



Study of Thought, language and communication disorders in schizophrenic patients of Tamil Nadu Population

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Abstract

Background: Schizophrenia is characterized by delusions, hallucinations. Concept of formal thought disorder is treated as unitary, but it has various different language behaviour. This study examines thought, language, communication disorders in schizophrenia in tamilnadu population.

Method: Out of 100 (one hundred) schizophrenic patients, 50 were acute and 50 were chronic schizophrenic. Among 100, 33 (thirty three) were paranoid, 67 (sixty seven) were non-paranoid. The disorder of thought, language, communication (FTD – formal thought disorder) in acute and chronic schizophrenic, paranoid and non-paranoid were studied.

Results: In FTD score study, negative FTD score in acute and chronic schizophrenic, paranoid and non-paranoid was highly significant ($p < 0.001$). Disorders of language in acute and chronic schizophrenic, paranoid and non-paranoid was significant ($p < 0.004$).

Conclusion: This pragmatic study will be helpful to understand the nature of thought, language, communication disorder in acute and chronic schizophrenic, paranoid and non-paranoid.

Keywords: FTD, schizophrenic, paranoid, ICD-10, TLC, Tamil Nadu.

Introduction

Human beings are social animals, hence they have ability to think, act of emotions, expression of language, communications, attention, motivations and behaviour. These abilities are due to well formed frontal cortex. In schizophrenia the connections of frontal cortex get altered which impairs the ability⁽¹⁾. It is also noted that schizophrenia is genetic in origin ⁽²⁾. Thought are expressed via language. Language incompetence reflects in delusion system. Language also contributes thinking process which is again related to Brain function. A brain abnormality leads to derailment in thinking and perpetuate psychopathology ⁽³⁾. Cognitive behaviour and languages are closely associated with thoughts. Abnormal thoughts expression can be observed in language behaviour of schizophrenic patients ⁽⁴⁾. Hence thought, language and communications were evaluated in both acute and chronic, paranoid and non-paranoid patients.

Material and Method

100 patients aged between 18 to 50 years regularly visiting to Institute of medical health, Madras Medical College Chennai, Tamil Nadu were studied.

Inclusion Criteria: Patients with Schizophrenia diagnosed as per ICD 10, Age between 18 – 50 years, duration of illness 1) Acute cases-within first week of admission, 2) Chronic cases - institutionalized patients >2years.

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

Method: In semi structured interview,

- 1) Socio demographic details (2) Disease related characteristics
- 3) ICD-10 for diagnosing (4) Mini Mental Status scale

5) Scale for assessment of thought language and communication (TLC)⁽⁵⁾⁽⁶⁾ were evaluated in every patients thoroughly and compared in patients.

Statistical analysis: Various parameters of schizophrenia compared in acute and chronic cases with z test. The statistical data was performed in SPSS software.

Observation and Results

The present study has 50 (fifty) acute schizophrenic and 50 (fifty) chronic schizophrenic patients. Out of these 33 (thirty three) were paranoid and 67 (sixty seven) were non-paranoid schizophrenic patients.

Table-1: Comparison of FTD score (Formal Thought disorder score) in acute and chronic schizophrenic patients shows that mean value was 3.04 (SD± 3.00) in acute schizophrenic, 4.32 (SD±2.47) and p value was highly significant (p<.002) in Negative FTD score.

Table-2: Comparison of FTD scores in paranoid and non-paranoid patients. Negative FTD score of 1.94 (SD±2.76) in paranoid, 4.54 (SD± 2.43) in non-paranoid were observed and p value was highly significant (p<0.001).

Table-3: Comparison of disorder of thought, language and communication scores in acute and chronic schizophrenics.

Disorders of language was 2 (SD± 2.52) in acute, 3.16 (SD± 2.7) in chronic schizophrenic and p value was highly significant (p<0.03).

