

# A Descriptive Study on the Phenomenology of Catatonia in a Tertiary Care Hospital

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## ABSTRACT

**Introduction:** Catatonia is a complex syndrome with multiple disorders involving behavior, mood, thought process, and the motor system. About 7–15% of inpatients in psychiatry are identified with catatonia. Published literature on the phenomenology of catatonia in India is available only as case reports.

**Aim:** The aim of the study was to study phenomenology, clinical profile, and diagnostic break up in patients presenting with catatonia to our hospital.

**Materials and Methods:** A cross-sectional descriptive study including 32 catatonia patients was conducted in the Psychiatry Department, Chengalpattu Medical College Hospital after obtaining Institutional Ethical Committee clearance. Informed consent was obtained from the patients caretakers. Disorders and Statistical Manual of Mental Disorders-5<sup>th</sup> Edition criteria for catatonia were used to include patients in this study. Using a semi-structured pro forma basic sociodemographic and clinical details were collected. Bush-Francis Catatonia Rating Scale (BFCRS) was used to assess the symptoms and severity.

**Results:** The mean age of the study population was  $33.16 \pm 12.28$  years (range 15–60 years) with 15 males (46.8%) and 17 females (53.1%). Among the catatonia patients, schizophrenia ( $n = 15$ , 50%) was the most common diagnosis after detailed evaluation. The mean BFCRS score was  $27.47 \pm 3.94$  (range: 18–32). The commonly observed catatonic symptoms were mutism, withdrawal, staring, immobility, and negativism (100%) followed by posturing/catalepsy (97%) and rigidity (93%).

**Conclusion:** This study has provided us with very important insights into the phenomenology, clinical profile, and diagnostic break up in catatonic patients following mental disorder. Schizophrenia was the most common diagnosis with mutism, withdrawal, staring, immobility, and negativism being the more common symptoms.

**Key words:** Catatonia, Phenomenology, Clinical profile

## INTRODUCTION

Catatonia is a complex syndrome with multiple disorders involving behavior, mood, thought process, and the motor system.<sup>[1]</sup> About 7–15% of inpatients in psychiatry are identified with catatonia.<sup>[2]</sup> Various authors have classified catatonia as acute or chronic, recurrent or periodic catatonia, as an independent syndrome or those occurring in association with psychiatric, neurological, and medical illnesses.<sup>[3]</sup> Recently, Diagnostic and Statistical Manual of

Mental Disorders-5<sup>th</sup> Edition (Disorders and Statistical Manual [DSM]-5) identified catatonia (293.89 [F06.1]) as a single diagnostic entity.<sup>[4]</sup>

Majority of the Indian studies have reported the occurrence of catatonia to be 4.5% in psychiatric inpatient admissions. Reports on the phenomenology of catatonia revealed mutism, immobility/stupor, staring, negativism, rigidity, posturing/catalepsy, and withdrawal as the most commonly observed symptoms in catatonia.<sup>[5]</sup> Often catatonia is poorly identified, as a high index of suspicion is required when concomitant medical or neurological disorders are present.

### Aim

The aim of the study was to assess the phenomenology, clinical profile, and diagnostic break up in patients diagnosed as catatonia, in Chengalpattu Medical College and hospital.

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Month of Submission : 02-2019  
Month of Peer Review : 03-2019  
Month of Acceptance : 03-2019  
Month of Publishing : 04-2019

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## MATERIALS AND METHODS

A cross-sectional descriptive study by purposive sampling method was conducted in the Department of Psychiatry, Chengalpattu Medical College and Hospital between January 2018 and August 2018. Institutional Ethical Committee clearance was obtained. 32 patients admitted in psychiatry ward with the diagnosis of catatonia according to DSM-5 (patients presenting with three or more symptoms out of 12 symptoms) and whose caretakers were giving consent were included in the study. Patient's caretakers who did not wish to take part in the study were excluded from the study. A semi-structured pro forma and Bush-Francis Catatonia Rating Scale (BFCRS) were used to assess the phenomenology and severity in the study population. BFCRS is a 23 items clinician-rated scale for catatonia screening.<sup>[6,7]</sup> According to DSM-5 patients were evaluated and diagnosed as catatonia (i) associated with another mental disorder (293.89) (F06.1), (ii) due to another medical condition (293.89) (F06.1), and (iii) catatonic disorder not otherwise specified.

