



## Experience of psychogenic nonepileptic seizures in the Canadian league against epilepsy: A survey describing current practices by neurologists and epileptologists

Alexandra Carter<sup>a</sup>, Alyssa Denton<sup>a</sup>, Lady D. Ladino<sup>a,b</sup>, Islam Hassan<sup>c</sup>, Tyson Sawchuk<sup>d,e</sup>, Thomas Snyder<sup>f</sup>, Mirna Vrbancic<sup>g</sup>, Markus Reuber<sup>h</sup>, Richard Huntsman<sup>i</sup>, Jose F. Tellez-Zenteno<sup>a,\*</sup>, PNES Canada Group

<sup>a</sup> Saskatchewan Epilepsy Program, College of Medicine, Division of Neurology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

<sup>b</sup> Epilepsy Program, Neurology Section, Hospital Pablo Tobón Uribe, Universidad de Antioquia, Medellín, Colombia

<sup>c</sup> Vancouver General Hospital Epilepsy Program and British Columbia Neuropsychiatry Program, University of British Columbia, Vancouver, British Columbia, Canada

<sup>d</sup> Children's Comprehensive Epilepsy Program, Pediatric Neurosciences, Alberta Children's Hospital, Calgary, Alberta, Canada

<sup>e</sup> Alberta Children's Hospital Research Institute, Calgary, Alberta, Canada

<sup>f</sup> Department of Psychiatry and Comprehensive Epilepsy Program, University of Alberta Hospital, Canada

<sup>g</sup> College of Medicine, Division of Psychiatry, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

<sup>h</sup> Academic Neurology Unit, University of Sheffield, Sheffield, UK

<sup>i</sup> College of Medicine, Division of Pediatric Neurology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

### ARTICLE INFO

#### Keywords:

Conversion disorder  
Functional seizures  
Nonepileptic attacks  
Pseudoseizures  
Psychotherapy

### ABSTRACT

**Purpose:** Psychogenic nonepileptic seizures (PNES) are one of the most common differential diagnoses of epilepsy. Our objective is to describe current medical care in Canada and identify patterns of practice and service gaps.

**Methods:** In 2015, a 36-question survey was sent via email to the 131 members of the Canadian League Against Epilepsy. The questions were designed after literature review and discussion with the ILAE PNES Task Force. Questions were separated into 5 sections: 1) the role of the respondent and their exposure to PNES, 2) diagnostic methods, 3) management of PNES, 4) etiological factors, and 5) problems accessing health care.

**Results:** Sixty-two questionnaires were analyzed (response rate: 47%). Most respondents were epileptologists (76%). The majority of respondents personally diagnosed PNES and communicated the diagnosis to the patient, but only 55% provided follow-up within their practice and only 50% recommended or arranged treatment. Many (35%) were either unfamiliar with the diagnosis of PNES or inexperienced in arranging or offering treatment. Most (79%) provided follow-up to patients with concomitant epilepsy, but when PNES was the sole diagnosis follow-up rates were low. Although 84% of respondents felt that individualized psychological therapy was the most effective treatment, 40% of patients were not referred to psychotherapy and in most cases availability such therapy was low (30–60%).

**Conclusions:** Canadian health professionals' understanding of PNES mostly reflects current international expert opinion. Once diagnosis is made however, the majority of patients are discharged from neurological services without appropriate psychological care.

### 1. Introduction

Psychogenic nonepileptic seizures (PNES) are episodes of seizure-like symptoms that are not associated with epileptiform discharges on electroencephalogram (EEG). They can be remarkably difficult to

distinguish from epileptic seizures: both may involve alterations in mental status and behavior; sensory or perceptual disturbances; as well as simple or complex motor patterns [1]. The diagnosis of PNES may be suggested by: (i) Failure of multiple anticonvulsants (ii) “seizures” triggered by stress and other triggers atypical for epilepsy (iii) lack of

\* Corresponding author at: Division of Neurology, Department of Medicine, Royal University Hospital, 103 Hospital Drive, Box 26, Room 1622, Saskatoon, SK, S7N 0W8, Canada.

E-mail address: [jose.tellez@usask.ca](mailto:jose.tellez@usask.ca) (J.F. Tellez-Zenteno).

<https://doi.org/10.1016/j.seizure.2018.08.025>

Received 14 May 2018; Received in revised form 27 July 2018; Accepted 31 August 2018

1059-1311/© 2018 British Epilepsy Association. Published by Elsevier Ltd. All rights reserved.

incontinence or injury such as tongue biting during events. PNES are a very common phenomenon, cited as the third most frequent diagnosis in seizure clinic patients [2]. The incidence is 1.4–4.9/100,000/year, and the prevalence is estimated to be 2–33/100,000 [3]. In many cases, PNES are associated with significant disability: while previous studies suggest that PNES may remit in the short term with appropriate communication of the diagnosis (up to 30% of cases), the long-term prognosis is poor for most patients, especially in adults, with 70% remaining disabled several years after initial diagnosis [4]. Pediatric patients tend to have a higher response rate to treatment possibly related to the diagnosis being made earlier. Moreover, these episodes are often misdiagnosed and patients are at risk of receiving inappropriate medications for prolonged periods or invasive interventions such as intubation and vagal nerve stimulation [5,6].