Table-4: Comparison of disorder of thought, language and communication score in paranoid and non-paranoids. Disorder of language was 1.82 (SD± 2.20) in paranoids, 2.90 (SD± 2.86) and p value was significant (p<0.04)

Discussion

Present study of thought, language and communication disorder in schizophrenic patients of Tamil Nadu Population, comparison of FTD score (Formal thought disorder score) in acute and chronic schizophrenics, thenegative FTD score was 3.04 (SD± 3.00) in acute, 4.32 (SD± 2.47) in chronic schizophrenic, ($p < 0.02$) p value was highly significant (Table-1). Comparison of FTD score study in paranoid and non-paranoids, the negative FTD score was 1.94 (SD± 2.76) in paranoid, 4.54 (SD± 2.43) in non-paranoid, p value was highly significant ($p < 0.001$) (Table-2). Comparison of disorder of language was 2 (SD± 2.52) in acute, 3.16 (SD± 2.7) in chronic schizophrenic, p value was highly significant ($p < 0.03$) (Table-3). Comparison of disorder of language was 1.82 (SD± 2.20) in paranoid, 2.96 (SD± 2.86) p value was significant ($p < 0.04$) (Table-4).

Comparing acute and chronic schizophrenia cases, Negative FTD score was more in chronic schizophrenia. Comparing paranoid and non paranoid cases, negative FTD score was more in non paranoid schizophrenia. Positive negative FTD dichotomy score was more in paranoid schizophrenia. It shows more positive FTD and less negative FTD score combination nature of paranoid schizophrenia.

In disorder of thought, disorder of language, disorder of communication score, comparing acute and chronic schizophrenia, disorder of language score was more in chronic schizophrenia. Comparing paranoid and non paranoid schizophrenia, disorder of language was more in non paranoid. In disorder of language, incoherence was the factor that influence this findings. These findings are not found in previous studies⁽⁷⁾⁽⁸⁾⁽⁹⁾.

In previous studies, commonest language behaviour in schizophrenia were pressure of speech, tangentiality, derailment, loss of goal, perservation, poverty of content. In paranoid group, poverty of speech, perseveration and self reference were commonly observed. In non-paranoid groups'tangentiality, derailment, loss of goal and preservation were observed⁽¹⁰⁾.

In present study, Significant difference between acute and chronic schizophrenia were noted. Pressure of speech, clanging found in acute schizophrenia while poverty of content, incoherence speech were noted in chronic schizophrenia.

In previous studies comparison of paranoid and non paranoid, gross disorganisation was observed in non-paranoids while tangentiality was more prevalence in chronic paranoids possibly reflection of evasive mode of communication ⁽¹¹⁾. But in present study, Word approximation, clanging, illogicality, circumstantiality were more in paranoid schizophrenia and Poverty of speech, derailment, incoherence were more in non paranoid schizophrenia.

Summary and Conclusion

The present study of thought, language and communication disorders in schizophrenia, there is significant difference in formal thought disorders in acute and chronic schizophrenia and paranoid, non paranoid schizophrenia patients. But it demands further longitudinal, linguistic and multi centric approach for more detailed understanding.

Table – 1**Comparison of FTD score in acute and chronic schizophrenic patients**

FTD score	Acute schizophrenic Mean value with SD	Chronic schizophrenic Mean value with SD	P value
Positive FTD score	9.20 (SD± 4.85)	8.20 (SD± 4.61)	P>0.293
Negative FTD score	3.04 (SD± 3.00)	4.32 (SD± 2.47)	P<0.22 *
Loosening Association Score	8.48 (SD± 5.07)	7.72 (SD± 4.61)	p>0.435
Positive Negative FTD	6.16 (SD± 6.51)	3.88 (SD± 5.76)	P<0.067

FTD = Formal Thought Disorder

Negative FTD score has significant P value (P<0.02)

(* = Significant value)

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

■ Acute schizophrenic Mean value with SD ■ Chronic schizophrenic Mean value with SD

