Use of clinical electrophysiology as a biomarker diagnostic and treatment in psychiatric setting

Psychiatric disorders interfere with daily-life activities and treated with psychological and pharmacological treatments. For Psychopharmacology and Psychotherapy to meaningfully improve outcomes, it's time to figure out how to develop "the next generation of interventions." A new route map has been drawn for the diagnosis and treatment of psychiatric diseases. The National Institute of Mental Health (NIMH) has called for a more rigorous and evidence-driven approach to mental healthcare. It is time that psychiatry and psychology moves away from its present focus on diagnosing subjectively and takes a new direction that uses other modalities of care; evidence-based diagnosis and treatments. Psychiatry and psychology are the only specialty that doesn't actually look at the organ it treats. Patients deserves better. We need to devote our selves to efficient evidence-based diagnosis of disorders and personalized treatments. Implementing biological markers for psychiatric disorders into laboratory-based electrophysiological diagnostic tests can significantly improve diagnosis and management of these disorders. Diagnostic electrophysiological techniques are non-invasive and relatively inexpensive. Psychiatric electrophysiology currently under utilizes such methods and plays a limited role in the diagnosis and treatment in psychiatric disorders. This status is not supported by the existing literature. I am going to talk about evidence supporting diagnostic electrophysiological biomarkers and their effectiveness in the treatment of psychiatric disorders.

Biography

Dr. Tanju Sürmeli received his Medical Doctor degree from Dokuz Eylül University in 1984 in İzmir, Turkey. He did his residency training in Psychiatry and Neurology at University of Connecticut/Institute of Living, Yale, and University of Texas, San Antonio. He is a board and ECFM certified psychiatrist. He had completed Harvard Medical School’s Global Clinical Scholars Research Training Program and a Research Fellowship in EEG and psychopharmacology at New York Medical College. As well as having numerous memberships (AMA, APA , AAPB, ISNR, SAN, BFE, ECNS) and and teaching positions in international medical societies’ workshops. He is also a reviewer for the Journal of Clinical EEG and Neurosciences, Psychiatry Research, Behavioural Neurology, Schizophrenia Research, and Journal of Child Psychology and Psychiatry. Neuro Biobehavioral reviews, Nature Scientific Reports and Journal of Child Psychology and Psychiatry. In 2015, upon request of the Swedish Science Academy Institution, he reviewed scientist's "Neurofeedback in Schizophrenia" placebo controlled study's grant application as an expert reviewer. In 2017, upon request of the Swedish Science Academy Institution, he reviewed scientist's "Neurofeedback in Bipolar Disorder and Borderline Disorder" placebo controlled study's grant application as an expert reviewer. In 2018, upon request of the Swedish Science Academy Institution, he reviewed scientist's "Neurofeedback in residual symptoms of Bipolar Disorder" placebo controlled study's grant application as an expert reviewer. His Schizophrenia Case Study paper was awarded in 2013, The Foundation for Neurofeedback and Applied Neuroscience (FNAN) award given to the publication that, "In its consideration, has most significantly advanced the field of neurofeedback during the preceding year"

He has been invited by the International Quantitative Board of Electrophysiology which is supported by the EEG and Clinical Neuroscience Society (ECNS) in US to be a QEEG board member for the 2015-2016 term and extended for 4 more years and now elected as a president. He has also been elected as a Board member for the International Society for Neurofeedback and Research in US for the 2015-2016 term and Board member for the Society of Applied Neuroscience in Norway.

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