

# Psychogenic non-epileptic events in young indian males - a hidden epidemic

## Abstract

Psychogenic nonepileptic seizures (PNES) are episodes of abnormal experience and observable behavior that superficially resemble epileptic seizures but unlike epileptic seizures, PNES are not caused by epileptic neuronal discharges in the brain. They are currently understood as a dissociative response to potentially distressing internal or external stimuli and can be included under the broad category of functional neurological disorders (FND).

**Keywords:** PNES; functional neurological disorders; FND; neurology; psychiatry; clinical psychology

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## Introduction

Current research suggests that PNES are best understood using a bio-psycho-social approach as there may not be a single factor or mechanism that explains PNES in all patients. Instead, a range of different interacting causes may contribute including: predisposing factors, such as a previous experience of significant trauma or conflict; precipitating factors occurring just prior to the onset of the seizure disorder; perpetuating factors that make it difficult to take control of seizures; and triggers, which occur before individual events. When compared to healthy populations or patients with epilepsy, those with PNES report higher rates of psychiatric problems including somatoform, dissociative, anxiety, mood and personality disorders. Patients with PNES also exhibit a higher prevalence of alexithymia traits and other emotional processing impairments. Psychopathology and significant impairments of functioning associated with PNES are reflected in a lower health related quality of life

Globally, 10-23% of children and 20-40% of adults have a diagnosis of PNES. Due to the significantly higher prevalence of PNES among young women, the issue is rarely looked at from the perspective of young males, leading to lack of adequate treatment for them.<sup>1-3</sup>

Young Indian males face a complex web of challenges when addressing mental health issues such as anxiety, PTSD, and depression, which are compounded by deeply ingrained societal stigma and cultural expectations. Traditional notions of masculinity prevalent in many parts of India emphasize traits like strength, resilience, and emotional stoicism, perpetuating the belief that men must suppress vulnerability and endure hardships silently. This cultural conditioning discourages open discussions about mental health, leaving young men feeling trapped by the pressure to conform to these ideals. Consequently, they may internalize their emotions, which can manifest as emotional isolation, self-doubt, and a worsening of mental health conditions over time. In this case report we discuss some of these issues.<sup>4,5</sup>

## Case report

A previously healthy 16-year-old male (henceforth referred to as Mr. X), presented with 3-month history of recurrent episodes of sudden onset of headache followed by unresponsiveness (apparent

loss of consciousness). He said during the event he was able to feel if someone was touching him but could not comprehend or vocalize. Reported events were of varying duration (3 minutes to 30 minutes) unaccompanied by tongue bite or loss of bladder control. MRI brain epilepsy protocol was reported normal. Video-EEG was carried out for characterization of above episodes. During the EEG a typical event was captured during which the patient suddenly became unresponsive and his hands dropped to the side. There was no response to verbal commands. EEG background remained organized, symmetrical and continuous with a well-defined posterior dominant rhythm of 10 Hz indicative of psychogenic unresponsiveness (psychogenic non-epileptic event). Previously, he had also seen a psychiatrist for some mental health issues where he had been diagnosed as having bipolar disorder. He was put on high dose anti-psychotics. During subsequent sessions with the neuropsychologist, it was revealed that Mr. X had been repressing certain strong emotions resulting from a traumatic breakup and had also suffered bullying at school after his peers found out about his psychiatric treatment. After five sessions of CBT, Mr. X had begun showing improvement in his mood and affect. The frequency of PNES also reduced.

## Discussion

Paroxysmal events, without an organic cause, likely have a psychological origin. However, due to lack of education, awareness, and training in the diagnosis and management of functional neurological symptoms, individuals with PNES often fall prey to misdiagnosis and inappropriate treatment. According to Kuyk and colleagues,<sup>6</sup> around 25% of the individuals visiting epilepsy centers likely have functional seizures. Bompair et al.<sup>1</sup> observed that the prevalence of PNES is significantly more among young adult females (75%) as compared to males.

Timely diagnosis and management of PNES requires a multidisciplinary collaboration between neurologists and clinical psychologists/neuropsychologists. Diagnosing PNES typically requires video-EEG monitoring, which records brain activity during an episode. In PNES, the EEG does not show the electrical abnormalities seen in epilepsy. It is important to rule out epilepsy and other medical conditions before addressing the psychological causes, often using psychotherapy, especially cognitive-behavioral therapy (CBT), or trauma-focused therapy, stress management techniques,

and medications, if there is an underlying mental health condition such as depression or anxiety.

The biopsychosocial model of PNES emphasizes that the condition may be influenced by various predisposing, precipitating, and perpetuating factors. Traumatic experiences, emotional stress, and unresolved psychological conflicts often serve as underlying triggers for these episodes. Individuals with PNES frequently have a history of psychiatric disorders, including anxiety, depression, and dissociative symptoms. These psychological factors, combined with societal expectations and stigma can create a complex environment in which emotional distress manifests as physical symptoms resembling seizures. This is particularly true for certain populations, such as young males in India, who may face heightened societal pressures to conform to traditional notions of masculinity further complicating their mental health challenges. As a result, though undocumented, a rise in functional neurological symptoms among young adult males can be expected in India.<sup>7</sup>

In India, hypermasculine societal norms, often propagated by popular culture and media, can make it difficult for men and boys to talk about their emotional problems, like relationship breakups, bullying, marital problems, and more, making them tabooed and stigmatized subjects. This can lead to mental health concerns that remain suppressed, and if not addressed in a timely fashion, can lead to a host of physical and functional symptoms. As seen in the case of Mr. X, social and relationship issues most likely contributed to PNES and after a few sessions of therapy, there was a reduction in symptoms. While this paper highlights a single case, the authors have noted an increase in young males visiting the neurology OPD with functional neurological symptoms. Therefore, public education and cultural awareness around mental health are crucial for reducing stigma and encouraging individuals to seek help when needed, especially in societies where mental health remains a taboo subject. There is an urgent need to have programs focusing on improving men's mental health to prevent problems like PNES from reaching epidemic proportions.

## Conclusion

Psychogenic nonepileptic seizures (PNES) are functional neurological symptoms that resemble epileptic seizures but arise from psychological distress rather than abnormal brain activity. Our case of a 16-year-old male highlights the significant role of emotional repression and social stigma in the manifestation of PNES, particularly among young Indian males. Due to prevailing cultural norms, men are often discouraged from expressing vulnerability, leading to emotional suppression and, in some cases, the development of psychosomatic symptoms.

Misdiagnosis and inappropriate treatment of PNES remain common due to a lack of awareness among healthcare professionals.

A multidisciplinary approach involving neurologists and clinical psychologists is essential for accurate diagnosis and effective management, typically through psychotherapy such as CBT along with judicious use of psychopharmacology. The increasing prevalence of functional neurological symptoms among young males in India underscores the urgent need for public education and mental health programs that challenge harmful gender norms and encourage help-seeking behavior. Addressing these societal barriers is crucial in preventing PNES and improving mental health outcomes for young men.

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## Conflicts of interest

The authors declare that there are no conflicts of interest

## Disclosures

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