

A DUAL THERAPEUTIC SETTING MODEL EXPERIENCE FOR SCHIZOTYPAL PERSONALITY DISORDER IN AN INPATIENT UNIT

Massimo C. Bachetti, Federica Cirimbilli, Valentina Pierotti, Giulia Menculini,
Alfonso Tortorella & Patrizia Moretti

Department of Psychiatry, University of Perugia, Perugia, Italy

SUMMARY

G.B., 21-year-old patient of Albanian origin suffering from acute psychotic burning on schizotypal personality disorder induced by substance abuse, was admitted to the Psychiatric Service at Perugia' General Hospital, Italy. On admission, antipsychotic therapy was set up which had the role to reduced delusional and hallucinatory symptoms but the suspiciousness, the presence of magical thought and the closure towards surrounding world that characterize it, combined with the presence of intrusive images, consequently increased the anxiety experiences and negatively affects the establishment of a therapeutic relationship with the operators. During the hospitalization, daily support interviews were carried out: G.B. showed clear difficulty in expressing his own thought contents in presence of more than two operators emerged jointly with the tendency to project different emotional experiences based on the gender of the operator. Following these observations, with the aim to carrying out an intervention that could integrate a psychological approach to the pharmacological therapy in place, a specific personalized support setting was set up, consisting of a female and a male operator. This setting was structured coherently with the therapeutic goals to be achieved: creation of a therapeutic alliance, the integration of the patient's emotional experiences and containing the splitting through the transference analysis. By means of this setting, the patient has obtained a substantial improvement of the splitting framework allowing a better integration of his emotional experiences. At the end of the sessions, G.B. showed more confidence with the medical staff and showed himself to be more aware of his pathological and non-pathological mental states and consequently more adherent to taking drug therapy and to the continuation of post-discharge psychological therapy.

Key words: schizotypal personality disorder - psychotherapy – inpatient - mindfulness-based therapy - transference-focused psychotherapy

* * * * *

INTRODUCTION

Personality is defined as a constant pattern of behaviors and inner experience, influencing thoughts, perceptions, actions, and beliefs (Barnhill 2014). Personality disorders were traditionally conceptualized as diagnostic categories, underpinning a complex of symptoms that define a clear-cut clinical syndrome. According to the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Schizotypal personality disorder (SPD) is defined by a set of criteria including social detachment and inhibited affectivity, significantly influencing overall individual functioning (American Psychiatric Association 2013). Subjects diagnosed with SPD often experience acute distress when facing social relationships, thus presenting with eccentricity and bizarre behaviors, coexisting with cognitive and perceptive distortions, mainly with a persecutory component. In this population of individuals, social interaction may cause anguish, leading to the perception of being vulnerable and to the belief that other people may read their thoughts or their feelings, thus causing progressive isolation and blunted affect as defensive processes. Ideas of reference, paranoid beliefs and abnormal perceptive experiences are common among subjects with SPD. This complex of symptoms may be considered as a milder presentation of cognitive distortions observed in schizophrenia spectrum disorders. In fact, SPD was at first

considered to be a prodromal stage of schizophrenia, but this was then demonstrated to be an infrequent clinical evolution, occurring in about 10% of cases (Lalli 2002). Despite this, epidemiological and neurobiological evidence demonstrate a genetic correlation between the two disorders, also confirmed by the higher prevalence of SPD among first-degree relatives of subjects affected by schizophrenia, when compared to the general population, where SPD shows a prevalence of about 3.9%. In addition, neuroimaging studies underlined similarities among schizophrenia and SPD in terms of brain volumetric abnormalities (Asami et al. 2013, Byne et al. 2001). Risk factors for SPD are common to other personality disorders, such as physical and affective abuse during childhood. Particularly, sexual assault at a young age is significantly associated to the onset of schizotypal symptoms, namely ideas of reference and paranoid ideas, magical thinking, bizarre perceptions (Berembaum 2008). Moreover, a significant correlation was demonstrated for schizotypal personality traits and cannabis use (Raynal & Chabrol 2016, Szoke et al. 2014). Further research suggests that cannabis consumption may be related to psychotic onset in subjects that are considered to be prone to schizophrenia, including SPD subjects (Nojolia et al. 2012). Personality disorders frequently present with comorbidities. As for SPD, the most frequent are represented by substance-related disorders, post-traumatic stress disorder and depressive disorders. The treatment

of this condition presents several complexities, also due to the difficulties of subjects in establishing and maintaining therapeutic relationships (Gabbard 2000). Despite the lack of systematic studies focusing on psychotherapy for schizotypal subjects, clinical evidence suggests that this population of individuals may benefit from an individual supportive or group dynamic psychotherapy approaches, or from a combination of both (Stone 2014). Empirical studies demonstrate that different elements influence treatment outcomes, particularly the establishment of a therapeutic relationship, the capability to communicate about treatment limitations and difficulties, and the possibility to reach pre-established goals together with the patient (Critchfield & Benjamin 2006, Linehan et al. 2005). Subjects with SPD could also benefit from an integrated approach, that could thus require psychopharmacological treatment with mood stabilizers and atypical antipsychotics.

