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Neurology

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Born in 1986 in Sofia
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FELLOWSHIP
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PROJECT

Functional Disorders: the Cinderella Subject of Neurology

One hundred years ago, in World War I, thousands of soldiers across Europe suffered neurological symptoms such as tremors or paralysis due to "shell shock" (known as "Kriegszitterer" in Germany). Initial theories suggested minor brain injury sustained from distant explosions, but soon the disorders were correctly identified as psychologically determined. While the study of functional neurological symptoms (also known as psychogenic or conversion disorder) used to be a major topic in neurology, it was later pushed to the margins of academic and clinical inquiry. However, one in six patients who come to see a neurologist nowadays will have a functional problem. Common manifestations include dissociative seizures, functional dizziness and psychogenic movement disorders. A specialist book that could help practicing neurologists to better understand, diagnose and treat functional neurological disorders would seem to be a useful addition to the German medical literature. My project at the Wissenschaftskolleg will be to write that book.

Several recent advances have moved functional neurological disorders back into the focus of academic neurology. Specific diagnostic signs have been systematically validated and can now replace the exclusion principle that used to guide the diagnostic process. Experimental studies using advanced brain scanning and other modern technology have shed some light on the underlying neurobiology and contributed to the formulation of illness models based on modern neuroscientific frameworks. Lastly, advances are being made in the treatment of these disorders, demonstrating the importance of multidisciplinary approaches. Many of these developments are reported in specialized journals and have yet to reach everyday practice. I aim to prepare a book that will provide state-of-the-art clinical advice rooted in modern neuroscience and evidence-based medicine.

Recommended Reading

Popkirov, S., J. P. Staab, and J. Stone (2018). "Persistent postural-perceptual dizziness (PPPD): a common, characteristic and treatable cause of dizziness." *Practical Neurology* 18, 1: 5-13.

Popkirov, S., S. Wessely, T. Nicholson, A. Carson, and J. Stone (2017). "Different Shell, Same Shock." *BMJ* 359:j5621.

Popkirov, S., J. Jungilligens, W. Grönheit, and J. Wellmer (2017). "Diagnosing psychogenic nonepileptic seizures: video-EEG monitoring, suggestive seizure induction and diagnostic certainty." *Epilepsy & Behavior* 73: 54-58.

The Rediscovery of Hysteria

The occurrence of seizures and paralysis in the absence of brain disease fascinated neurologists at the end of the 19th century. Hysteria, as this disorder was called then, took centre stage at Jean-Martin Charcot's Salpêtrière hospital, the cradle of academic neurology. Interest in hysteria intensified further during the First World War, as tens of thousands of soldiers returned with neurological disabilities due to "shell shock." However, as the psychological theories of one of Charcot's students became more influential and neurology and psychiatry drifted further apart, interest in what was then termed "conversion disorder" seemed to fade. For several decades, this disorder was deemed a historical curiosity, and it slowly disappeared from neurology textbooks. In a classic article from 1965, hysteria was declared non-existent, a myth. However, a century after Charcot's pioneering work, interest in functional neurological disorders, as they are called now, seems to be undergoing a renaissance. Modern concepts from cognitive neuroscience and improved scientific methods have led to significant advances in the diagnosis and treatment of this surprisingly common illness. As new theoretical formulations take hold, one should keep in mind the turbulent history of dogma and stigma that preceded them.

PUBLICATIONS FROM THE FELLOWS' LIBRARY

Popkirov, Stoyan (New York, NY, 2020)

Functional neurological disorder

<https://kxp.k1oplus.de/DB=9.663/PPNSET?PPN=1725498634>

Popkirov, Stoyan (London, 2018)

Complex regional pain syndrome and functional neurological disorders : time for reconciliation

<https://kxp.k1oplus.de/DB=9.663/PPNSET?PPN=1668611384>

Popkirov, Stoyan (London [u.a.], 2017)

Persistent postural-perceptual dizziness (PPPD): a common, characteristic and treatable cause of chronic dizziness

<https://kxp.k1oplus.de/DB=9.663/PPNSET?PPN=1668811766>

Popkirov, Stoyan (London, 2017)

Different shell, same shock

<https://kxp.k1oplus.de/DB=9.663/PPNSET?PPN=1668810808>