

Review

Research on dissociative seizures: A bibliometric analysis and visualization of the scientific landscape

Stoyan Popkirov^{a,*}, Johannes Jungilligens^{b,c}, Uwe Schlegel^a, Jörg Wellmer^b

^a Department of Neurology, University Hospital Knappschaftskrankenhaus, Ruhr University Bochum, In der Schornau 23-25, 44892 Bochum, Germany

^b Ruhr-Epileptology, Department of Neurology, University Hospital Knappschaftskrankenhaus, Ruhr University Bochum, In der Schornau 23-25, 44892 Bochum, Germany

^c Department of Neuropsychology, Institute of Cognitive Neuroscience, Faculty of Psychology, Ruhr University Bochum, Bochum, Germany



ARTICLE INFO

Article history:

Received 29 January 2018

Revised 30 March 2018

Accepted 31 March 2018

Available online xxxxx

Keywords:

Dissociative seizures

Psychogenic nonepileptic seizures

Bibliometric

Literature

ABSTRACT

Dissociative seizures are a common and often elusive differential diagnosis in epilepsy centers. Considering their high prevalence, long diagnostic delays, and disappointing rates of treatment response, scientific research dedicated to dissociative seizures is surprisingly scarce. In order to chart the scientific landscape of dissociative seizures and to visualize thematic clusters and trends in research, a comprehensive bibliometric analysis was performed. The Web of Science database was examined to identify relevant English language documents from the last half-century. A total of 1751 documents with titles referring to dissociative seizures were identified. Automated textual analysis of all titles and abstracts revealed that research clusters around three major topics: differential diagnosis in epilepsy centers, management and treatment, and psychopathology. Time analysis of term networks revealed that the focus of clinical research has moved from diagnostic procedures to treatment approaches. Furthermore, interest within etiological research is shifting from an emphasis on early life trauma and personality traits to the role of anxiety and emotion regulation. With respect to individual contributing authors, a relatively small network of prolific scientists with a remarkable degree of collaboration emerges. By mapping relevant publications, it becomes evident that dissociative seizures still represent a subject mostly within the realm of neurology and epileptology, with a tendency to settle in the latter domain. This analysis sheds light on an important niche subject and highlights trends in research focus and output.

© 2018 Elsevier Inc. All rights reserved.

1. Introduction

Functional neurological disorders, also known as conversion disorder and formerly as “hysteria”, tend to occupy the “no-man’s-land” between neurology and psychiatry [1]. Neurologists often remain suspicious regarding malingering and leave that distinction for psychiatrists to make, whereas psychiatrists are often wary of unrecognized underlying brain pathology and tend to ask for repeated testing [1,2]. This overall reluctance of both disciplines to fully commit to research and treatment of functional neurological disorders has resulted in a striking scarcity of research and clinical service provision. Dissociative seizures, a prominent form of functional neurological disorder, seem to have fared slightly better. Because of their close semiological resemblance to epileptic seizures (and common co-occurrence), dissociative seizures have long been “adopted” by epileptologists as a diagnosis within their responsibility. This seems inevitable since 25–30% of patients seen in epilepsy centers for suspected refractory epilepsy are found to have dissociative seizures [3]. Still, “nonepileptic” seizures have remained a Cinderella subject among neurologists [2], and it is

not only the epidemiology that would dictate higher scientific engagement—the average diagnostic delay from first dissociative seizure to final diagnosis is still 5–10 years, long-term treatment outcomes are largely disappointing, and the socioeconomic burden of these disorders is considerable [4,5]. An important obstacle to improving care for affected patients is a paucity of evidence-based models of pathomechanism. Recent efforts to elucidate the neural underpinnings of dissociative seizures have not yet resulted in a complete mechanistic understanding [6]. Despite these persisting challenges, however, progress in recognizing and treating dissociative seizures has been made since the introduction of video-electroencephalography (video-EEG) monitoring in 1968 [7]. In order to chart the scientific landscape of the last half-century and to explore clusters and trends of research on dissociative seizures, we conducted a comprehensive bibliometric study on this subject.

2. Methods

2.1. Data collection

The Web of Science Core Collection database was chosen to identify and extract relevant research documents. The Web of Science is a human-curated database (unlike Google Scholar) which tracks citations

* Corresponding author at: Klinik für Neurologie, Knappschaftskrankenhaus, In der Schornau 23-25, 44892 Bochum, Germany.

E-mail address: stoyan.popkirov@kk-bochum.de. (S. Popkirov).