The most efficient treatment for this population of subjects has not been established yet and literature about the topic is poor (Kirchner et al. 2018). In addition, the first contact of SPD individuals with psychiatric services often takes place in the context of emergency services, such as psychiatric inpatient units, which contributes to the difficulty in understanding the best treatment strategy for initiating treatment. The present case report describes the implementation of a treatment programme for a subject with SPD at his first psychiatric contact in the context of an inpatient setting.

CASE PRESENTATION

G.B., a 20 year-old boy with Albanian origins, was admitted to the Emergency Service of the General Hospital of Perugia, Italy, due to acute psychosis. During the first evaluation, he showed perplexity, long response latency, and a low voice volume. His speech was characterized by a diminished speed and he presented with difficulty in facing the interlocutor's gaze and psychomotor retardation. The mood was depressed, with blunted affect and anguish. He was probably disturbed by auditory hallucinations that appeared to influence his behavior. His thoughts were barely accessible in form and content. Despite this, clinicians evidenced the presence of not-structured, bizarre ideas with religious content and disorganization. His mother reported episodes of aggression directed towards others. Such behavioral disturbances started off about one month before the admission.

Blood exams did not show significant abnormalities, whilst toxicological exams detected the presence of cannabis. Due the young age and the overall severity of the clinical condition, G.B. was admitted to the Psychiatric Inpatient Unit on voluntary basis. Pharmacological treatment with atypical antipsychotics (risperidone, 2 mg bid) and benzodiazepines (delorazepam, 2 mg tid) was started.

During the following evaluations, he declared to experience "paranormal phenomena", e.g. he was able to induce women urination by means of his thoughts. He confirmed cannabis use, that he had previously interrupted and then restarted due to imperative voices belonging to people from his neighborhood that were trying to put him to test. He also reported to see distressing images during the day, described as simple geometrical pictures, which suggested the possible use of further abuse substances. He subsequently confirmed the use of methamphetamine, acids and alcohol up to three months before the inpatient admission. Toxicological exams of hair matrix showed the presence of cannabis and benzodiazepines. Although G.B. expressed feelings of anguish during the following days, he scarcely collaborated with clinicians in examining his experiences in depth. Medications were increased, but despite this G.B. started to refuse the inpatient stay and compulsory medical treatment was required. Risperidone was changed into haloperidol that was progressively increased up to 10 mg/die, but G.B. continued to present with anguish, bizarre thoughts and hallucinations that frequently led to episodes of aggression towards objects. He described images of him holding babies in his arms, causing feelings of shame and anger, and hypothesized that such images were inserted into his mind by others. Among other visual hallucinations, he also described the picture of a baby cut into two parts, that was supposed to represent G.B. himself according to his own interpretation. He also reported the presence of geometrical figures with a sacred meaning, that did not elicit negative feelings. During the stay in the Inpatient Unit, he started to be more participative and approachable to clinical evaluations, also declaring the decrease of distressing images. When G.B. became more collaborative, psychometric evaluation was implemented by means of the Structured Clinical Interview for DSM-IV (SCID-II) (First et al. 1997) and the Minnesota Multiphasic Personality Inventory - 2 (MMPI-2) (Butcher et al. 1989), evidencing the presence of SPD. The feelings that emerged in response to the hallucinations, namely anguish and anger, were hypothesized to result from traumatic memories and to be connected with possible mechanisms of defense, such as repression or denial. G.B. started to describe episodes belonging to his youth, during which he underwent abuse both in school and family contexts. After the description of such episodes, distressing images became more intense and G.B. was convinced that clinicians were inserting such images into his mind. Haloperidol was changed into clozapine, 25 mg bid. Despite this, the persistence of worrying images and the suspiciousness that he showed towards professionals hindered the creation of an efficient therapeutic relationship. G.B. was asked about his difficulties in communicating with personnel working in the unit and he declared to face embarrassment when talking with more interlocutors. A new programme of

