Programme of the 29th ECNP Congress - Vienna 2016

Presentation No: P.2.h.024

Session title: Mood disorders and treatment - Other (clinical)

Session type: Poster session

Sensory processing patterns and their relation with impulsivity, alexithymia, depression, and hopelessness in major affective disorders

G. Serafino(1), B. Engel-Yeger(2), X. Gonda(3), S. Costi(4), M. Pompili(5), Z. Rihmer(6), P. Girardi(7), M. Amore(1)

(1) Section of Psychiatry- University of Genoa, Neuroscience DINOGMI, Genoa, Italy
(2) Faculty of Social Welfare and Health Sciences- University of Haifa, Occupational Therapy, Haifa, Israel
(3) Kutvolgyi Clinical Center- Semmelweis University- Budapest- Hungary, Clinical and Theoretical Mental Health, Budapest, Hungary
(4) Icahn School of Medicine at Mount Sinai- New York, Psychiatry- Mood and Anxiety Disorders Program, New York, USA
(5) Suicide Prevention Center- Sant’Andrea Hospital- University of Rome- Rome, Neurosciences, Rome, Italy
(6) Kutvolgyi Clinical Center- Semmelweis University- Budapest, Clinical and Theoretical Mental Health, Budapest, Hungary
(7) Sant’Andrea Hospital- University of Rome- Rome, Neurosciences, Rome, Italy

Introduction: Major affective disorders are associated with long-term disability, psychosocial impairment, and poor outcome (e.g., suicidal behavior). Evidence suggested the contribution of extreme sensory processing patterns in the pathophysiology of major affective disorders [1] as they have been proposed as stable dimensions able to characterize individuals with major affective disorders [2]. Similarly to sensory processing profiles, there
are studies in the current literature investigating the association between impulsivity and major affective disorders [3]. Patients with major affective disorders and alexithymic traits may also present specific emotion processing deficits. Alexithymia is associated with a heterogeneous range of sensory modulation related to both hypo- or hyper sensitivity and may be a significant predictor of suicidal behavior conceptualized as an exit of hopelessness and despair [4]. To date, the relation between sensory processing profiles, impulsivity, alexithymia, and major affective disorders has been not thoroughly investigated.

**Aims:** The present study aimed to: (1) examine the correlations between sensory processing patterns, impulsivity, alexithymia, depression, and hopelessness; (2) analyze the contribution of sensory processing patterns in predicting depression, alexithymia, impulsivity, and hopelessness; (3) investigate the contribution of sensory processing patterns, depression, alexithymia, and impulsivity in predicting hopelessness.

**Methods:** We recruited 281 participants (mean age 47.4±12.1) of which 62.3% with unipolar and 37.7% with bipolar disorders (BD). Bipolar patients were diagnosed as having BD type I (BD-I), manic or mixed episode (10.3%); BD-I, depressive episode (6.3%); BD-II, hypomanic episode (1.4%); BD-II, depressive episode (12.1%); cyclothymia (6.8%). All participants completed the Adolescent/Adult Sensory Profile (AASP), Toronto Alexithymia Scale (TAS-20), second version of the Beck Depression Inventory (BDI-II), Barratt Impulsivity Scale (BIS), Beck Hopelessness Scale (BHS). The correlations between all dependent variables were examined by Pearson correlation test and Chi square analysis. A stepwise regression analysis was also performed.

**Results:** Most of the correlations were found between low registration of sensory input and elevated depression ($r = 0.464, p \leq 0.001$), attention ($r = 0.430, p \leq 0.001$) and motor impulsivity ($r = 0.415, p \leq 0.001$), and higher alexithymia (in particular with difficulties to describe and identify feelings) ($r = 0.358, p \leq 0.001$). Low registration of sensory input was significantly higher among participants with BHS of 9 or higher ($x^2 = 7.18, p = 0.02$) and accounted for 22% of the variance in depression severity, 15% of the variance in greater impulsivity, 36% of the variance in alexithymia, and 3% of the variance in hopelessness. Depression accounted for 22% of the variance in higher hopelessness levels.

**Conclusion:** Although limited by the small sample size and its cross-sectional nature that do not allow the generalization of the main findings, this preliminary study found that specific sensory processing patterns, attention/motor impulsivity, alexithymia, depression, and hopelessness may be commonly correlated in patients with major affective disorders. Interestingly, low registration of sensory input resulted differently associated with most of the investigated variables. Our results suggest the importance to refer to low registration of sensory input as a relevant factor involved in determining depression severity that was able to predict higher hopelessness levels. The careful evaluation of the individual sensory profiles may help clinicians to enhance targeted treatment interventions and functional/adaptive strategies.
References


Keywords:
Depression: clinical
Sensory processing patterns
Alexithymia