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Brief Communication

Bridging a clinical gap in psychogenic nonepileptic seizures: Mental health provider preferences of biopsychosocial assessment approaches

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ABSTRACT

Management of psychogenic nonepileptic seizures (PNES) is complex, requiring multidisciplinary care. A standardized assessment and formulation approach to PNES is lacking, yet use of a comprehensive model may alleviate problems such as mental health aftercare noncompliance. Although a biopsychosocial (BPS) approach to PNES balancing predisposing, precipitating, and perpetuating (PPP) variables has been described and has been recently tested in pilot form, it is unclear how this assessment style is perceived among community mental health practitioners such as psychotherapists (including psychologists, counselors, and social workers). We predicted preference of a comprehensive "BPS/PPP" assessment style by those most involved in PNES care (i.e., community psychotherapists). One hundred and forty-three community-based social workers and counselors completed a survey featuring a fictional PNES case followed by assessment style options ("Multiaxial," "Narrative," and "BPS/PPP"). Respondents clearly preferred the robust BPS/PPP approach over less-comprehensive multiaxial and narrative assessments ($p < 0.0001$). Reasons for choosing the BPS/PPP by respondents include ease of organization, clear therapeutic goals, and comprehensive nature. This assessment of acceptability of a BPS/PPP approach to PNES assessment among community mental health practitioners may provide a patient-centered mechanism to enhance referrals from the neurological to mental health setting. Implications and future directions are explored.

1. Introduction

Psychogenic nonepileptic seizures (PNES) are characterized by paroxysmal episodes resembling epileptic seizures yet lacking electrical correlation as measured by the gold-standard diagnostic approach, video-electroencephalography (vEEG) [1,2]. Management of PNES is complex, requiring multidisciplinary care starting with a robust biopsychosocial assessment because of the multifactorial nature of the condition. Nonetheless, a standardized multidimensional approach to evaluating PNES is lacking. The use of a comprehensive assessment model may ease the transition of patient care from the diagnosing team to the outpatient treatment provider.

Traditional models for assessing and formulating PNES from a psychosocial or psychiatric perspective include the multiaxial approach and a narrative approach. The multiaxial approach derives from the 1980 publication of the third edition of the Diagnostic and Statistical Manual of Mental Disorders and involves a linear listing of psychiatric diagnoses, personality disorders/traits, medical comorbidities, psychosocial stressors, and a global assessment of functioning still in use today [3]. A basic narrative assessment relies on an unstructured paragraph format. Given both the complexity of PNES and the objective of such evaluations directed at guiding future therapeutics, these traditional approaches seem inadequately simplistic. To complicate matters, studies have demonstrated suspicion among psychiatrists of neurologists' intentions when consulting for PNES evaluations (such as fear of patient "dumping" onto psychiatric services) [4].

We thus recently tested clinician preference for a comprehensive assessment model [5] incorporating predisposing, precipitating, and perpetuating factors (the "3 P's," or PPP) as well as biopsychosocial (BPS) factors contributing to PNES [6] against traditional models, namely multiaxial or narrative. In our pilot evaluation, we found a statistically significant difference in assessment preference for this "BPS/PPP" model between psychiatrists (defined in our cohort as those performing one-time consultation evaluations of PNES in the medical setting) and nonpsychiatrists (defined in our cohort as both neurologists diagnosing patients with PNES as well as psychologists, therapists, counselors, social workers, and other psychotherapists inheriting/treating patients with PNES). Psychiatrists preferred multiaxial and narrative models because of ease of use, brevity,

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and familiarity. Nonpsychiatrists alternatively preferred the BPS/PPP assessment approach, citing its comprehensive nature, high detail, and explicit therapeutic targets. The pilot suggests incongruent priorities and preferences in the psychiatric formulation approach to PNES, a likely impediment to ongoing collaborative efforts with this patient population.

As yet to be determined is whether the BPS/PPP assessment approach translates to altered clinical outcomes in the care of patients with PNES. The first step in determining the potential effects of this is to better understand the preferences of mental health practitioners to whom patients with PNES are referred. To address this question, we studied whether the BPS/PPP model is favored by receiving psychotherapists. We hypothesize higher preference for the BPS/PPP over multiaxial and narrative assessment models in a large cohort of community mental health providers and thus embarked on testing this premise.