meetings was proposed to the patient, consisting of daily visits with one doctor (male) and meetings with one psychologist (female). The psychologist, in order to create a setting, decided to conduct meeting in a room that was different from one used for medical visits, and met G.B. everyday at the same time for 20 minutes. At first, the patient did not collaborate during the meetings, trying to talk about different topics and frequently asking about the possible day of discharge. He appeared to be blocked by a sensation of shame towards the female professional. The equipe of clinicians thus decided to change the setting of the meetings, hypothesizing that these should be conducted by both the female and the male professionals. During the first meeting in this new co-therapy setting, G.B. showed a better contact with his interlocutors. He reported to see the image of a child beside him, generating embarrassment and shame. When clinicians tried to analyze the content of the image, the patient answered that this was probably connected to a period of time during which he worked in another city and assisted to scenes of children being mistreated by a police agent. He was convinced that plain-cloth police officers were controlling him in order to investigate his reactions in front of children mistreatments. During the same period of time, G.B. presented another odd experience: he often pointed at people that raised his interest (not merely sexual interest) using his foot. He described a scission of his emotions when acting like this: when pointing at men, he experienced feeling of angers, whereas he felt embarrassed each time he indicated women. A similar phenomenon appeared to be reproduced in the context of the co-therapy setting. When communicating with the male doctor, G.B. reported mental representations producing anger and competition, whilst the interaction with the female psychologist he presented anguish and fear, with a clear activation in terms of attachment system. A mechanism of gender-dependent emotional scission emerged during the meetings. The two professionals performed a restitution of this mechanism, in the attempt of providing an integrated image of what G.B. experienced, helping him to distinguish between what truly happened and what he imagined. The young boy presented a fair insight since the first co-therapy meeting and explored the possibility to express himself concerning his worries. Clinicians hypothesized that the underlined mechanisms took origin from relationships belonging to the familiar nucleus. This was represented by an authoritarian, distant, often violent father, and a helpless, frightened, submissive mother. The communication between the family members also appeared to be dysfunctional, especially concerning its non-verbal component. After five days since the start of this intensive co-therapy programme, G.B. described how the visual hallucinations were perceived as “external” from himself, and felt the need to accept them without fearing their content. The insight appeared to

be adequate and the patient experienced a significant reduction of the feelings of anguish and anger. The two clinicians progressively introduced to G.B. the psychiatrist that would follow him at discharge. The co-therapy lasted for an overall period of 8 days. Meanwhile, treatment with clozapine was increased up to 75+100 mg/die.

DISCUSSION

The implementation of a co-therapy in the context of an acute inpatient unit represents a major challenge due to the peculiarity of the setting. Although the effectiveness of inpatient treatment for personality disorders remains a debated issue, some special populations of subjects may benefit from it. Only few studies were conducted on psychotherapy interventions for acute inpatients, whilst studies concerning co-therapies are lacking to our knowledge. The existing literature focuses on cohorts of inpatients with long length of stay, mainly affected by borderline personality disorder (BPD) (Tucker et al. 1987, Blatt & Ford 1994, Stone 1993). Few controlled studies report data about Dialectical Behavior Therapy (DBT) on subjects with BPD (Dolan et al. 1997), presenting improvement in their clinical conditions after one year follow-up. Further studies analyzing psychotherapy approaches for personality disorders in inpatient settings (Magnavita 2010) underline possible benefits not only from DBT (Linehan 1987, Robins et al. 2010), but also from mindfulness-based therapy (MBT; Bateman & Fonagy 2006), and transference-focused psychotherapy (TFP; Clarkin et al. 2006). In subjects affected by SPD and BPD, also pharmacological treatment was considered, with clinically significant results when using antipsychotics and antidepressants (Ingenhoven et al. 2010). The general aim of personality disorders treatment is the improvement of adjustment capability and the subsequent reduction of non-adaptive thoughts and behaviors (Critchfield & Benjamin 2006; Linehan et al. 2005). The therapeutic strategy described in the present paper was implemented on the basis of previous studies concerning evidence-based psychotherapy approaches used for subjects with personality disorders in the middle- and long-term. At the same time, clinicians created a personalized treatment for G.B., taking into account psychopathological characteristics of SPD, specific symptom dimensions presented by the patient and the specific limitations concerning the inpatient setting. In fact, the two clinicians hypothesized that G.B. could live with ambivalence (anger and guilt) events belonging to his childhood. In view of this, it was treated with an integrated approach with psychodynamic, based on transference involving the two professionals (Kernberg 2008). One of the major strengths of the proposed treatment strategy is represented by the implementation of an individualized treatment, taking into account that people sharing the same psychiatric diagnosis may benefit from

