

CLINICAL UTILIZATION OF THE RATING SCALE OF MIXED STATES (GT-MSRS) IN A PSYCHIATRIC INPATIENT UNIT: A RETROSPECTIVE STUDY

Alba Cervone¹, Giuseppe Cimmino¹, Francesco Paolo D'Ostuni¹, Giulia Esposito¹,
Manlio Russo¹ & Giuseppe Tavormina²

¹Psychiatrist Inpatient Unit, "Ospedale del Mare", Mental Health Department, ASL NAI Centro, Naples, Italy

²President of Psychiatric Studies Centre (Cen.Stu.Psi. – www.censtupsi.org), Brescia, Italy

SUMMARY

Mixed states are often underdiagnosed, with important consequences in terms of worsening prognosis, frequent admission to the hospital, higher suicide risk and poorer quality of life. For this reason, we analyzed retrospective data from patients admitted in the Psychiatric Hospital from January 1st to April 30th 2019 to identify clinical features of the mixed states by administering the G.T. MSRS scale. Within the 90 subjects of the sample, the large majority (75%) met criteria for mixed state. Of those only 16 were discharged with a diagnosis of Affective Disorder, however 26 (30.9%) were prescribed a mood stabilizer. This study shows that there is a high prevalence of mixed states in the inpatient unit admission, which is demonstrated both from the prescription of mood stabilizers, and confirmed by the diagnosis of mixed states rated with the scale. The scale can be a useful instrument to detect early in the course if the hospitalization the presence of mixed state, in order to guide a tailored psychopharmacological treatment, and improve prognosis.

Key words: mixed state - bipolar spectrum - unitary psychosis - mixed state rating scale - tailored treatment

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INTRODUCTION

Mixed affective states, defined as the coexistence of depressive and manic symptoms, are complex presentations of manic-depressive illness that represent a challenge for clinicians at the diagnosis, classification, and pharmacological treatment levels. In the updated DSM-5 version, published in May 2013, Mixed States are classified as Specifiers of Bipolar Disorders or Major Depressive Disorder and it applies when a person experiences both symptoms of depressed mood and mania (though one or the other would be considered predominant) within the same episode.

According to the theory of "unique psychosis", first postulated by Neumann (1874-1884), we can find different psychopathological pathways that are probably modulated by the personality structure on which the affective disorder is implanted and by its intrinsic possibility of experiencing anger (dysphoria) alongside pain and euphoria. Affective disorders are considered therefore the result of a "process" that can be implanted on different "structures" of personality and which will be modulated by them (Wiener 1983).

This is the reason why, according to this theory, bipolar disorders are always underestimated, especially if we consider subthreshold forms, with important consequences in terms of prognosis and quality of life. As for any other psychiatric diagnosis, in fact, correct identification of mixed states has important clinical relevance for both timely diagnosis and planning adequate treatment. In contrast, the inability to recognize this clinical entity exposes the patient to significant risks, and

especially for the possible worsening of symptoms due to iatrogenic damage as a consequence of inappropriate therapy.

A change in the classification system that takes into account subthreshold bipolarity represents a challenge for clinicians, researchers, and regulators, who may use it as a base for a corresponding change in psychopharmacological choices. Treatment guidelines do not usually recommend specific treatment for mixed states (Stahl 2016). As a consequence, the selection of medication is usually based on individual factors and short and long-term safety and tolerability. It is largely recognized, however, that mixed manic/depressive presentations in bipolar disorder have a poorer pharmacological response compared with pure episodes, and combination therapy is often required.

The aim of this study is to identify mixed states in an inpatient unit sample, to check the prevalence of those symptoms by using the G.T. Mixed States Rating Scale ("G.T. MSRS"), (Tavormina 2014). The "G.T. MSRS" has been designed to detect mixed states in order to improve the clinical effectiveness of psychiatrists and to prescribe a correct treatment.

SUBJECTS AND METHODS

The medical records of all patients, aged more than 18 years, consecutively admitted to a Male-only inpatient Psychiatric Unit of Hospital from January 1st 2019 to April 30th 2019 were revised to assess the presence of symptoms of mixity, utilizing the G.T. Mixed states rating scale, by two trained psychiatrists (AC, GE).

Exclusion criteria were the presence of psychotic symptoms due to medical condition (e.g. Parkinson disease, brain tumor) and mental retardation.

