The catatonia conundrum: Controversies and contradictions

Susanta Kumar Padhy*, Preeti Parakh†, M. Sridhar

Department of Psychiatry, PGI MER (Post Graduate Institute of Medical Education and Research), Chandigarh, India

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A B S T R A C T

Although catatonia is known to psychiatrists for more than a century, it is still poorly understood, often under recognized, have inspired debate and criticism about nosological status of the catatonic syndrome in recent times without reaching its conclusion. It can present with a number of psychiatric and medical illnesses and is easily treatable, though treatment response varies depending upon the underlying condition and can lead to a multitude of complications, if not treated. Some issues are more than forty catatonic signs are available to scientific audience for diagnosis; threshold number for labelling varies according to the nosological system followed and the underlying condition; and mood stabilizers like carbamazepine and lithium are helpful in some cases of idiopathic periodic catatonia. Researchers have been asking for a separate diagnostic category for catatonia since long and the debate has gained pace over the last few years, with new editions of both DSM and ICD coming up. Therefore, this paper looks at the controversies associated with the diagnosis and classification of catatonia, the arguments and counter-arguments and future directions, in crisp.

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1. Introduction

The catatonic syndrome has been known to psychiatrists for more than a century now. However, it still remains poorly understood and often under-recognized. Although it can present with a number of psychiatric and medical illnesses and is easily treatable, the diagnosis is often missed, leading to a multitude of complications. It has been proposed that the failure of the psychiatric diagnostic classification systems to give catatonia its due place has resulted in under-recognition, poor treatment choices and a high morbidity and mortality (Fink et al., 2010).

Since its first appearance in scientific literature, catatonia has inspired debate and criticism. This review looks at the controversies associated with the diagnosis and classification of catatonia, the arguments and counter-arguments and future directions.

2. The origin of the controversy

The German clinician Karl Ludwig Kahlbaum (1874) was the first to formulate the concept of catatonia. Although others before
him had reported patients with psychomotor signs, Kahlbaum described these signs as the manifestations of a single disease entity, which he named catatonia. He considered it an independent clinical entity, characterized by psychomotor alterations, cyclical in course and generally with a good prognosis (Kahlbaum, 1874). The patients he described would have currently met the criteria for bipolar disorder, depressive disorder, schizophrenia, and delirium.

While many clinicians endorsed Kahlbaum’s concept and presented similar cases, Kraepelin (1896) had different ideas. Kraepelin believed that catatonia was a phase of a progressively deteriorating condition which he called dementia praecox. Unlike Kahlbaum, he considered catatonic signs to be a manifestation of mental blocking, rather than primarily psychomotor disturbances (Kraepelin, 1896). Kraepelin’s concept also found supporters and with time, was adopted by the modern classificatory systems like Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Statistical Classification of Diseases and Related Health Problems (ICD).

ICD recognized catatonic schizophrenia as a subtype of schizophrenia as early as 1949 (World Health Organization, 1949), while DSM included a diagnosis of “schizophrenic reaction: catatonic type” in its first edition in 1952 (American Psychiatric Association, 1952). Schizophrenic reaction was renamed as schizophrenia in the second edition in 1968 (American Psychiatric Association, 1968) and catatonia became a subtype of schizophrenia.

3. Renewal of the controversy

The following years saw renewal of the debate with many studies reporting that catatonia was more common among depressed and manic patients than in those with schizophrenia (Abrams and Taylor, 1976; Morrison, 1975; Taylor and Abrams, 1977). Catatonia was also described in patients with neurologic and general medical illnesses (Gelenberg, 1991). In spite of these developments, there was no change in the nosology of catatonia in the next edition of DSM (1980), where catatonia was again described as a subtype of schizophrenia. The debate continued, with researchers asking for a revision of the nosological status of catatonia (Fink and Taylor, 1991). It was only in 1994, in the fourth edition of DSM, that catatonia was additionally recognized as a disorder due to a general medical condition and as a specifier in mood disorders, apart from being a subtype of schizophrenia.

4. Current issues

Researchers have been asking for a separate diagnostic category for catatonia since long and the debate has gained pace over the last few years, with both the fifth edition of DSM and the eleventh edition of ICD coming up. The arguments given in favour of catatonia as an independent entity are discussed below.

