

Comorbidity in Liaison Psychiatry: Evaluating Tripolar Syndrome of Depression, Factitious Disorders, and Borderline Personality Disorder

Ricardo Mendes*¹, Ana Pereira², & João Silva³

¹Department of Renewable Energy, University of Lisbon, Lisbon, Portugal

²Faculty of Mechanical Engineering, University of Porto, Porto, Portugal

³Institute of Environmental Sciences, University of Coimbra, Coimbra, Portugal

Keywords:

Factitious Disorders, Munchausen Syndrome, Borderline Personality Disorder, Depression, Liaison Psychiatry

Abstract

Introduction. During recent years, there has been an increased incidence of hospital admissions in general adult psychiatry of patients presenting with comorbid Factitious Disorders, Borderline Personality Disorder and Depression. This clinical triad here named as Tripolar Syndrome can generate an articulate process of diagnosis and treatment. Patients with Tripolar Syndrome might tend to exaggerate or distort the gravity of their depression with suicidal ideation, and associated physical symptoms.

Material and Methods. The authors used case vignettes and focus groups to identify the Tripolar Syndrome while improving the understanding of this standard presentation in adult and non-forensic acute psychiatric wards in the United Kingdom. Data collected from multiple mental and medical specialists helped to cross-analyze every single case.

Results. The authors hypothesized that patients suffering from the Tripolar Syndrome have an underlying proclivity to use depressive and physical symptoms to exercise leverage on medical decisions while aiming to extensive and unnecessary physical and surgical treatments.

Conclusion. The management of patients presenting with the Tripolar Syndrome is not easy. These patients are usually reluctant to be discharged from hospital as they quickly adapt to the role of patients. Besides, these patients use exaggerated psychological and mental symptoms to communicate their distress. Therefore, detailed knowledge of the tripolar syndrome as well as specific interventions and liaison between psychiatry, general medicine, and surgery are vital to improving the outcome of this frequently occurring syndrome.

Introduction

Factitious disorders were formerly identified as Munchausen Syndrome. Baron Munchausen is the central personage of *The Surprising Adventures of Baron Munchausen* by Rudolph Eric Raspe, who reported his encounter with the titular baron, Freiherr von Münchhausen (Germany, 1720–1797). This noble gentleman used to entertain bystanders with his embellished and fantastical stories about his campaign in Russia [1]. During recent years, there has been an increase of cases of Factitious Disorders (FD) comorbid with Borderline Personality Disorder (BPD) and Depression (D). This occurrence has increased a load of admissions into psychiatric and general hospitals corresponding to epochal drops in the socioeconomic conditions of the adjacent population and the self-referral to hospitals as a safety belt to social isolation, emargination, depression, unemployment, etc. The authors of the current research have identified the Tripolar Syndrome (TS) in this scenario. People with the syndrome tend to give dramatic accounts of their illnesses, are inclined to exaggerate subjective symptoms of depression that do not match the objective presentation, and are usual to provide embellished stories of their physical and mental illnesses to access hospital admissions, prescribed medications, antidepressants, invasive surgery and unnecessary medical treatments. The complexity of their presentation rising similar concerns in liaison psychiatry and professionals from many branches of medicine, has brought the authors of the current article to propose tools for understanding the Tripolar Syndrome and possible strategies for its clinical diagnosis and management.

According to Merriam-Webster Dictionary, “Munchausen Syndrome is a psychological disorder characterized by the feigning of the symptoms of a disease or injury to undergo diagnostic tests, hospitalization, or medical or surgical treatment” [2]. This definition highlights that the simulated or exaggerated symptoms can be physical and mental and that patients might use them to gain long-term hospitalization. The International Statistical Classification of Diseases (ICD-10) code F68.1 is used to code Munchausen syndrome, “The patient feigns symptoms repeatedly for no reason and may even inflict self-harm to produce symptoms or signs” [3]. As the ICD-10 [3] and the National Health Service (NHS) [4] documents inform, Munchausen Syndrome is a condition where the patient feigns to be unwell or intentionally constructs signs of a disease in themselves. The ICD-10 [3] and the NHS [4] stress that the core purpose of Munchausen’s behavior is to adopt a ‘sick role’ to access public nursing and to be at the core of others’ consideration. “The disorder is often combined with marked alterations of personality and relationships” [3]. The ICD-10 classification mentions self-harm and the fact that the behavior is recurrent with the intent to adopt the role of a patient [3]. As illustrated in the current study, there is frequent comorbidity of factitious disorders with depression and borderline personality disorder. Feigning symptoms is a way of achieving a patient role and accessing hospital that problematic fringes of the population use as a respite from financial and social difficulties, homelessness, solitude, and conflict with society [5]. As a consequence, the Tripolar Syndrome bears a series of advantages when patients are in hospital, inclusive of receiving complete care, attention, restricted sedative medications and painkillers, antidepressants also when not necessary, a shelter, several means to self-harm and opportunity to act parasuicidal behaviors buffered by a belt of medical and nursing attention.