different therapeutic approaches. Precision psychiatry determined the possibility of a better characterization of different phenotypes among subjects that share a common diagnosis, thus permitting to better stratify treatments (Maj 2020). Along with this, personalized psychiatry afforded the issues related to the unique combination of biological and developmental characteristics that each subject presents, that will be hopefully integrated with biomarkers during the next years, in order to guide treatment choices (Fountoulakis & Stahl 2020). The other central role in the treatment strategy is therapeutic relationship, representing the basis for an efficient psychotherapeutic programme (Norcross et al. 2006). At the early stages of the treatment, after providing information about potential adverse effects connected to cannabis use and focusing on strategies that could reduce the presence of worrying images, common short-term goals to be achieved were fixed together with the patient. All the project was sharing with the outpatient psychiatrist that would later follow the young man.

For this case, we have designed a specific setting structure coherently with the therapeutic goals to be achieved, in particular the creation of a therapeutic alliance, the integration of the patient's emotional experiences and containing the splitting through the transference analysis. As first step was applied decentralization techniques based on Mindfulness in order to reduce the patient anguished share related to intrusive images. Once that anxiety state was attenuated, the two professionals worked on the on the splitting mechanism using a "crossover" approach. The two therapists alternately performed expressive interventions towards the patient, that tended to respond to the therapists with a splitting mode of transference depending on gender. The two operators together resumed the main theme that the therapist of the opposite gender dealt with the patient and gave to him a more complete and adherent vision of reality about what was happening, leaving him the opportunity to express his doubts and uncertainties.

This case report presents limitations. First, the diagnosis was conducted with the aid of few psychopathological assessment tests, since G.B. did not collaborate to further evaluation during the inpatient stay. In consideration of this, neither the Structured Clinical Interview for DSM-5- Clinical Version (SCID-5 -CV) (First et al. 2016) nor a specific test for SPD, e.g. the Wisconsin Schizotypy Scale (WSS) (Kwapil et al. 2008), were performed. Similarly, we did not evaluate the clinical improvement of G.B. by repeating specific assessment scales during the treatment. Furthermore, the peculiarity of the acute setting may limit the possibility to reproduce a similar intervention, which is not usually provided in the context of an inpatient stay. Last, it was not possible to provide an adequate duration for the proposed intervention (Gabbard 2000), due to the discharge of G.B. as soon as his clinical conditions were getting better. Actually, in populations of patients affected

by personality disorders the treatment is expected to be even longer than in patients with Axis I disorders, since the creation of a long-term therapeutic relationship appears to be more efficient. Despite this, the choice of treating G.B. in the acute setting was proposed since the implementation of an integrated treatment during the early phases of the disorder may prevent possible relapses and the chronicization of the disorder. Early diagnosis and intervention are one of the major challenges of modern psychiatry, also in consideration of the serious mental illnesses onset age, e.g. bipolar and psychotic disorders (Scott et al. 2013, Scott et al. 2017).

At the beginning of the century, researchers tried to identify subgroups of help-seeking youths presenting ultra-high risk (UHR) of transition to first-episode psychosis (Scott et al. 2017). The UHR paradigm is aimed at identifying psychosis during its prodromal stage, thus addressing preventive interventions before the onset of a clear-cut psychiatric disorder (Raballo et al. 2019). The risk of transition, as predicted by UHR criteria, may vary between 15% and 35% in 12-24 months, and is calculated on the basis of state and trait characteristics, together with familiar history features (Scott et al. 2017). Risk syndromes consist of a cluster of subthreshold symptoms together with the above-mentioned variables, also including personality traits (Geoffroy & Scott 2017). Among personality disorders, SPD is considered to be the one with the worst prognosis in terms of transition to schizophrenia spectrum conditions in the long-term. Furthermore, SPD was hypothesized to be influenced by neurobiological and genetic factors. Noteworthy, exposure to traumatic experiences during childhood represents a major risk factor for the development of psychotic symptoms at an older age. Particularly, sexual assault is often associated to schizotypal symptoms, such as ideas of reference, magical thinking and paranoid beliefs (Berenbaum et al. 2008). The personal and social impact of such symptoms, as well as their risk of progression to chronic/recurrent disorders, suggests the need for early diagnosis and intervention, also in order to prevent worsening of global functioning (Raballo et al. 2019). Further advantages of early intervention are represented by the possibility of a better treatment response, a favorable risk-benefit ratio and the planification of adequate interventions targeted on the illness stage (Scott et al. 2013). Under this point of view, the combination of psychotherapy and pharmacotherapy at an early stage may influence illness trajectories in SPD and potentially prevent the transition to schizophrenia spectrum conditions. The present case report suggests the need for future prospective studies focused on non-pharmacological interventions for personality disorders in acute settings, where subjects often undergo their first contact with psychiatric services. This could help systematizing treatment strategies for early stages of illness and at-risk conditions, possibly reducing their risk of transition.