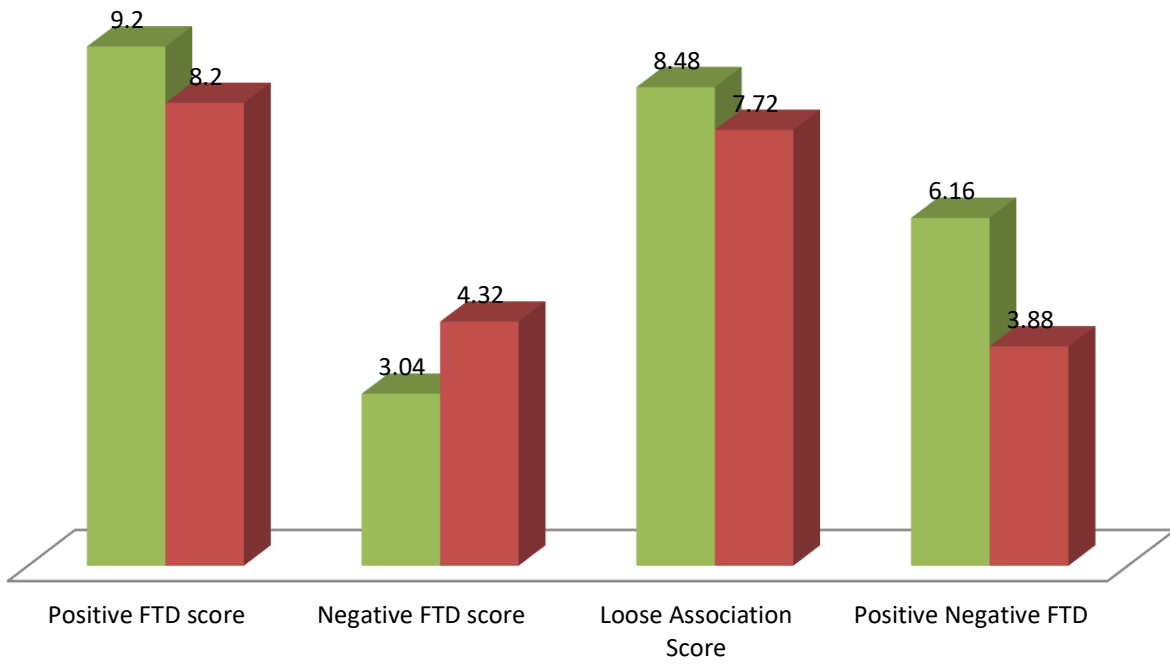


Table – 2**Comparison of FTD score in paranoid and Non-paranoid schizophrenia**

FTD score	Paranoid (33) Mean value with SD	Non Paranoid (67) Mean value with SD	P Value
Positive FTD score	9.15 (SD± 5.50)	8.48 (SD± 4.34)	P>0.506
Negative FTD score	1.94 (SD± 2.76)	4.54 (SD± 2.43)	P<0.001 *
Loosening Association Score	8.06 (SD± 5.30)	8.12 (SD± 4.63)	P>0.955
Positive, Negative FTD	7.21 (SD± 6.74)	3.94 (SD± 5.70)	P<0.001 *

Positive FTD score and positive negative FTD score were highly significant P value (P<0.001) (* =Significant)