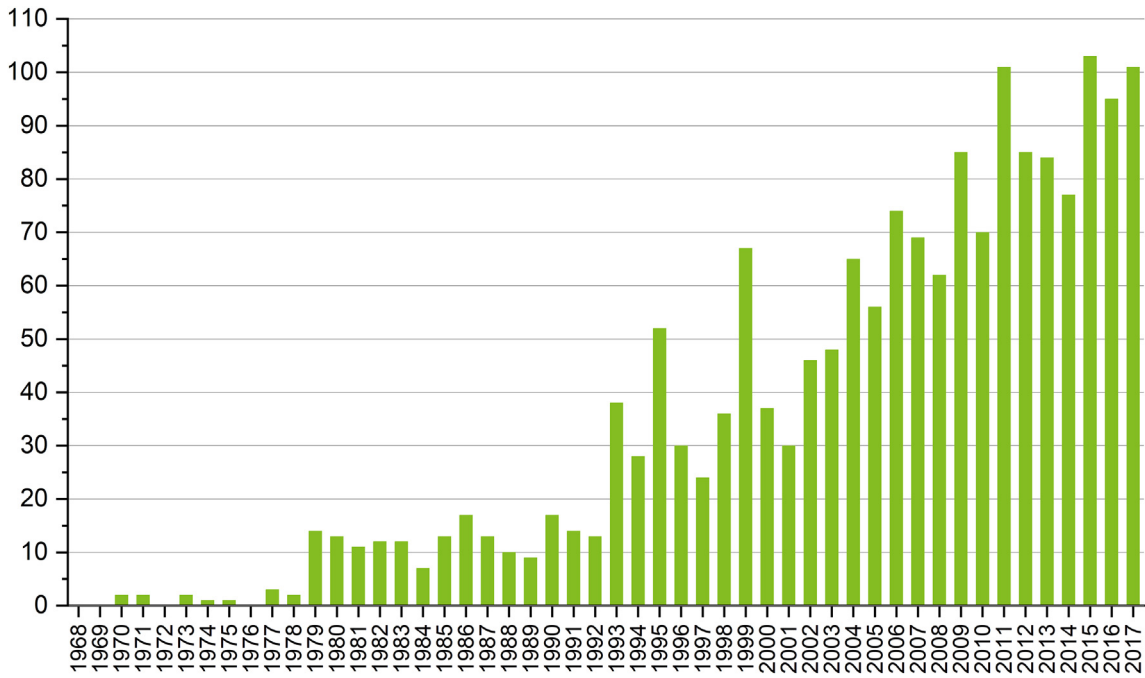


Fig. 1. Number of published documents per year.

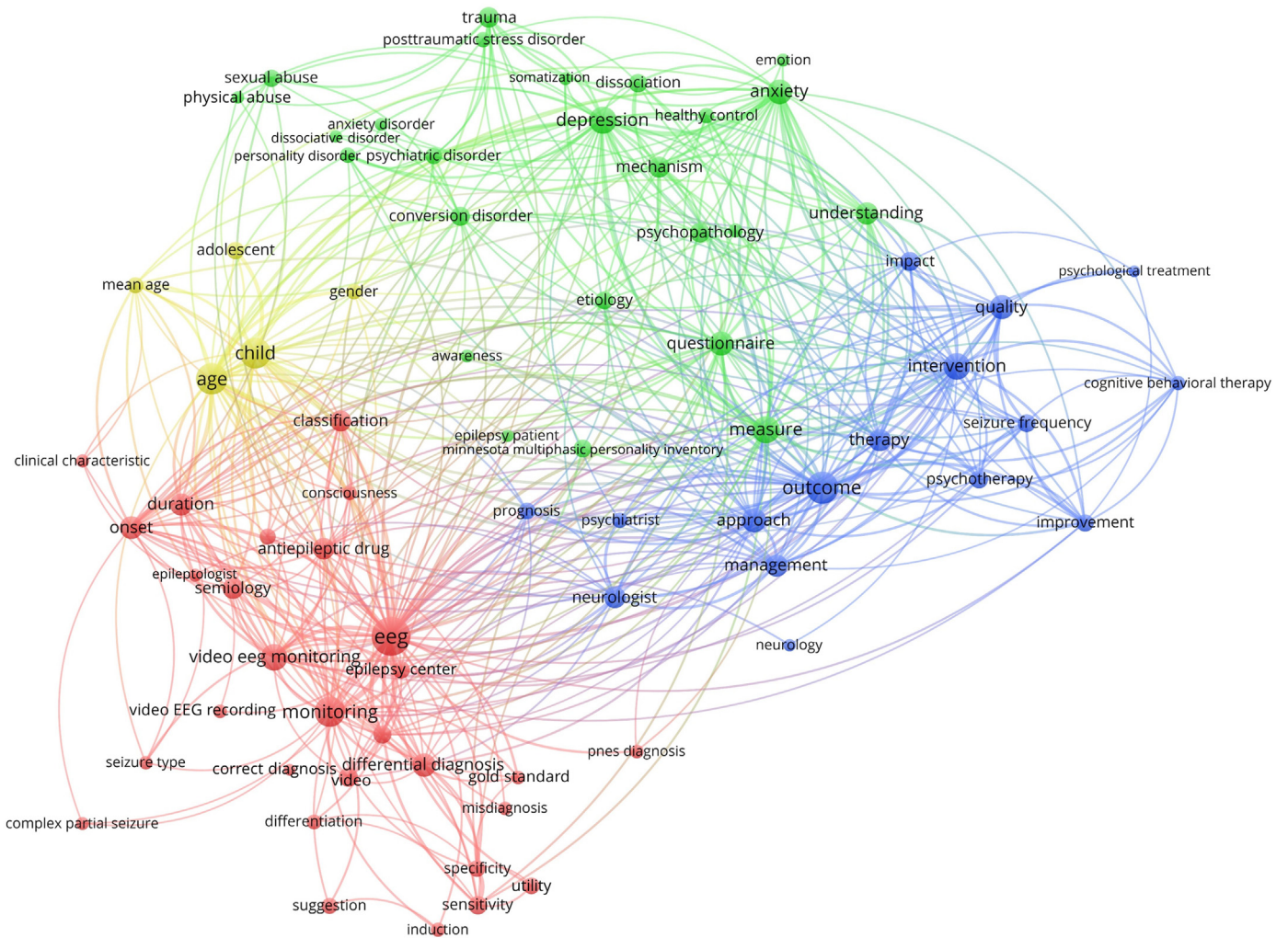


Fig. 2. Term map. Bubble size is scaled to total number of (binary) occurrences of each term. Lines between terms indicate co-occurrence. Bubble proximity indicates frequency of co-occurrence. Colors denote clusters based on term co-occurrence. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Download English Version:

<https://daneshyari.com/en/article/8683578>

Download Persian Version:

<https://daneshyari.com/article/8683578>

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