Acknowledgements: None.

Conflict of interest: None to declare.

Contribution of individual authors:

Massimo Claudio Bachetti & Federica Cirimbilli conceived and designed the study.

Massimo Claudio Bachetti, Federica Cirimbilli, Valentina Pierotti & Giulia Menculini wrote the first draft of the manuscript.

Massimo Claudio Bachetti & Federica Cirimbilli performed psychological session with the patient.

Massimo Claudio Bachetti, Federica Cirimbilli, Valentina Pierotti, Giulia Menculini, Alfonso Tortorella & Patrizia Moretti discussed obtained results.

Giulia Menculini, Alfonso Tortorella & Patrizia Moretti supervised the writing of the manuscript; all authors approved the final version of the manuscript.

References

1. American Psychiatric Association: *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub, 2013
2. Asami T, Whitford TJ, Bouix S, Dickey CC, Niznikiewicz M, Shenton ME et al.: *Globally and locally reduced MRI gray matter volumes in neuroleptic-naïve with schizotypal personality disorder: associations with negative symptoms*. *JAMA Psychiatry* 2013; 70:361-372
3. Barnhill WJ: *DSM – 5 Casi Clinici*. prima edizione, Raffaello Cortina Editore, Milano 2014; 18:351
4. Bateman A & Fonagy P: *Mentalization-based Treatment for Borderline Personality Disorder: A Practical Guide*. Oxford University Press, New York (NY), 2006
5. Berenbaum H, Thompson RJ, Milanak ME, Boden MT & Bredemeier K: *Psychological trauma and schizotypal personality disorder*. *Journal of abnormal psychology* 2008; 117:502
6. Byne W, Buchbaum MS, Kemether E, Kemether E, Hazlett EA, Shinwari A et al.: *Magnetic resonance imaging of the thalamic mediodorsal nucleus and pulvinar in schizophrenia and schizotypal personality disorder*. *Archives of General Psychiatry* 2001; 58:133-140
7. Blatt SJ & Ford RQ: *Therapeutic change: An Object Relations Perspective*. Plenum Press, New York-London, 1994
8. Butcher JN, Dahlstrom WG, Graham JR, Tellegen A & Kaemmer B: *Manual for the Minnesota Multiphasic Personality Inventory-2: MMPI-2*. Manual for administration and scoring. University of Minnesota Press, Minneapolis MN, 1989
9. Clarkin JF, Yeomans FE & Kernberg OF: *Psychotherapy for Borderline Personality: Focusing on Object-Relations*. Wiley New York (NY), 2006
10. Crichfield KL & Benjamin LS: *Principles for psychosocial treatment of personality disorder: An integration of participant relationship, and treatment domains*. In Castonguay LG, Beutler L: *Principles of Therapeutic Change that Work*. Oxford University Press, New York 2006; 253-271
11. Dolan B, Warren FM & Norton K: *Change in borderline symptoms one year after therapeutic community treatment for severe personality disorder*. *British Journal of Psychiatry* 1997; 171:274-279
12. First MB, Williams JBW, Karg RS & Spitzer RL: *Structured Clinical Interview for DSM-5 Disorders, Clinician Version (SCID-5-CV)*. American Psychiatric Association, Arlington, VA 2016
13. First MB, Spitzer RL, Gibbon M, & Williams JBW: *Structured Clinical Interview for DSM-IV Axis II personality disorders (SCID II) user's guide and interview*. American Psychiatric Press, Washington DC, 1997
14. Fountoulakis KN & Stahl SM: *Precision and personalized assessment, diagnosis and treatment in psychiatry*. *CNS spectrums* 2020; 1-7
15. Gabbard GO: *Psychotherapy of personality disorders*. *Journal of Psychotherapy Practice and Research* 2000; 9:1-6
16. Geoffroy PA & Scott J: *Prodrome or risk syndrome: what's in a name?* *International Journal of Bipolar Disorders* 2017; 5:7
17. Ingenhoven T, Lafay P, Rinne T, Passchier J & Duivenvoorden H: *Effectiveness of pharmacotherapy for severe personality disorders: Meta-analyses of randomized controlled trials*. *Journal of Clinical Psychiatry* 2010; 71:14-25
18. Kernberg O, Yeomans F, Clarkin JF & Levy K: *Transference focused psychotherapy: Overview and update*. *International Journal of Psychoanalysis* 2008; 601-620
19. Kirchner SK, Roeh A, Nolden J & Hasan A: *Diagnosis and treatment of schizotypal personality disorder: evidence from a systematic review*. *NPJ Schizophr* 2018; 4:20
20. Kwapil TR, Barrantes-Vidal N & Silvia PJ: *The dimensional structure of the Wisconsin Schizotypy Scales: factor identification and construct validity*. *Schizophr Bull* 2008; 34:444-457. doi:10.1093/schbul/sbm098
21. Lalli N: *Manuale di psichiatria e psicoterapia*. Liguori Editore, Napoli 2002; 25:326-327
22. Linehan MM: *Dialectical behavior therapy for borderline personality disorder: Theory and method*. *Bulletin of the Menninger Clinic* 1987; 51:261-276
23. Linehan MM, Davison G, Lynch T & Sanderson C: *Technique factors in treating personality disorders*. In Castonguay LG, Beutler L: *Principles of Therapeutic Change that Work*. Oxford University Press New York 2005; 239-252
24. Magnavita JJ: *Evidence-based treatment of personality dysfunction*. Wiley, Hoboken (NJ), 2010
25. Maj M: *Beyond diagnosis in psychiatric practice*. *Annals of General Psychiatry* 2020; 19:1-6
26. Nojolia GM, Buckner JD & Cohen AS: *Cannabis use and schizotypy: the role of social anxiety and other negative affective states*. *Psychiatry Research* 2012; 200: 660-8
27. Norcross JC, Beutler LE & Levant RF: *Evidence-based practices in mental health: Debate and dialogue on the fundamental questions*. American Psychological Association, 2006
28. Raballo A, Mechelli A, Menculini G & Tortorella A: *Risk syndromes in psychiatry: a state-of-the-art overview*. *Archives of Psychiatry and Psychotherapy* 2019; 2:7-14
29. Raynal P & Chabrol H: *Association between schizotypal and borderline personality disorder traits, and cannabis use in young adults*. *Addict Behaviors* 2016; 60:144-7