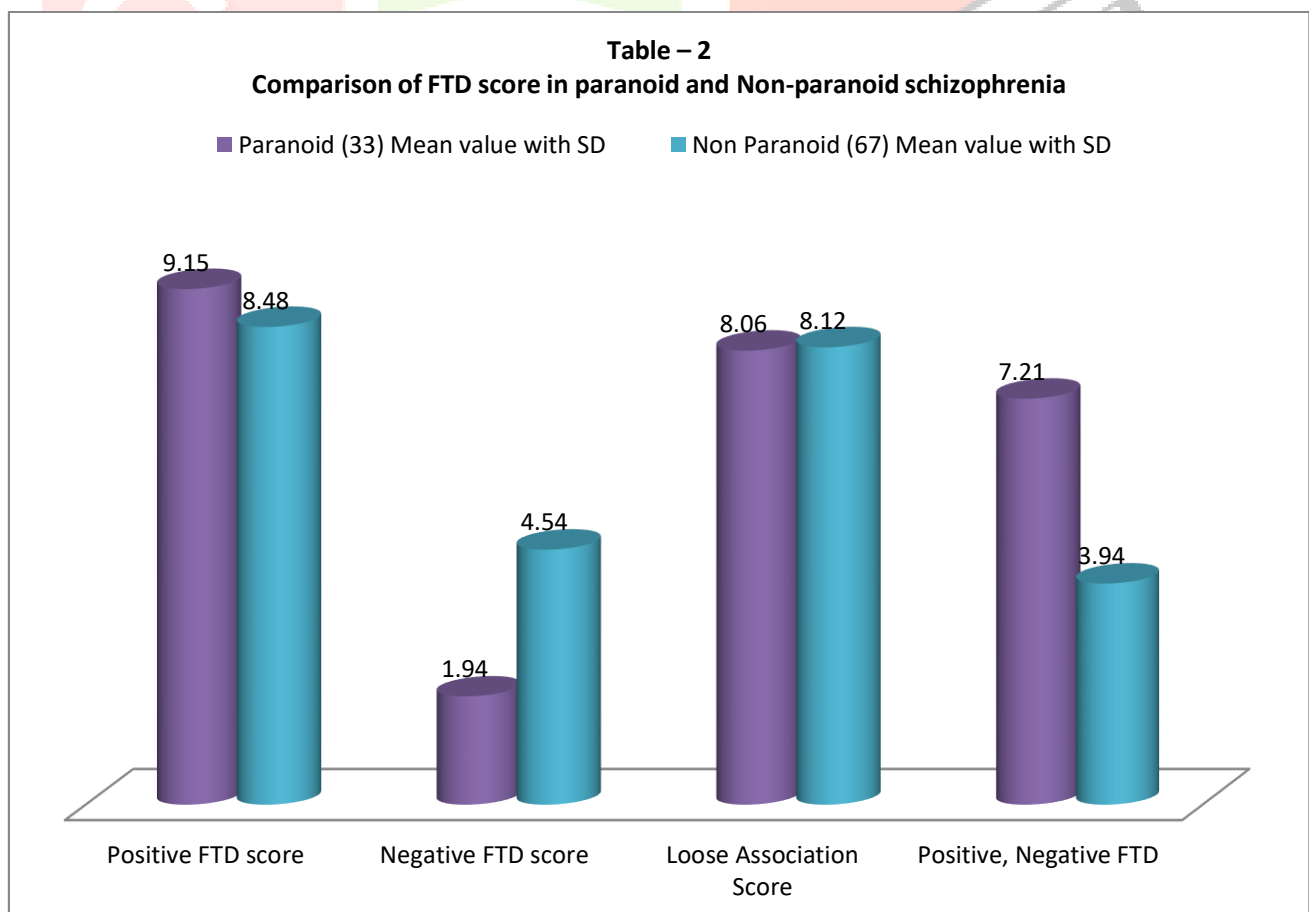


Table – 3

Comparison of disorders of thought, disorders of language and communication scores in acute and chronic schizophrenic patients

Disorders scores	Acute Mean value with SD	Chronic 50 Mean value SC	P Value
Disorder of thought	2.56 (SD± 3.31)	2.12 (SD± 2.72)	P>0.469
Disorder of language	2 (SD±2.52)	3.16 (SD± 2.7)	P<0.031 *
Disorder of communication	9.42 (SD±7.90)	9.14 (SD± 7.58)	P>0.857

Disorder of language had significant P value (P<0.03) (* = Significant)