## RESULTS

### Sociodemographic Profile

The mean age of the participants in this study was 33.16  $\pm$  12.28 years (range 15–60 years). Distribution of age in catatonia patients is depicted in Figure 1. Males constituted 46.8% ( $n = 15$ ) and females were 53.2% ( $n = 17$ ) [Figure 2]. Majority of the patients ( $n = 24$ , 75%) were from rural domicile and belonged to the lower socioeconomic status ( $n = 26$ , 81.25%) [Figure 3]. Majority of them were either illiterate ( $n = 13$ , 40.6%) or had done only primary education ( $n = 11$ , 34.4%). Both of these groups constituted around 75% of the study population. In our study, there were 29 adults and three adolescents. All the adolescents were students. Among the adult's, the majority were unemployed ( $n = 19$ , 54%).

### Clinical Profile

Schizophrenia ( $n = 15$ , 47%) was the most common diagnosis in our study population followed by schizophreniform ( $n = 4$ , 12%) and schizoaffective disorder ( $n = 4$ , 12%). Together they constitute 72% of the study population [Figure 4].

The two cases of catatonia with a general medical condition were referred to medicine department and were diagnosed subsequently as viral encephalitis and acute kidney injury/uremia.

Majority of patients were free from comorbid physical illness. 22% suffered from a seizure disorder [Figure 5].

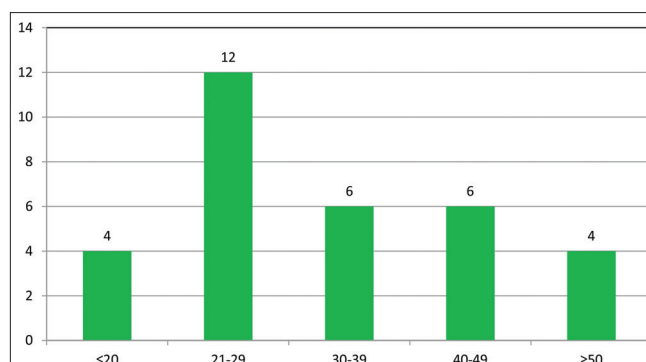


Figure 1: Distribution of age in catatonia patients

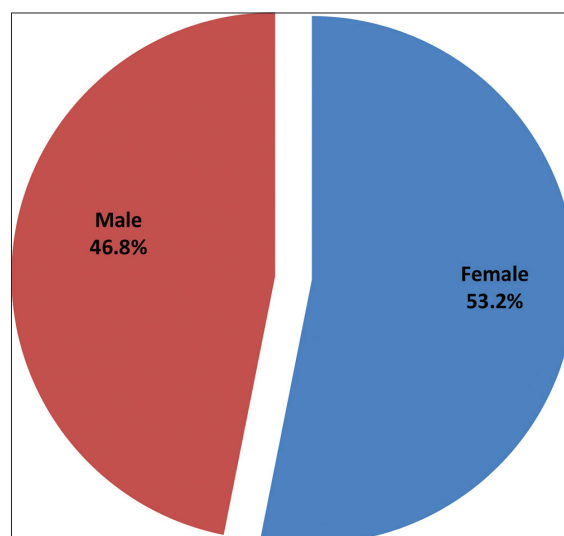


Figure 2: Distribution of gender in catatonia patients

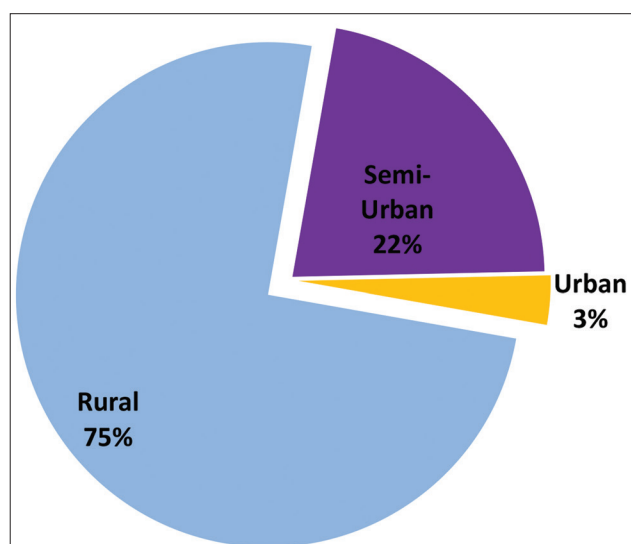


Figure 3: Distribution of domicile of catatonia patients

The precipitating stressor before the onset of illness could be identified in 84.4% of cases [Figure 6]. The common stressors were family conflicts, the death of a family member followed by a short duration of fever.

