Taking an evidence-based approach to 10 common myths about catatonia: An educational review

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Introduction

Catatonia, derived from the Greek *kata* (down), and *tonos* (tone), was first described by German psychiatrist Karl Ludwig Kahlbaum in the 19th century. It is a complex neuropsychiatric disorder marked by motor, affective, and cognitive-behavioral abnormalities. It is associated with prolonged hospital stays, functional impairment, and significant economic burden. In the US alone, 13,630 annual hospital admissions for catatonia result in $1.15 billion in charges and 215,165 hospital days (1). The disorder can lead to various severe medical complications, such as dehydration, malnutrition, pressure ulcers, thromboembolism and cardiac arrhythmias to name a few.

Despite the life-threatening nature of catatonia, it remains underdiagnosed, with studies highlighting that clinicians often fail to recognise the features. A survey reported nearly 50% of psychiatrists misidentified catatonia features (2). Early recognition and prompt management are crucial to prevent complications and improve clinical outcomes. Enhanced education for healthcare providers is essential to improve diagnosis and treatment of the condition and ensure better care for affected patients.

Aim & Methods

The aim of this educational review is to inform clinical decision making and narrow the gap between the scientific literature and clinical practice. We discuss ten common myths about catatonia, based on the authors' collective experiences. We respond to each myth with an evidence-based approach (see Table 1).

A systematic search on PubMed, PsycInfo, Medline and EMBASE was conducted on 06/10/24 using the following search terms: 'catatoni* AND (myth* OR misconception* OR misunderstanding* or fiction* OR fallac*). This produced fourteen results, none of which addressed prevalent catatonia myths. Thus, we provide the following list of myths based on our collective clinical experiences, discussions with colleagues, and background in catatonia scholarship.

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Myths

Myth 1 – Catatonia is harmless

Reality 1: Catatonia can lead to a host of medical complications, including death.

Malignant catatonia is a severe, life-threatening form of catatonia characterized by autonomic dysfunction, with a mortality rate of up to 20% (3). It can arise from psychiatric and medical causes and requires urgent treatment, often in intensive care. Early ECT significantly improves survival and recovery.

Myth 2 – Catatonia implies schizophrenia

Reality 2: Catatonia can present in association with a wide range of psychiatric disorders. Moreover, the treatment of catatonia differs from the treatment of schizophrenia.

Catatonia, previously viewed as a subtype of schizophrenia is now recognised across various psychiatric conditions. Reported to present most commonly in mood disorders, also common in psychosis, autism, PTSD, and medical conditions (see table 2). Benzodiazepines remain the first line treatment.

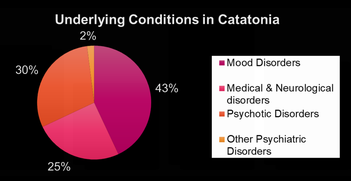

Figure 1: Underlying conditions in catatonia (4-5)

Myth 3 – Catatonia is exclusively a psychiatric condition

Reality 3: Catatonia can present due to a wide range of medical conditions

Catatonia not only presents in psychiatric condition but also from medical conditions such as encephalitis, lupus and structural brain abnormalities (6). Thorough medical assessment is crucial for first-episode catatonia to prevent misdiagnosis, ensure timely treatment and improve patient outcomes.

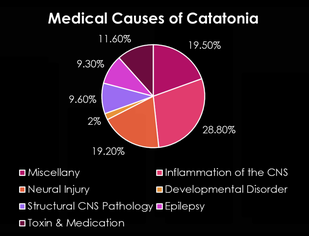

Figure 2: medical causes of catatonia (6).

Myth 4 – Catatonia is a zebra

Reality 4: Most catatonia is never diagnosed

Catatonia is often misperceived as a rare "zebra" diagnosis, yet studies report a prevalence rate of up to 20% in inpatient psychiatric and A&E settings, as well as up to 10% of medical patients in general hospitals (6). Underdiagnosis stems from its fluctuating course and assessment challenges. Increased clinician awareness, especially in A&E and general medicine, plus routine screening could improve recognition.

Myth 5 – Catatonia is always stuporous

Reality 5: Catatonia often fluctuates and can include excited phases

Kahlbaum described it as progressing through stages, including excitement and stupor. Periodic catatonia involves recurrent episodes with alternating agitation, impulsivity, stupor, and mutism, resembling bipolar disorder. Clinicians should monitor for fluctuating hyperkinetic, hypokinetic, and parakinetic features throughout the day in catatonic patients.

Myth 6 – Patients with catatonia are confused and unaware of their surroundings

Reality 6: Patients with catatonia are often frightened and can have detailed recollections of what occurred during an episode of catatonia

Patients with catatonia are often aware of their surroundings and can recall their experience, despite appearing unresponsive. Possible explanation for this could be a freeze reaction in response to fearful stimuli. Recognising this allows clinicians to offer empathetic care and strengthen the therapeutic alliance.

Myth 7 – Catatonia and delirium are mutually exclusive

Reality 7: Catatonia and delirium commonly co-occur

Studies have demonstrated catatonia and delirium can co-exist, with catatonic features present in up to 31% of delirious or ICU patients (7). ICD-11 removed the delirium exclusion, unlike DSM-5-TR. Clinicians should investigate neurological causes and consider initiating lorazepam trial at low doses.

Myth 8 – Lorazepam doses should be the same for catatonia as they are for other indications

Reality 8: High-dose lorazepam may be needed for maximal clinical response of catatonia

High dose lorazepam may be required for maximal clinical response, possibly up to 16mg daily (8). We recommend tailoring the regime to the patient's individual needs.

Myth 9 – Catatonia occurs exclusively in adults

Reality 9: Catatonia affects children as well, particularly those with neurodevelopmental disorders

Catatonia occurs in children too, with high mortality. It often presents in psychiatric and neurodevelopmental disorders, with symptoms sometimes resembling developmental regression and loss of previously acquired skills. Consider catatonia in neurodevelopmental children with new onset or sustained pre-existing motor features. Unique paediatric features of catatonia may include schizophasia, acrocyanosis and incontinence. Early recognition and use of assessment tools are crucial to prevent complications and improve outcomes.

Myth 10 – Catatonia is an unreliable construct

Reality 10: Psychopathological and therapeutic evidence point to catatonia as a valid entity.

Originally viewed as a subtype of schizophrenia, catatonia is now recognised as an independent syndrome in ICD-11. We argue that catatonia meets Kendler's criteria for diagnostic validity (9), due to its distinct features, neurobiological findings, and effective treatments.

Conclusion

Our review addresses the common myths contributing to the under recognition and mismanagement of catatonia. Several themes emerged, including the occurrence across ages and medical conditions as well as patient's preserved awareness. We urge clinicians to use validated screening tools, such as BFCRS, consider catatonia in delirium, and raise awareness in order to improve patients' outcomes and reduce the financial burden involved in treating the disorder.

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