2. Methods

The study was approved by the Institutional Review Board of the Cleveland Clinic Foundation. A completed survey indicated consent. An electronically delivered confidential, anonymous, and uncompensated 5-item survey was distributed to two cohorts of practicing psychotherapists across the state of Ohio: 1) social worker group (n = 1042) and 2) counselor group (n = 500). The study populations were selected from two professional organizations (the National Association of Social Workers Ohio Chapter and the Ohio Counseling Association). Each of these associations distributed a weblink to their respective membership via a listserv; a reminder was sent 2 weeks after the initial distribution. As with the aforementioned pilot version of this study [7], the survey featured a clinical vignette of a typical patient with PNES on an epilepsy monitoring unit (Fig. 1). Respondents were asked to rank in order of preference three assessment approaches: multiaxial, narrative, and biopsychosocial (BPS/PPP) assessments (Fig. 1). Respondents were also asked to briefly explain their ranking choices. Chi-square analysis and goodness-of-fit testing were used to assess statistical significance between preferences.

3. Results

Fig. 2 captures the results of our analysis. A total of 143 psychotherapists completed the survey, 79% of whom had at least 2 years of posttraining clinical experience as a psychotherapist (question 1) and over a third of whom listed cognitive–behavioral psychotherapy as their treatment modality of choice, among others (question 2). One hundred three psychotherapists ranked BPS/PPP first, and 40 ranked

28 year old female with a PMH of asthma, migraines, fibromyalgia, and depression is admitted to the epilepsy monitoring unit for evaluation of seizure-like episodes x 12 months. Episodes are brief periods of unresponsiveness with forced eye closure, no incontinence/tongue biting, no sensorimotor issues/confusion upon resolution; 3 such episodes occur while on video-EEG without electrographic correlate. Psychogenic nonepileptic seizures (PNES) is diagnosed. Psychiatry is consulted to address PNES. Evaluation reveals a history of depression and anxiety since adolescence, as well as a family history of maternal substance abuse/bipolar disorder and a close sister with epilepsy. The patient also has a history of early separation from parents at age 6 (including foster home care). She was admitted numerous times for asthma exacerbations during childhood and adolescence. Her primary care physician currently prescribes Lexapro 10mg, Seroquel 50mg at bedtime, and Xanax 0.5mg BID PRN (rarely used).

Socially, patient is single, lives alone with her 2 children (their father is uninvolved), and has sole social support in "sometimes abusive" boyfriend (no physical abuse). She completed high school and started medical technician training, but stopped 2 years ago due to worsening depression and chronic pain; she currently seeks disability. She denies any overt "stress" in her life. Core psychiatric symptoms include chronic insomnia, difficulty concentrating, low energy, some irritability, and chronically-low mood, but no suicidal ideation, intent, or plans, and no symptoms of mania, psychosis, or confusion. She adds that her depression has "been better since being in hospital."

Please rank the following formulation styles in order of preference:

1) **Multiaxial Psychiatric Assessment**
Axis I: Major Depressive Disorder; rule-out Conversion disorder/PNES
Axis II: deferred
Axis III: Migraines, Asthma, Obesity, Fibromyalgia
Axis IV: social isolation, unemployment/disability, medical burden
Axis V: GAF 65

2) **Narrative Psychiatric Assessment**
28 year old female with PMH asthma, obesity, fibromyalgia, and migraines, admitted to the EMU for evaluation of seizure-like episodes and diagnosed with PNES by VEEG. Risk factors for PNES include family history of psychiatric illness, personal history of depression, history of neglect, unemployment/disability status, and lack of social supports.

3) **Biopsychosocial/3P ("BPS/PPP") Psychiatric Assessment**
28 year old female with PMH asthma, obesity, fibromyalgia, and migraines, admitted to the EMU for evaluation of seizure-like episodes and diagnosed with PNES by VEEG. Risk factors for PNES include:

CASE FORMULATION	BIOLOGICAL	PSYCHOLOGICAL	SOCIAL
PREDISPOSING (early)	Family history of psychiatric illness (genetic loading)	Early separation (dysfunctional attachment); early inability to communicate distress; early family/learned epilepsy experience	Foster care home, chaotic upbringing
PERPETUATING (ongoing)	Somatic hyper-vigilance (migraines, asthma, fibromyalgia), obesity	Chronic reliance on medical care; dependence, denial/minimization, and somatization traits; chronic depression; alexithymia	Single mother status/low social support; unemployment
PRECIPITATING (acute)	Worsening pain and depressive symptoms prior to PNES onset	Learned helplessness secondary to abuse; depression leading to career loss; sick identity formation	Social isolation; primary gain in hospital admission

Fig. 1. Survey clinical vignette of PNES followed by three psychiatric assessment styles from which to rank.