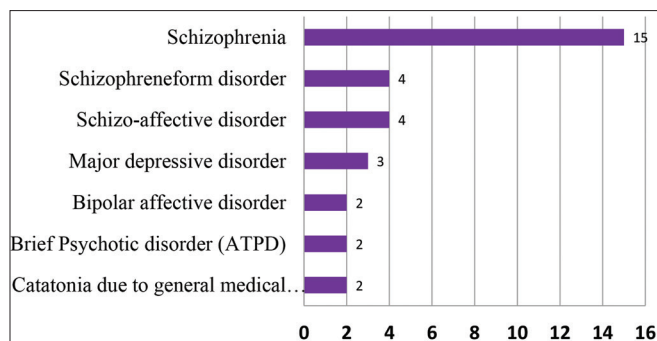


Figure 4: Distribution of diagnostic break up in catatonia patients

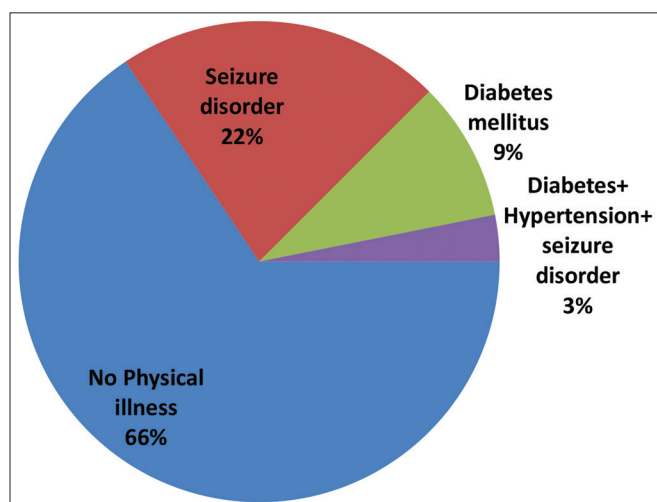


Figure 5: Distribution of co-morbid physical illness in catatonia patients

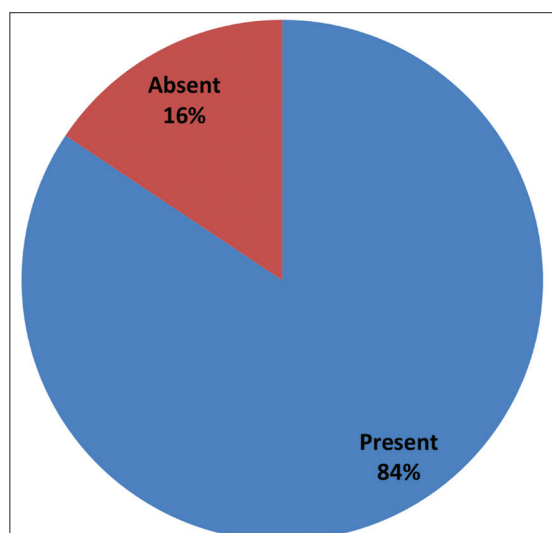


Figure 6: Status of precipitating factors for catatonia in our study

### BFCRS Score

The mean BFCRS score was  $27.47 \pm 3.94$  (range: 18–32). The most commonly observed catatonic symptoms were mutism, withdrawal, staring, immobility, and negativism

Table 1: Percentage distribution of BFCRS items

| Bush-Francis scale item | Percentage (%) |
|-------------------------|----------------|
| Excitement              | 18.75          |
| Immobility              | 100            |
| Mutism                  | 100            |
| Staring                 | 100            |
| Posturing/catalepsy     | 96.88          |
| Grimacing               | 62.50          |
| Echopraxia/echolalia    | 9.40           |
| Stereotypism            | 21.90          |
| Mannerism               | 37.50          |
| Verbigeration           | 9.40           |
| Rigidity                | 93.80          |
| Negativism              | 100            |
| Waxy flexibility        | 81.25          |
| Withdrawal              | 100            |
| Impulsivity             | 56.25          |
| Automatic obedience     | 59.38          |
| Mitgehen                | 9.40           |
| Gegenhalten             | 21.90          |
| Ambitendency            | 59.38          |
| Grasp reflex            | 31.25          |
| Perseverance            | 3.13           |
| Combativeness           | 25             |
| Autonomic abnormality   | 65.60          |

