
Appendix 2 Additional detail about treatment approaches in the identified studies:

Among the CBT studies, there were five main approaches identified.

Goldstein 2004; 2010 and 2020 (all applied to PNES) used a CBT intervention described by the authors as adapted from Lang's fear-escape avoidance model³³, focusing on practicing techniques to address symptoms and return to avoided activities as well as challenging unhelpful thoughts that influence symptoms, self-esteem, mood and anxiety. Dallochio 2016 used the same intervention modified for the treatment of patients with motor FND. Baslet 2012 and 2020, and Tolchin 2019 (given to patients with PNES) were described by the authors as similar to the protocol used in the Goldstein studies, with the addition of mindfulness training and motivational interviewing respectively.

LaFrance 2009 and 2014 (both for PNES) used a CBT intervention described by the authors as based on CBT manuals for epilepsy and depression. This protocol focused on monitoring and controlling seizures; healthy communication; understanding medications; behavioural analysis; examining triggers; addressing mood-cognition-environment connections and challenging automatic thoughts and somatic misinterpretations.

Sharpe 2011 (applied to all types of FND) used guided self-help based on a CBT workbook similar to one published by Williams et al.³³ The workbook focused on understanding and changing how patients think about and respond to their symptoms and life situation in order to improve physical symptoms, emotional state and functioning. The book also explained diagnosis, common symptoms and self-management techniques.

Myers 2017 (for PNES with comorbid post-traumatic stress disorder) used Prolonged Exposure (PE) following a protocol by Foa, Hembree and Rothbaum³⁴ involving imaginal exposure to a recording of the traumatic memory and in vivo confrontation of trauma-related situations in everyday life. PE directly targets avoidance of a previous identified traumatic event, and hence differs substantially from PDT which addresses patterns of relatedness.

Graham 2018 (applied to patients with all types of FND) used Acceptance and Commitment Therapy (ACT) involving functional analysis in which participants were encouraged to notice clinically relevant behaviours, then to become aware of their function, consequences and effectiveness in relation to their own values. This led to an individualised intervention plan to make progress towards their goals.

Among the PDT studies, three main approaches were identified:

Hinson 2006 and Kompoliti 2014 (both given to patients with Motor FND) and Russell 2016 (applied to PNES) were based on brief dynamic therapy and Intensive Short-Term Dynamic Therapy (ISTDP) as described by Davenloo³⁵ aiming for insight into unconscious phenomena, focusing on emotional experiencing and working through underlying conflicts.

Mayor 2010 (applied to PNES), as well as Reuber 2007 and Hubschmid 2015 (both applied to all forms of FND) were based on the Psychodynamic Interpersonal Therapy (PIT) protocol by Guthrie³⁶ focusing on engagement, formulation, illness perception, symptom control, increasing independence, encouraging self-care, enlisting support from carers and other health care professionals, emotional processing and processing trauma.

Santos 2014 used psychoanalysis (applied to PNES) based on psychoanalytic theory, which has been influenced by a large number of theorists but can be traced back to the work of Freud³⁷. This intervention is higher in frequency and longer in duration but has similar goals to brief psychodynamic therapies. The author describes a standardised protocol which incorporates exploration of the diagnosis; reactions to anxiety, defensive strategies, symbolic resources and the symptom as "compromise formation".
