ELSEVIER

Contents lists available at ScienceDirect

# Seizure: European Journal of Epilepsy

journal homepage: www.elsevier.com/locate/seizure



# Check for updates

## Shame, pediatric PNES, and COVID-19

ARTICLE INFO

Keywords COVID-19 PNES Shame Children

The recent papers on shame in patients with psychogenic non-epileptic seizures (PNES) are noteworthy [1,2]. The emotion of shame has not received its due recognition in the pathophysiology of PNES. We agree with the authors on the difficulties of assessing this emotion owing to its subjectivity and possible inability of patients to identify, understand, and phrase it [1]. Another important reason for fewer discussions on the subject may be the unawareness of the treating professionals. We appreciate the authors for trying to set the ball rolling. We would like to share our thoughts on shame in pediatric PNES and the imminent impact of the changing social fabric and COVID-19 pandemic in this context.

There is a paucity of literature on shame in pediatric PNES. However, the studies describing the stressors (such as bullying, body image issues, low self-esteem) and psychiatric co-morbidities in pediatric PNES provide indirect evidence for the role of this emotion [3]. Also, the phenomenology of dialeptic PNES (the commonest semiology in pediatric PNES) resembles the body language associated with shame (shoulder slump, downward head movement, and collapse of upper torso) [3,4]. Hence, future studies exploring this emotion in pediatric PNES are needed.

The authors have methodically discussed the developmental trajectory of shame and the role of poor parenting and traumatic experiences in atypical shame development [1]. We would like to add on the potential influence of changing social fabric and COVID-19 pandemic in this context. With social media being ubiquitous, the fear of being continuously judged and scrutinized from an early age can affect the developmental trajectory of self-conscious emotions including shame. The COVID-19 pandemic has further heightened social media exposure beginning from early childhood. Besides, the traumatic experiences and scars of this pandemic have impacted the mental health of children and are likely to atypically shape these emotions and influence their long-term mental health [5-7]. Few small studies on adults with PNES during the pandemic showed a higher frequency of events [8,9]. However, the increase or decrease in the population burden of PNES during the pandemic is unclear. With limited literature and difficulties in research on the burden of PNES, it will be difficult to assess the long-term impact of the pandemic on PNES burden [10].

### **Declarations of Competing Interest**

The authors have no conflict of interest to disclose with regard to this.

Funding

None.

Ethical statement

We confirm that we have read the Journal's position on issues involved in ethical publication and affirm that this report is consistent with those guidelines.

#### References

- Reuber M, Roberts NA, Levita L, Gray C, Myers L. Shame in patients with psychogenic nonepileptic seizure: a narrative review. Seizure 2021. https://doi.org/ 10.1016/j.seizure.2021.10.017. in press.
- [2] Myers L, Gray C, Roberts N, Levita L, Reuber M. Shame in the treatment of patients with psychogenic nonepileptic seizures: the elephant in the room. Seizure 2021. https://doi.org/10.1016/j.seizure.2021.10.018. in press.
- [3] Madaan P, Gulati S, Chakrabarty B, Sapra S, Sagar R, Mohammad A, et al. Clinical spectrum of psychogenic non epileptic seizures in children; an observational study. Seizure 2018;59:60–6. https://doi.org/10.1016/j.seizure.2018.04.024.
- [4] Szabo L, Siegler Z, Zubek L, et al. A detailed semiologic analysis of childhood psychogenic nonepileptic seizures. Epilepsia 2012;53:565–70.
- [5] Panda PK, Gupta J, Chowdhury SR, Kumar R, Meena AK, Madaan P, et al. Psychological and behavioral impact of lockdown and quarantine measures for COVID-19 pandemic on children, adolescents and caregivers: a systematic review and meta-analysis. J Trop Pediatr 2021;67:fmaa122.
- [6] Sharma M, Aggarwal S, Madaan P, Saini L, Bhutani M. Impact of COVID-19 pandemic on sleep in children and adolescents: a systematic review and meta-analysis. Sleep Med 2021;84:259–67. https://doi.org/10.1016/j.sleep.2021.06.002.
- [7] Aggarwal S, Madaan P. Pediatric mental health during COVID-19 pandemic: concerns in developing countries. J Trop Pediatr 2021. https://doi.org/10.1093/tro-pej/fmab099. in press.
- [8] Valente KD, Alessi R, Baroni G, Marin R, Dos Santos B, Palmini A. The COVID-19 outbreak and PNES: the impact of a ubiquitously felt stressor. Epilepsy Behav 2021; 117:107852. https://doi.org/10.1016/j.yebeh.2021.107852.
- [9] Asadi-Pooya AA, Farazdaghi M. Effects of the COVID-19 pandemic on characteristics of functional (psychogenic) seizures. J Psychosom Res 2021;147:110514. https://doi.org/10.1016/j.jpsychores.2021.110514.

[10] Asadi-Pooya AA, Sperling MR. Epidemiology of psychogenic nonepileptic seizures. Epilepsy Behav 2015;46:60–5. https://doi.org/10.1016/j.yebeh.2015.03.015. May.

Shivali Aggarwal<sup>a</sup>, Priyanka Madaan<sup>b,\*</sup> <sup>a</sup> Department of Psychiatry, All India Institute of Medical Sciences, New Delhi, India <sup>b</sup> Pediatric Neurology Unit, Department of Pediatrics, Postgraduate Institute of Medical Education and Research, Chandigarh, India

 $^{\ast}$  Corresponding author.

E-mail address: doc.priyanka72@gmail.com (P. Madaan).