

analyses will address a Linear Discriminant Analysis to proceed to a machine learning oriented approach.

**Disclosure:** No significant relationships.

**Keywords:** methylation; epigenetics; postnatal risk factors; psychopathology trajectories

## O157

### Epigenetic modulation in obsessive-compulsive disorder: Methylation and hydroxymethylation of the *bdnf* gene exon I promoter

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**Introduction:** Several evidence recognizes Brain Derived Neurotrophic Factor (BDNF) as a promising biomarker in the pathophysiology of psychiatric disorders, including Obsessive-Compulsive Disorder (OCD), considering the involvement of epigenetic regulation in BDNF altered expression.

**Objectives:** This study aims to investigate, in a sample of OCD patients, the epigenetic modulation in terms of levels of methylation and hydroxymethylation on the BDNF gene exon I promoter.

**Methods:** Fifty OCD patients, recruited from Psychiatry Unit 2, Sacco University Hospital in Milan and fifty healthy controls, comparable by age and gender. Saliva samples were collected by oral swab and epigenetic analysis were performed at the University of Teramo. Statistical analyses were performed with t test with Bonferroni correction.

**Results:** Data analysis showed a significant decrease in 5-methyl cytosine levels (5mC) (mean OCD: 1.221%; mean CTRL: 1.784%;  $p < 0.001$ ) and a significant increase in 5-Hydroxy-methyl cytosine levels (5hmC) (mean OCD: 1.018%; mean CTRL: 0.527%  $p < 0.0001$ ) in BDNF gene exon I promoter of OCD patients compared to controls. Regarding 5mC of site 3 and 5hmC of site 1 and 2 of the exon I promoter CpG islands, no statistical significance was found.

**Conclusions:** Present results showed significant differences in epigenetic modulation of BDNF gene, which might not be univocally interpreted. They could represent an intrinsic OCD characteristic or the effect of antidepressant drugs, assumed by all recruited patients. Further studies, comparing OCD subjects in treatment vs drug-free, are necessary to define BDNF epigenetic modulation role and its possible use as biomarker in the characterization of OCD.

**Disclosure:** No significant relationships.

**Keywords:** Molecular Neurobiology; genetics; Obsessive-Compulsive disorder; Neuroscience in Psychiatry

## O159

### WPA Global Guidelines for Telepsychiatry

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**Introduction:** The current pandemic has only confirmed the need for international collaboration and more extended use of telepsychiatry than before. Unfortunately, regulatory constraints and lack of standardization are posing significant barriers to the internationalization of telepsychiatry. A need for global guidelines and service standardizations is of utmost importance in this rapidly growing but not yet well-established field. By mastering telepsychiatry, the professionals also may enable the remote provision of other eMH approaches complementary to well-known, traditional service(s). However, first, one ought to become familiar with the basics of telepsychiatry. Globally standardized telepsychiatric service and uniform regulations are prerequisites for fruitful international cooperation.

**Objectives:** - to present the main objectives and messages of the WPA Global Guidelines for Telepsychiatry.

**Methods:** A structured review of the main challenges, innovations, and settings in the first Global Guidelines for Telepsychiatry, published by WPA.

**Results:** With proper preparation and thoughtful risk management, telepsychiatry can be an invaluable tool for allowing greater access to care. However, certain prerequisites must be fulfilled to achieve the desired goals. These prerequisites are e.g. choice of the technology, settings, patient/provider preferences as well as competencies and skills, all outlined in this document.

**Conclusions:** This WPA document may pave the way for the development of global regulations in order to break down the barriers of accessibility for both the professionals as well as for the patients worldwide. Further, it may help professionals in setting up a standardized telepsychiatry service(s) in addition to the existing mental health system(s).

**Disclosure:** I am the author of WPA Global Guidelines for Telepsychiatry but have no financial interest.

**Keywords:** International collaboration; WPA; Regulatory issues; Telepsychiatry Global Guidelines

## Intellectual disability

## O160

### Social orienting is reduced in williams syndrome

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