The "G.T. Mixed States Rating Scale", or "G.T. MSRS", is a self-administered rating scale structured with 11 items (7 among them include also sub-items). The response to each question would be "YES" or "NO". A "YES" answer would score 1 (or 2 if the symptom scored on items 1-2-3-4-8-9-10-11 is present for 50% of the month), a "NO" answer would score zero. Scores can range from 0 to 19, with a higher score meaning a more severe mixed state presentation. If a patient is positive (meaning having a total score equal or more than 1) on the "G.T. MSRS", this will suggest a "generic" diagnosis for a mixed state in the bipolar spectrum, based on the Akiskal's or Tavormina's full-spectrum scheme (Akiskal & Pinto 1999, Tavormina & Agius 2007). Subsequently, the clinician will need to carefully make a correct sub-diagnosis of the sub-groups of mixed state. A Medium-light level of mixed state is defined with scores ranging from 2 to 6; a Medium level of mixed state is defined if the score is 7 to 12; a High level of mixed state is defined if the score ranges 13 to 19.

RESULTS

The total sample included 90 subjects, with an age that ranged from 20 to 72 years old (mean 49, SD=17). Subjects were grouped into 4 sub-groups based on the discharge diagnosis: schizophrenia-spectrum psychosis for 38 subjects (45.2%), affective disorder for 16 (19%), personality disorder for 16 (19%) and "others" (which included adjustment disorders, obsessive compulsive disorder, substance abuse) for 14 (16.8%).

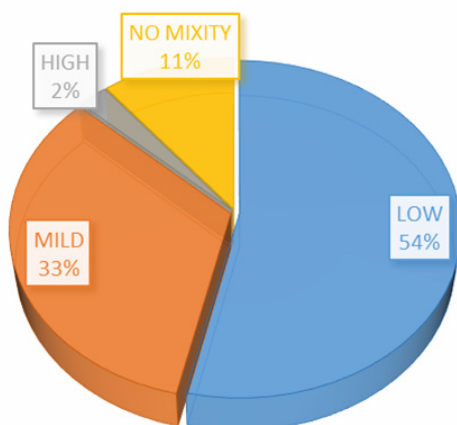


Figure 1. Level of mixity

In our sample, 75 patients (89.2%) met criteria for mixed state: 45 met criteria for low level of mixity, 28 for mild level of mixity, 2 for high level of mixity (Figure 1). Specifically, the majority of subjects discharged with a schizophrenia spectrum psychosis disorder

diagnosis had a mixed state (29 patients), of which 21 met criteria for low level of mixity and 8 met criteria for mild level of mixity (Figure 2). All subjects discharged with an affective disorder had mixed state, 12 of them met criteria for low level of mixity and 4 met criteria for mild level of mixity (Figure 3). The large majority of patients with a discharge diagnosis of personality disorder (14 out of 16) showed a mixed state, 12 met criteria for mild level of mixity and 2 met criteria for high level of mixity (Figure 4); all subjects diagnosed with "others" diagnosis met criteria for low level of mixity (Figure 5).

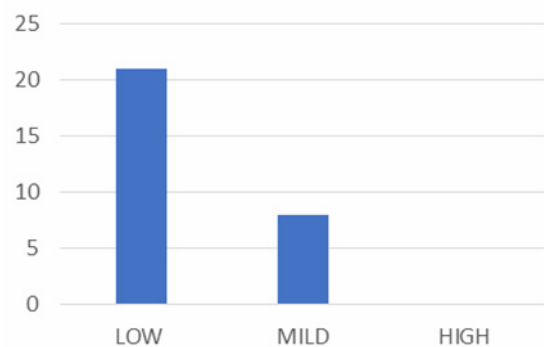


Figure 2. Level of Mixity in pt. with Schizophrenia Spectrum Psychosis Disorder diagnosis at discharge

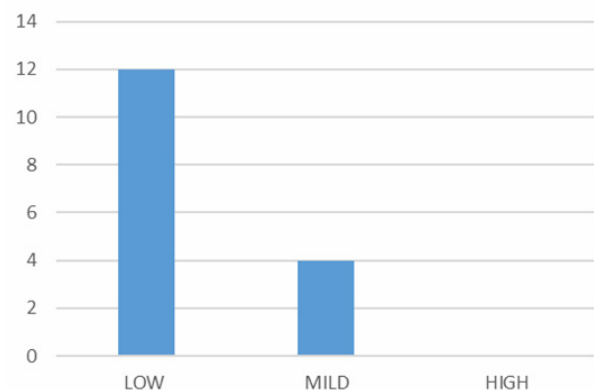


Figure 3. Level of Mixity in pt. with Affective Disorder diagnosis at discharge

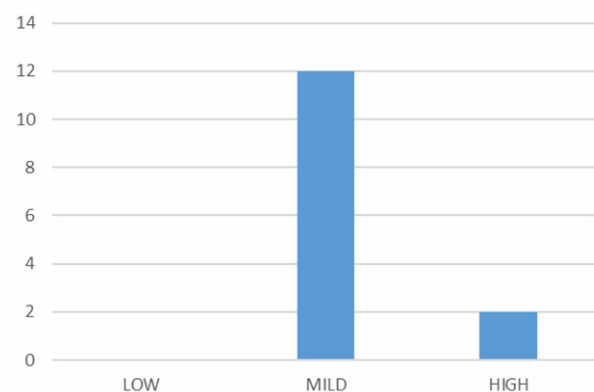


Figure 4. Level of Mixity in pt. with Personality Disorder diagnosis at discharge