Neurologists are best placed within the medical community to diagnose and arrange treatment for PNES, given their specialist training in the differential diagnosis of epileptic seizures and their access to the diagnostic gold standard: long-term video-EEG monitoring. The question who should provide treatment is more difficult to answer. Most PNES fulfill the diagnostic criteria of a psychological conversion or dissociative type disorder. Many patients with PNES have psychiatric comorbidities, suggesting that psychiatrists may play an important role in further diagnostic assessment and treatment [7]. Although no evidence-based management guidelines exist at present, there is evidence that psychological treatment is indicated and effective for many patients with this disorder [8]. Such treatments would usually be provided by psychotherapists or psychologists. However, many psychiatrists, psychologists and psychotherapists only have limited experience with the management of patients with PNES.

Common practices employed by experts in Canada must be identified in order to be used as a basis for implementing guidelines for physicians diagnosing and managing PNES. The International League Against Epilepsy (ILAE) has recently created an international PNES Task Force to describe current treatment practices and identify service gaps around the world [9,10]. Our objective in this paper is to focus on responses to an ILAE survey from Canada, and to describe current management in this country, while identifying heterogeneity in practice styles and service gaps, in order to provide a basis for a future standardized management approach.

## 2. Methods

### 2.1. Questionnaire

In 2015 an internet survey was sent to all members of the Canadian League Against Epilepsy (CLAE) by email. A web-based survey was administered to have the broadest reach. The CLAE had 131 members at the time of the survey. Potential recipients included adult and pediatric neurologists, epileptologists, psychiatrists, neuropsychiatrists, psychologists, neuropsychologists, nurses, neurosurgeons, social workers, and EEG technologists.

The questions were designed after literature review and discussion with PNES Task Force of the ILAE. This survey was designed with the intent of quantifying common practices regarding PNES in Canada. Questions were separated into 5 sections: 1) the role of the respondent and their exposure to PNES, 2) diagnostic methods, 3) management of PNES, 4) etiological factors, and 5) problems accessing health care. The questionnaire consisted of 36 questions. Thirty-one questions offered predefined choices; five were open-ended questions. The response format was categorical for close-ended questions (i.e. multiple-choice format) and “check the answers that apply” format for lists (Supplementary Material—Appendix A). The survey required 10–20 min to complete. A panel of experts in neurology and psychology reviewed and tested the survey to evaluate the content, the flow, and the format of the questions. The questions in the survey were inspired by similar surveys carried out previously in the UK, the USA and Chile

[1,11,12].

### 2.2. Data and analysis

Data were collected using the online software Survey Monkey, which provides anonymous collection of survey responses. Responses were entered directly into the Survey Monkey database and were then collated, reformatted and imported to SPSS version 21 (SPSS Inc., Chicago, IL, USA). Questionnaires on which less than 50% of the items had been completed were excluded from the analyses. Descriptive statistics were used to assess frequencies and distributions. Open-ended questions were reviewed for qualitative assessment. All analyses were performed using SPSS version 21.

### 2.3. Ethics

This cross-sectional study was led by the Epilepsy Program in Saskatchewan, Canada. The biomedical research ethics board at the University of Saskatchewan approved this study. Signed informed consent was not required because clinicians were not providing confidential health information.

## 3. Results

### 3.1. General data

The survey response rate was 47% (62/131). All sixty-two questionnaires were included in the data analysis. All respondents were fully trained. The majority (76%) of respondents were young male epileptologists (Table 1). Fifty-eight percent of survey respondents were between 31 and 50 years old. All respondents treated both hospital

**Table 1**  
General information of the participants (n = 62).

Age (years)	
21–30	2 (3.2)
31–40	16 (25.8)
41–50	20 (32.3)
51–60	11 (17.7)
61–70	8 (12.9)
71–80	5 (8.1)
Sex	
Male	41 (66)
Female	21 (34)
Province	
Ontario	23 (37)
Saskatchewan	9 (14.5)
Alberta	9 (14.5)
Quebec	7 (11.2)
Nova Scotia	6 (9.6)
British Columbia	5 (8)
Manitoba	3 (4.8)
Specialty	
Epileptologist	47 (75.8)
General neurologist	4 (6.5)
Neuropsychologist	4 (6.5)
EEG technologist	3 (4.8)
Epilepsy nurses	2 (3.2)
Psychiatrist or Neuro-Psychiatrist	2 (3.2)
Patients attended	
Children (aged 0–18)	27 (43.5)
Adults (aged 19–74)	50 (80.6)
Elderly patients (75 and older)	39 (62.9)
Patients with intellectual disability	53 (85.5)
Time to travel to the appointment (hours)	
Up to 1	24 (38.7)
1–2	27 (43.5)
3–4	10 (16.1)

Download English Version:

<https://daneshyari.com/en/article/11002076>

Download Persian Version:

<https://daneshyari.com/article/11002076>

[Daneshyari.com](https://daneshyari.com)