions are pathognomonic of Schizophrenia. Goldman et al (1992) commented that bizarre delusions had a sensitivity of 0.79, a specificity of 0.56, and a positive predictive power of 0.82 for the diagnosis of schizophrenia relative to other psychotic disorders (15).

Congruence of Delusions:

In Mania most of delusions were found to be congruent in significant proportion as compared to Schizophrenia ($p =.000$). In Schizophrenia the delusions were mostly incongruent and has a statistically significant difference when compared to Mania ($p = .000$). This finding is in accordance with the traditional view that mood incongruent delusions are mostly found in Schizophrenia while in case of Mania the delusions are mostly mood congruent (Kendler K.S. 1991) (16, 17) .

V. Conclusion

In our study Delusion of Reference and Delusions of Persecution were found to be the two most common delusions in Schizophrenia which was found to be significantly high as compared to mania. Delusions of Grandiose identity and Delusions of Grandiose Abilities were found to be significantly high in Mania as compared to Schizophrenia

One of the striking features of the Delusions in Mania was their monothematic nature which showed significant differences when compared to schizophrenia

Delusions in Mania were found to be mostly mood congruent while in case of Schizophrenia these were mostly mood incongruent. Delusions as a prominent feature in the clinical picture were not found in almost equal proportions in both the groups nor there do any difference in their conviction about the delusions.

Limitations:

This study has got few limitations

1. It is a cross sectional study
2. Sample size is small
3. Correlation of nature of delusion with the duration of illness has not been assessed.

Despite its limitations this study was only one of its kinds in this part of the country in the sense that it had tried to cover wider dimensions of delusion by using PSE – 10 of SCAN (Schedule for Clinical Assessment in Neuropsychiatry) and can be expected to inspire further extensive, explorative researches in this field

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