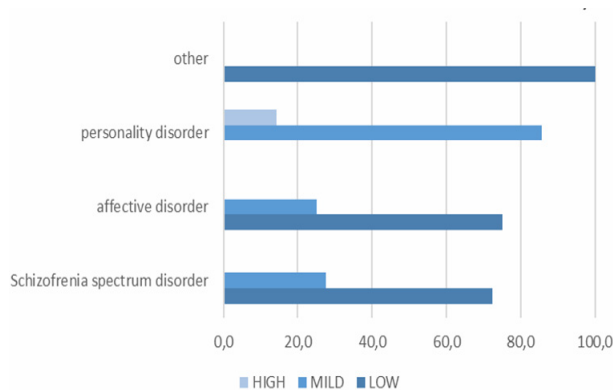


Figure 5. Level of Mixity: summary chart

Twenty-six patients (30.9%), within all the 75 that met criteria for mixed state, had prescribed a mood stabilizer during their hospitalization, but only 16 had a diagnosis of Affective Disorder (Bipolar Disorder or Major Depression) at the discharge; in particular, we found a high prevalence of mixity in patient with personality disorder. It often happens that mixed symptoms are underestimated because the patients referred frequently present anxiety or somatic symptoms that influence the clinicians to prescribe only antidepressants or benzodiazepines. For this reason, we have highlighted that an early detection of mixed states could help avoid misdiagnosing or mistreating patients with these symptoms. As we said before, treatment guidelines do not usually recommend specific treatment for mixed states. As a consequence, the choice of medication is usually based on clinical experience, individual factors and short and long-term safety and tolerability.

DISCUSSION

In our study, we found that the majority of subjects admitted to an inpatient psychiatric unit met the criteria for mixed state diagnosis, which was not always reflected in the discharge diagnosis, confirming our hypothesis of the limitation of the DSM-5 diagnosis, compared to the affective spectrum.

Mood stabilizers and atypical antipsychotics are recommended to treat mixed episodes, but data is limited to sub-analyses or post hoc analyses of populations of patients with both manic and mixed episodes. It is interesting to note that the majority of those subjects who met the criteria for mixed states diagnosis had been prescribed a mood stabilizer, validating the results of GT-MSRS scale. Even though there are already two validating studies on the usefulness of “GT-MSRS” (Tavormina 2015, 2017), the limitations of this study suggest that additional studies are needed to understand what is the best treatment option for mixed states.

A question that often arises in the psychiatric debate is how to describe the nature of mental disorders, in terms of either nosological entities or unitary psychosis.

Since psychiatric disorders reflect affective imbalances, we have considered the hypothesis that the concept of the unitary psychosis helps us to think that there is a unitary affective ground in the psychosis, in which the psychotic symptoms fit within different phenomenological frameworks.

CONCLUSIONS

Despite the limitations of this study, interesting results have been obtained with this retrospective study: the rating scale “G.T. MSRS” can be a valid instrument that helps clinicians to identify the “mixity” symptoms of the mood, in order to prescribe a tailored treatment. To detect mixed states is very important in terms of prognosis, suicide risk, side effects and quality of life. Given the high prevalence of mixed state in the inpatient unit population, the G.T. MSRS scale could be an easy tool to detect “mixity” symptoms in mood disorders early in the course of hospitalization, in order to prescribe mood regulator drugs as soon as possible, avoiding the utilization of antidepressants alone, or the use of benzodiazepines for long periods (Tavormina 2016). Further studies are needed to identify a tailored treatment, considering the mixity features.

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Conflict of interest: None to declare.

Contribution of individual authors:

Alba Cervone projected and designed the study, and also wrote the manuscript.

Alba Cervone, Giuseppe Cimmino, Francesco Paolo D'Ostuni & Giulia Esposito visited patients and carried out clinical work.

Alba Cervone, Francesco Paolo D'Ostuni, Giulia Esposito & Manlio Russo interpreted the data.

Giuseppe Tavormina created and validated the Mixed State Rating Scale, and reviewed the study.

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Correspondence:

Alba Cervone, MD
Psychiatrist Inpatient Unit, "Ospedale del Mare"
Mental Health Department, ASL NA1 Centro
Via Tino di Camaino, 2/A, 80128 Napoli, Italy
E-mail: alba.cervone@gmail.com