4.1. Catatonia is common

Catatonia has been described in association with many disorders. Among psychiatric conditions, catatonia is commonly seen in bipolar disorder, depressive disorder, schizophrenia and substance-induced disorders amongst others. In psychiatric inpatients, catatonia has been observed in 7%–17% of cases, commonly in those with mood or substance abuse disorders (Chalasani et al., 2005; Fink and Taylor, 2006). Around 28%–31% of patients with catatonia present with a manic or mixed episode while catatonia is associated with a schizophrenic disorder in only 10–15% of cases (Taylor and Fink, 2003). A recent prospective cohort study found catatonia in only 7.6% of patients with schizophrenia (Kleinhaus et al., 2012). Catatonia is seen in the paediatric population as well, in association with autism and mental retardation among other disorders (Dhossche and Bouman, 1997).

Catatonia has also been reported to result from a variety of medical conditions. The percentage of catatonia reported to be due to a general medical condition in studies on catatonic patients has been reported to range from 20% to 39% (Barnes et al., 1986; Bush et al., 1996a; Smith et al., 2012; Wilcox, 1986). A wide variety of medical conditions, including metabolic, neurological and substance induced disorders have been shown to cause catatonia (Ahuja, 2000; Carroll et al., 1994). The neurological conditions include strokes, tumours, inflammatory disorders, epilepsy, pan-neoplastic syndrome and others (Ahuja, 2000; Carroll et al., 1994). Metabolic, endocrine and nutritional disorders that can cause catatonia include diabetic ketoacidosis, hypernatremia, renal failure, hypothyroidism, hyperthyroidism, hyperparathyroidism, adrenal carcinoma, pellagra and vitamin B12 deficiency (Ahuja, 2000; Carroll et al., 1994). Catatonic signs can occur both during intoxication as well as withdrawal from drugs of dependence, like alcohol, opioids, amphetamines, cannabis and hallucinogens (Ahuja, 2000). Neuroleptic agents can cause or aggravate pre-existing catatonia. Neuroleptics are also associated with the occurrence of neuroleptic malignant syndrome, which is considered by some to be a subtype of catatonia (Fink, 1996; Mann et al., 1986). With such a ubiquitous presentation, catatonia should not be subsumed under schizophrenia but deserves to be an independent entity like delirium.

4.2. Catatonia is an identifiable syndrome

In spite of having a varied presentation with more than forty signs and symptoms, catatonia is identifiable as a syndrome. Published rating scales are available that facilitate the syndrome’s recognition (Bräunig et al., 2000; Northoff et al., 1999). Inter-rater reliability individually and across instruments has been shown to be good. Factor analytic studies have delineated a pattern among the catatonic features, indicating that a syndrome exists (Ungvari et al., 2009).

4.3. Catatonia of diverse etiologies is treated the same way

About 70% of catatonic patients respond to lorazepam alone, regardless of the cause of catatonia (Fink et al., 2010). Electroconvulsive therapy (ECT) is another effective treatment that works even when benzodiazepines fail to give the desired response (Bush et al., 1996b). Since neither benzodiazepines nor ECT is considered a treatment for schizophrenia and since response to antipsychotic agents is poor in catatonia, catatonia appears to be pathophysiologically different from schizophrenia. Though, there are some reports of efficacy of mood stabilizers like carbamazepine and lithium in idiopathic recurrent catatonia (Padhy et al., 2011).

4.4. Catatonia is under-recognized and under-researched

In a Dutch study, clinicians could identify catatonia in only 2% of 139 inpatients, but the research team was able to identify catatonia in 18% (van der Heijden et al., 2005), indicating that the diagnosis of catatonia is often missed. The researchers advocating a separate diagnostic category for catatonia argue that it will help in better recognition of catatonia as well as encourage research to improve our understanding of the neurobiological mechanisms of catatonia (Fink et al., 2010).

4.5. Better treatment

Catatonia is treatable once it is diagnosed (Ungvari et al., 1994). But non-identification of catatonia with schizophrenia in clinical