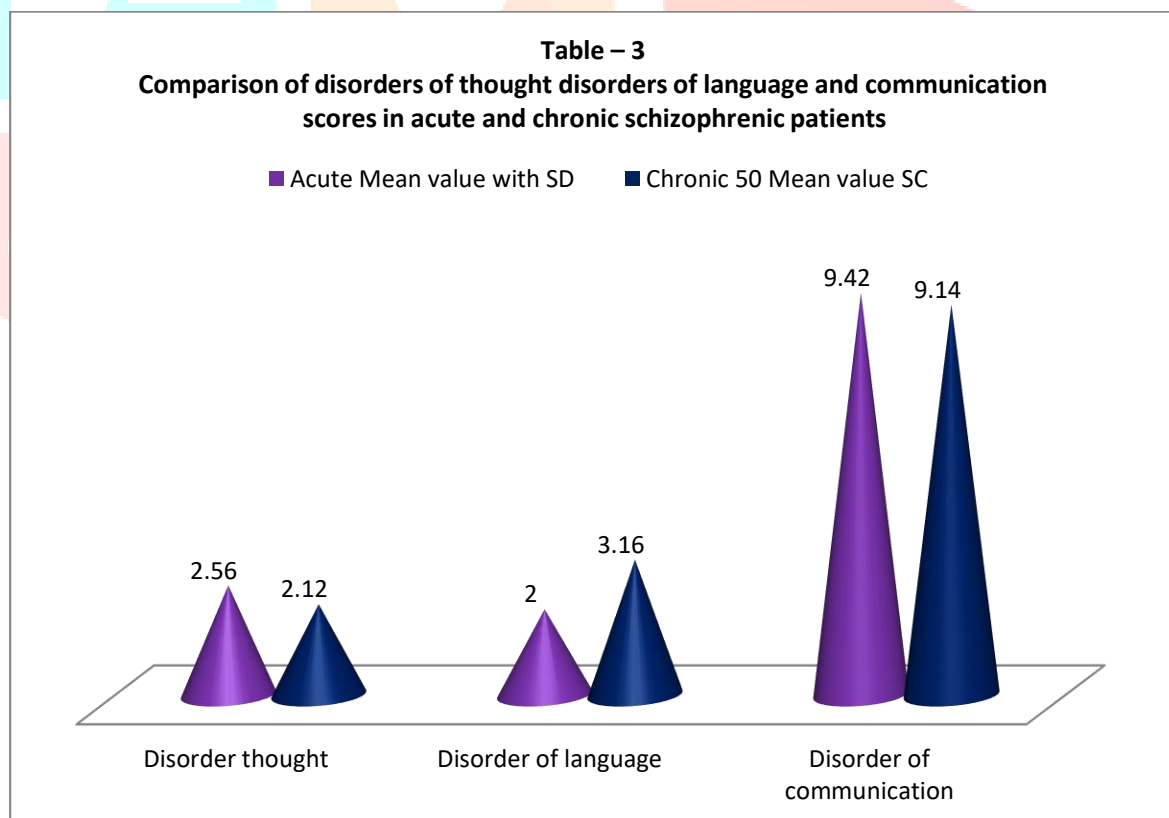
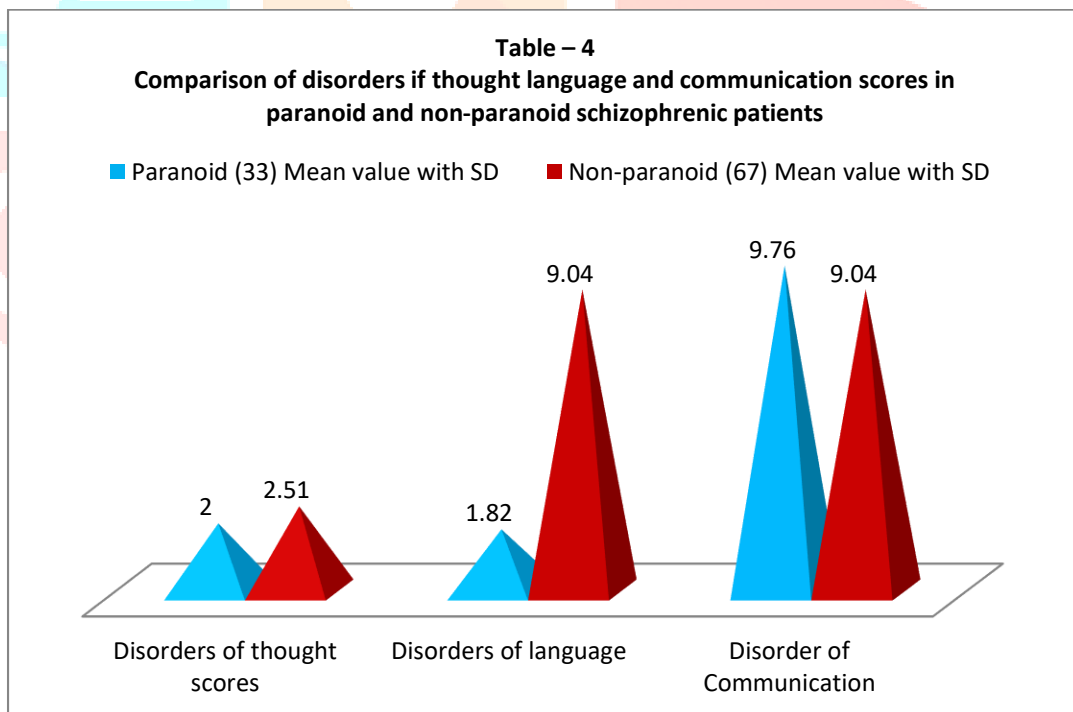


Table – 4

**Comparison of disorders if thought language and communication scores
in paranoid and non-paranoid schizophrenic patients**

Disorders score	Paranoid (33) Mean value with SD	Non-paranoid (67) Mean value with SD	P value
Disorders of thought	2 (SD± 2.55)	2.51 (SD± 3.24)	P>0.433
Disorders of language	1.82 (SD± 2.20)	9.04 (SD± 7.90)	P<10.47 *
Disorder of Communication	9.76 (SD±7.38)	9.04 (SD± 7.90)	P>0.660

Disorder of language has significant P value (P<0.04) (* = significant)



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