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Original Research Article

Perspective study of disorders of thought, language and communication in schizophrenic patients of Maharashtra

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ABSTRACT

Background: Schizophrenia is a mental disorder characterised by paranoid, hallucination and delirium. The person with such disorder cannot lead a normal life in the society due to his abnormal communication and thought disorder. Hence such disorders are helpful to diagnose the type and severity of disease.
Materials and Methods: Out of 1000 (one thousand) patients 500 were acute schizophrenia and 500 were chronic schizophrenics. Among 1000, 330 were paranoid and 670 were non-paranoid. The disorder of FTD, language, communication disorders in acute, chronic non-paranoid and paranoid schizophrenia were noted.
Results: In the comparison of acute and chronic schizophrenic patients – Negative FTD scores positive negative FTD scores, language disorders score was highly significant ($p<0.001$). In the schizophrenic negative FTD score Negative positive FTD scores, thought disorder score, language disorder scores were highly significant ($p<0.001$).
Conclusion: This study will be helpful to psychiatrist to differentiate acute and chronic schizophrenic patients and treat them efficiently with proper medication so that such patients can lead normal social and family life.

1. Introduction

Ever since the concept of thought disorder was given pre-eminence in Bleuler's conceptualisation in schizophrenia (in 1950)[1] and kraephn's has reviewed that language and communication are also associated with schizophrenia (1919). It was observed that the traditional concept of thought disorder was also observed in Mania (or Manic) patients hence symptoms scale was useful to diagnose the schizophrenia. Moreover poverty of speech was prominent character in schizophrenia.[2]

It was suggested that thought disorder that is characterised by intellectual impoverishment was characteristic of schizophrenic.

Since original development of thought, language communication was observed in schizophrenia but the clinical experience contradicts both assumptions language behaviour such as associative loosening, clanging, blocking etc occur in mania, depression and even in normal people when they are fatigued or stressed.[3] Furthermore, some patient's with schizophrenia speak and think normally with only delusion or hallucination as schizophrenic manifestation occasionally.[4] Hence attempt was made to confirm and evaluate the thought, language communication disorder in schizophrenic.

2. Materials and Methods

1000 (One Thousand) patient aged between 18 to 50 years regularly visiting to Manas hospital Jalna-431203 Maharashtra were studied.

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2.1. Inclusive criteria

Patients diagnosed as schizophrenic as per ICD 10 having episodes. Acute schizophrenia was newly diagnosed and chronic schizophrenia was > 2 years were selected for study.

2.2. Exclusion criteria

Epileptic, organic mental disorder, patients with physical illness, mentally retarded, substance abuse, were excluded from study.

2.3. Method

Every patient was counselled by team of psychiatrist of Manas hospital and ruled out socio-demographic details, disease related characteristics, ICD 10 for diagnosing, Mini mental status scale, scale for assessment of thought, language and communication (TLC) was evaluated thoroughly and compared in acute and chronic schizophrenic illness.

Duration of study was from March-2021 to September-2021 (six months)

2.4. Statistical analysis

Various parameters of schizophrenic compared in acute and chronic schizophrenia with z test. The statistical analysis was carried out in SPSS software. The ratio of male and female was 2:1.

3. Observation and Results

Table 1 Comparison of Formal thought disorder (FTD) in acute and chronic schizophrenic patients. In Negative FTD score Mean value of Acute schizophrenic was 3.01 (SD±2.10) and in chronic schizophrenic 4.12 (SD±1.80) and t test was 8.97 and p value was highly significant (p<0.001).

In comparison of positive Negative disorder (FTD) mean value acute schizophrenic was 6.12 (SD±5.25) in chronic 3.43 (SD±4.32) and t test was 8.84 and p value was highly significant (p<0.001)

Table 2 Comparative study of FTD scores in paranoid and non-paranoid schizophrenic patients. In Negative FTD test mean value of paranoid was 1.92 (SD±2.33) and in non-paranoid 4.52 (SD±2.20) t test was 16.8 and p value was highly significant. In positive Negative FTD study Mean value of paranoid was 7.90 (SD±5.33) and 3.90 (SD±4.30) in non-paranoid, t test was 9.75 and p value was highly significant (p<0.00).

Table 3 Comparison of disorder of thought, language and communication score in acute and chronic schizophrenic patients. In language disorder study mean value acute schizophrenic in language disorder was 2.2 (SD±1.90) and 3.14 (SD±1.80) in chronic schizophrenic, t test was 8.03 and p value was highly significant.

Table 4 Comparison of disorders of thought, language and communicating scores in paranoid and non-paranoid schizophrenic. (a) In disorder of thought scores mean value of paranoid was 2.2 (SD±1.80) and 2.50 (SD±2.60) in non-paranoids t test was -2.12 and p value was highly significant (b) In disorder of language 1.80 (SD±1.40) in paranoids, 9.02 (SD±6.20) in non-paranoid t test was 28.2 and p value was highly significant (p<0.001).

4. Discussion

Present study of disorder of thought, language and communication in schizophrenic patients in Maharashtra. In the comparison of FTD scores in chronic and acute schizophrenia Negative FTD score mean value in acute schizophrenic was 3.01 (SD±2.10) and in chronic 4.12 (SD±1.80) t test was 8.97 and p value was highly significant (p<0.003) and positive negative FTD score. Mean value in acute schizophrenic was 6.12 (SD±5.25) in acute and 3.43 (SD±4.32) in chronic schizophrenic t test was 8.84 and p value was highly significant (p<0.00) (Table 1). In comparative study FTD scores in paranoid and non-paranoid schizophrenic, Negative FTD score in paranoid score mean value was 1.92 (SD±2.33) in paranoid and 4.52 (SD±2.20) in non-paranoid t test was 16.8 and p value was highly significant positive negative FTD score mean value 7.19(SD±5.33) in paranoid and 3.90 (SD±4.30) in non-paranoid t test was 9.75 and p value was highly significant (p<0.001) (Table 2).