BFCRS: Bush-francis catatonia rating scale

(100%) followed by posturing/catalepsy (96.8%) and rigidity (93.8%) [Table 1]. The other features of catatonia such as waxy flexibility (81.25), autonomic abnormality (65.6%), grimacing (62.5%), automatic obedience and ambitendency (59.38%), impulsivity (56.25%), mannerism (37.5%), grasp reflex (31.25%), combativeness (25%), stereotypy and gegenhalten (21.9%), excitement (18.75%), echopraxia/echolalia, verbigeration, and mitgehen (9.4%), and perseverance (3.13%) were observed less frequently.

### DISCUSSION

In our study including 32 patients with catatonia, the mean age of the participants in this study was  $33.16 \pm 12.28$  years (range 15–60 years) which was similar to a study done by Swain *et al.*,<sup>[1]</sup> where mean age was  $26.2 \pm 10.5$  years (range 12–56). It is also similar to study done by Ramdurg *et al.*,<sup>[8]</sup> where catatonia onset was in the late 20s. In our study, catatonia had an almost equal preponderance in both males and females with slight increase proportion in females, 17 females (53.1%) and 15 males (46.8%). A similar higher female prevalence was observed by Ramdurg *et al.*<sup>[8]</sup> However, Swain *et al.*<sup>[1]</sup> observed a slightly higher preponderance in males compared to females.

Majority of our patients belonged to lower socioeconomic status and were from rural domicile. Majority of the participants were unemployed. A similar state was

documented by Swain *et al.*,<sup>[1]</sup> where most of the patients belonged to the rural domicile (85%) and was unemployed.

Among the catatonia patients, a detailed clinical evaluation after recovery found that majority of the participants suffered from schizophrenia ( $n = 15$ , 47%). It was followed by schizophreniform disorder ( $n = 4$ , 12%) and schizoaffective disorder ( $n = 4$ , 12%). This is similar to a study done by Swain *et al.*,<sup>[1]</sup> where schizophrenia was the common diagnosis after detailed evaluation. This is also similar to another study done by Seethalakshmi *et al.*,<sup>[9]</sup> where schizophrenia was the common diagnosis. The precipitating stressor was identified in 84% of the cases. This is similar to a study done by Swain *et al.*,<sup>[1]</sup> where the precipitating factor was identified in 75% of the cases.

The mean BFCRS score was  $27.47 \pm 3.94$  (range: 18–32) in our study. The commonly observed catatonic symptoms were mutism, withdrawal, staring, immobility, and negativism (100%) followed by posturing/catalepsy (97%) and rigidity (93%). The presence of the above symptoms should alert the clinician to suspect catatonia and to look for its other markers. Our study is comparable to the study done by Swain *et al.*,<sup>[1]</sup> where the mean BFCRS score ranged from  $29.78 \pm 5.88$  (Range 17–36). The commonly seen catatonic symptoms which were observed in the study population were mutism, mannerism, rigidity, staring, withdrawal, negativism, and posturing/catalepsy. It is also similar to the study done by Seethalakshmi *et al.*,<sup>[9]</sup> commonly observed symptoms were automatic obedience and gegenhalten (100%), withdrawal (83%), immobility and stupor (73%), posturing (55%), mutism (43%), and staring and negativism (40%). Chalasani *et al.* observed that classical signs of catatonia such as posturing, catalepsy, staring, and stupor were more frequent among psychiatric admissions in India than in Wales.<sup>[10]</sup>

## CONCLUSION

This study has come out with very important insights in the phenomenology, clinical profile, and diagnostic break up in catatonic patients following mental disorder. Schizophrenia was the most common diagnosis with mutism, withdrawal, staring, immobility, and negativism being the more common symptoms.

## Limitations and Future Directions

This study was done in patients with catatonia who were brought to our hospital. Many of the patients in the community would have not been identified as it is a hospital-based study. Large sample size and periodic follow-up are needed to study about catatonia comprehensively.

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**How to cite this article:** Humayoon A, Sudhakar S, Poornachandrika P. A descriptive study on the phenomenology of catatonia in a tertiary care hospital. *Int J Sci Stud* 2019;7(1):121-124.

**Source of Support:** Nil, **Conflict of Interest:** None declared.