

WPA Section on Dual Disorders
WPA Course on Dual Disorders: Addiction and other Mental Disorders
México City, Nov.14, 2024.

Course Description

This course is offered by the WPA Section on Dual Disorders and aims to present an update on comprehensive care for dual disorders based on current scientific evidence. Dual disorders are defined as the coexistence of a mental disorder and a substance use disorder occurring simultaneously or sequentially across the patient's lifespan. From an epidemiological point of view, dual disorders are highly prevalent and pose a significant public health burden. Dual disorders are associated with greater healthcare utilization, increased rates of disability, and higher economic costs compared to single disorders. Neurobiologically, dual disorders are characterized by alterations in brain circuitry and neurotransmitter systems.

Pre-existing mental health disorders or people at ultra-high risk for serious mental disorders may increase a person's vulnerability to substance use disorders. This can disrupt the delicate balance of neurobiological systems and neurotransmitters involved in the regulation of mood and psychotic symptoms, contributing to the development or exacerbation of mental health disorders.

In this course we will analyze the relationship between these conditions that highlights the intricate and shared neurocircuitry dysfunctions that underlie dual disorders.

In this course we will also focus on the attending Opioid Use Disorder pandemic that has far-reaching consequences, including staggering rates of overdose deaths, strained healthcare systems, and socioeconomic burdens. In the United States alone, opioid overdoses claimed over 50,000 lives in 2019, with the numbers continuing to rise. Neurobiologically, opioids act on several key brain regions, including the limbic system, which regulates emotions, and the brainstem, which controls vital functions such as breathing and heart rate. The endogenous opioid system is involved in different mental functions and its knowledge and modulation can be a clinical tool to treat dual disorders.

We will also walk through the importance of developing safe and effective therapeutic devices for dual disorders. Neuromodulatory devices appear to be promising tools that may be complementary to psychotherapy and psychopharmacology approaches, however additional work is needed to understand the relationship between target engagement, changes in brain circuitry and behavioral responses. We will describe ongoing clinical practice in dual disorders using transcranial magnetic stimulation

protocols, especially focusing on psychoactive and alcohol use disorder in patients with depression, generalized anxiety disorder and obsessive-compulsive disorder.

Lastly, we will set a debate where we will present some clinical cases. We would like to enroll participants to express their doubts, debate with us and contribute to increase knowledge on how to improve comprehensive care of dual disorders patients.

Objective: Promote participants' updating of evidence-based knowledge about Dual Disorders and their treatment.

Aimed at: Mental health professionals.

Duration: 4 hours.

Prerequisites: None.

Speaker Background

- 1. Dr. Rodrigo Marín-Navarrete:**
- 2. Dr. Nestor Szerman:** Chair of the WPA Section on Dual Disorders. Psychiatrist and President of WADD. President of the Dual Disorder Foundation. University Hospital Gregorio Marañón Madrid, Spain. Number of Publications: plus 100 papers. Member of the Spanish State Council for Addictions since 2016 and the State Council on Responsible Gambling since 2019. Chair of the Pan-American Health Organization consensus of Dual Disorders (World Health Organization) . He has been invited to speak as an expert for the United Nations Office on Drug and Crime (UNODC) (2017) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2018)
- 3. Dr. Alejandro Fuertes-Saiz** works as a psychiatrist in Hospital La Salud (Valencia, Spain), where he coordinates the Treatment Resistant Depression Program (ECT, Esketamine and TMS). Mental Health Coordinator and Associate Professor of University CEU-Cardenal Herrera, CEU Universities. PhD in Neurobiology of Dual Disorders by the CEU International Doctorate School. Research Collaborator of the TXP Research Group. He worked as a Research Fellow in the Laboratory for Neuropsychiatry and Neuromodulation of the Massachusetts General Hospital-Harvard Medical School (Boston, USA) with Dr. Camprodon.

SCIENTIFIC PROGRAM

9:00-10:00 a.m.

Topic 1: Update on Dual Disorders, Addictions and other Mental Disorders for Clinicians.

Speaker: Dr. Rodrigo Marín-Navarrete.

10:00-11:00 a.m.

Topic 2: > The endogenous Opioid System and Dual Disorders: Relevance for Treatment.

Speaker: Dr. Nestor Szerman.

11:00-12:00 a.m.

Topic 3: Neuromodulation Treatments for Dual Disorders: Neurocircuitry, Target Engagement and Clinical Experience

Speaker: Dr. Alejandro Fuertes-Saiz

12:00-13:00 a.m.

Topic 4: Clinical Cases Reports and Debate.

Speakers: Dr. Rodrigo Marín-Navarrete, Dr. Nestor Szerman, Dr. Alejandro Fuertes-Saiz.

References and recommended readings

1. Fuertes-Saiz, A., Benito, A., Mateu, C., Carratalá, S., MD, PhD, Almodóvar, I., Baquero, A., & Haro, G., MD, PhD (2019). Sensorimotor Gating in Cocaine-Related Disorder with Comorbid Schizophrenia or Antisocial Personality Disorder. *Journal of dual diagnosis*, 15(4), 243–253. Doi:10.1080/15504263.2019.1633489
2. Gil-Miravet, I., Fuertes-Saiz, A., Benito, A., Almodóvar, I., Ochoa, E., & Haro, G. (2021). Prepulse Inhibition in Cocaine Addiction and Dual Pathologies. *Brain sciences*, 11(2), 269. Doi:10.3390/brainsci11020269
3. Marín-Navarrete, R., Torrens, M., Toledo-Fernández, A., Mestre-Pinto, J. I., Sánchez-Domínguez, R., Pérez-Lopez, A., Saracco-Alvarez, R., Madrigal-De León, E. Á., & Szerman, N. (2021). Developing an App to Screen for Dual Disorders: A Tool for Improving Treatment Services in Mexico. *Frontiers in Psychiatry*, 12, 697598. Doi:10.3389/fpsy.2021.697598
4. Navarrete, R. M., Szerman, N., & Ruiz, P. (2020). Monografía sobre Patología Dual: Co-ocurrencia entre trastornos por consumo de sustancias y otros trastornos psiquiátricos. Ediciones APM.
5. Peris, L., & Szerman, N. (2021). Partial Agonists and Dual Disorders: Focus on Dual Schizophrenia. *Frontiers in Psychiatry*, 12, 769623. Doi:10.3389/fpsy.2021.769623

6. Sakurai, H., Uribe, S., Cirillo, P., Fuertes-Saiz, A., Camprodon, J. A., & Barbour, T. (2022). Residual symptoms after achieving remission with repetitive transcranial magnetic stimulation in depression. *Journal of affective disorders*, 301, 154–161. Doi:10.1016/j.jad.2021.12.115
7. Szerman, N., Ferre, F., Basurte-Villamor, I., Vega, P., Mesias, B., Marín-Navarrete, R., & Arango, C. (2020). Gambling Dual Disorder: A Dual Disorder and Clinical Neuroscience Perspective. *Frontiers in Psychiatry*, 11, 589155. Doi:10.3389/fpsy.2020.589155
8. Szerman, N., Torrens, M., Maldonado, R., Balhara, Y. P. S., Salom, C., Maremmani, I., Sher, L., Didia-Attas, J., Chen, J., Baler, R., & World Association on Dual Disorders (WADD). (2022). Addictive and other mental disorders: A call for a standardized definition of dual disorders. *Translational Psychiatry*, 12(1), 446. Doi: 10.1038/s41398-022-02212-5