In comparison of thought disorders of language and communication scores in acute and chronic schizophrenia language disorder score mean value 2.2 (SD±1.90) in acute and 3.14 (SD±1.80) in chronic schizophrenia t test 8.03 and p value was highly significant (p<0.001) (Table 3). Comparison of disorders of thought language and communication scores in paranoid and non-paranoid schizophrenics. Disorders of thought scores mean value 2.2 (SD±1.80) in paranoid and 2.50 (SD±2.6) in non-paranoid t test was -2.12 and p value was highly significant (p<0.01). Disorders language on mean value 1.80 (SD±1.90) in paranoid and 9.02 (SD±6.30) in non-paranoid t test 28.2 and p value was highly significant (p<0.00) (Table 4). These findings are more or less in agreement with previous studies.[5–7]

It is known fact that, commonest language behaviours is pressure of speech, tangentiality, derailment loss of goal. Preservation poverty of content of speech is characteristics of schizophrenic.[8] Moreover in paranoid group has poverty of speech, preservation and self reference illogicality, clanging, neologising word, approximation echolalia are commonly observed. In non-paranoid group tangentiality, derailment loss of goal and preservation changing neologism were observed.[9]

In the comparison of paranoid and non-paranoids gross disorganisation was observed in non-paranoid while

Table 1: Comparison of FTD score in acute and chronic schizophrenic patients.

FTD Score	Acute Schizophrenic (500) Mean Value with SD	Chronic schizophrenic (500) Mean value with SD	t test	p value
Positive FTD score	9.22(SD±3.45)	8.18(SD±3.32)	4.85	P>0.19
Negative FTD score	3.01(SD±2.10)	4.12(SD±1.80)	8.97	P<0.003 *
Loose Association score	846(SD±4.08)	7.39(SD±3.38)	4.51	p>0.5
Positive Negative FTD	6.12(SD±5.25)	3.43(SD±4.32)	8.84	P<0.00 *

FTD = Formal thought disorder
Negative FTD score was highly significant p value (p<0.001)
* = Significant value

Table 2: Comparison of FTD score in paranoid and Non-paranoid schizophrenia.

FTD score	Paranoid (330) Mean Value with SD	Non-paranoid (670) Mean Value with SD	t test	p value
Positive FTD score	9.13(SD±4.40)	8.43(SD±3.36)	2.54	p>0.99
Negative FTD score	1.92(SD±2.33)	4.52(SD±2.20)	16.8	P<0.00 *
Loose Association score	8.02(SD±4.15)	8.10(SD±3.38)	0.30	p>0.38
Positive Negative FTD	7.19(SD±5.33)	3.90(SD±4.30)	9.75	P<0.001 *

Positive and Negative FTD scores and Negative FTD were highly significant
* = Significant value

Table 3: Comparison of disorders of thought, disorders of language and communication scores in acute and chronic schizophrenic patients.

Disorders scores	Acute schizophrenic (500) Mean Value with SD	Chronic Schizophrenic (500) Mean value with SD	t test	p value
Thought disorder	2.54(SD±2.69)	2.10(SD±1.82)	3.02	p>0.5
Language disorder	2.2(SD±1.90)	3.14(SD±1.80)	8.03	p<0.00 *
Communication Disorder	9.40(SD±6.45)	9.11(SD±6.12)	0.72	p>0.4

Disorder of language had significant p value
* = Significant value

Table 4: Comparison of disorders of thought, language and communication scores in paranoid and non-paranoid schizophrenic patients.

FTD score	Paranoid (330) Mean Value with SD	Non-paranoid (670) Mean Value with SD	t test	p value
Disorder of thought scores	2.2(SD±1.80)	2.50(SD±2.60)	-2.12	p<0.01
Disorder of language	1.80(SD±1.40)	9.02(SD±6.30)	28.2	p<0.00 *
Disorder of communication	9.74(SD±6.60)	9.02(SD±6.30)	1.64	p>0.9

Disorder of language and thought score and has significant p value (p<0.01)
* = Significant value

tangentiality is common disorder in chronic paranoids, possibly reflection of evasive mode of communication word approximation, clanging, and illogical circumstantialities were significant characters in paranoids.[10]

Thought, language and communication (TLC) disorders were severe in acute schizophrenia while poverty of speech is extreme in chronic schizophrenia. Positive negative FTD score were more in paranoid schizophrenics includes problems with planning and is reflective of frontal lobe pathology. Moreover the bilateral parietal and temporal lobes gyrus are involved in information processing.[11]

5. Conclusion

Present study of thought language and communication disorders in schizophrenic patients there is significant difference between acute and chronic schizophrenia. In schizophrenia have different diagnostic characteristics in acute and chronic schizophrenia, paranoid and non-paranoid as well. But this demands genetics, embryological, dermatoglyphics, chromatographic, neurological studies because exact patho-psychogenesis of schizophrenia is still un-clear.

6. Ethical Approval

This research paper was approved by Ethical committee of Indian Institute of Medical Sciences and research warudi, Badnapur, Jalna (district) – Maharashtra

7. Conflict of Interest

None.

8. Source of Funding

None.

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Author biography

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