30. Robins CJ, Rosenthal MZ & Cuper PF: Dialectic behavior therapy. In Magnavita JJ: *Evidence-based Treatment of Personality Dysfunction: Principles, Methods and Processes*. American Psychological Association, Washington (DC) 2010; 49-78
31. Scott J, Leboyer M, Hickie I, Berk M, Kapczinski F, Frank E et al.: Clinical staging in psychiatry: a cross-cutting model of diagnosis with heuristic and practical value. *The British Journal of Psychiatry* 2013; 202:243-245
32. Scott J, Marwaha S, Ratheesh A, Macmillan I, Yung AR, Morriss R et al.: Bipolar at-risk criteria: an examination of which clinical features have optimal utility for identifying youth at risk of early transition from depression to bipolar disorders. *Schizophrenia bulletin* 2017; 43:737-744
33. Stone MH: Long-term outcome in personality disorders. *British Journal of Psychiatry* 1993; 162:299-313
34. Stone MH: Paranoid, schizoid, and schizotypal personality disorders, In Gabbard G.O. (a cura di), *Gabbard's Treatments of Psychiatric Disorders*, American Psychiatric Publishing, Washington, 2014
35. Szoke A, Galliot AM, Richard JR, Ferchiou A, Baudin G, Leboyer M et al.: Association between cannabis use and schizotypal dimensions - a meta-analysis of cross-sectional studies. *Psychiatry Research* 2014; 219:58-66
36. Tucker L, Bauer SF & Wagner S: Long-term hospital treatment of borderline patients: A descriptive outcome study. *American Journal of Psychiatry* 1987; 144:1443-1448

Correspondence:

Patrizia Moretti, MD

Department of Psychiatry, University of Perugia

Piazzale Lucio Severi, 1, 06132, S. Andrea delle Fratte, Perugia (PG), Italy

E-mail: patrizia.moretti@unipg.it