The current study started from analyzing prototypical cases of patients with comorbidity of Munchausen Syndrome (MS) with Borderline Personality Disorder (BPD) and subjective Dysthymia. Other studies also confirmed the association between Munchausen Syndrome and Borderline Personality Disorder [6,4]. Other authors suggest that Munchausen syndrome might be a sign of Borderline Personality Disorder [7] or comorbid with Borderline Personality Disorder [4,8]. Symptoms of the tripolar syndrome at times might be exaggerated by patients to control environment, admission, treatment, staff and health organizations [9]. Furthermore, patients with tripolar syndrome tend to embellish their physical and psychiatric symptoms, especially pain, insomnia, anxiety, depression; they aim to access strong painkillers, opioid-based medication, higher dosages of antidepressants, sleep tablets, stronger psychotropic medication while aiming for long-term admissions in a general or psychiatric hospital [10].

In mental health, comorbidity refers to the combined manifestation of two or more psychiatric pathologies with physical illnesses [11]. Comorbidity occurs ‘When two disorders or illnesses occur in the same person, simultaneously or sequentially’ [12]. Diagnosis of comorbidity is easy in multiaxial systems such as the Diagnostic Statistical Manual of Mental Disorders (DSM-5) and the ICD-10, and clinicians should be encouraged to log the full range of diagnoses for each patient as a way of recording the intricacy of psychiatric cases [13]. Indeed, Desay (2006) suggests that comorbidity affects all mental illnesses [14]. Other authors reported that numerous personality disorders are present in more than fifty percent of patients with a personality disorder diagnosis [15]. Maj (2005) warns that the process of separating psychiatric conditions into many diagnoses may inhibit the holistic treatment of patients, and suggests that psychiatrists should avoid the term comorbidity as it merely refers to various aspects of the same psychiatric illness [16].

Consequently, physicians might be approached by patients seeking to ‘self-medicate’ to anesthetize mental or emotive discomfort or to cope with other untreated psychiatric conditions [17]. The methods that patients with factitious disorders use to access regular prescriptions include going to hospitals to obtain painkillers, claiming attention deficit hyperactivity disorder (ADHD), claiming to have lost a prescription, complaining of side effects from current medication, visiting numerous family doctors to collect multiple prescriptions and, in extreme cases, faking surgical symptoms to access surgery and strong(er) medications [17]. Correlations have also been reported with sleep disturbance, low positive affect, and drug craving. Such craving is mostly for painkillers, of which use has increased in the United States, often despite a lack of objective evidence of pain in the people requesting them [18]. Patients with comorbid MS-BPD also feel the proclivity to undergo invasive therapeutic investigations and treatments, such as intravenous fluid therapy [6] or intramuscular medication, instead of oral medication. Indeed, many self-harming behaviors of patients with the tripolar syndrome can be interpreted as a plan to receive invasive diagnostic and therapeutic procedures [19].

Equally, self-harming in tripolar disorder can be a form of malingering and act to attract (more) attention from concerned staff and achieve unnecessary diagnostic procedures or therapy, for example, intramuscular medication for rapid tranquilization, or an unnecessary increase of prescription of antidepressants [20]. These disputes with

staff can result in the deterioration of patients' symptoms and in a game between staff and patients that is difficult to interrupt or manage [20]. Moreover, patients with factitious disorders regularly challenge ward staff; they demand continuous care from health carers to reduce their alleged pain, and they insist on receiving medications, complex instrumental examinations, referrals to other specialists and expensive medical investigations [21]. Other authors report that people have used medication overdoses to commit suicide, to make others believe that they are depressed, and have tried to kill themselves or to injure themselves without an actual intention to die [22]. Even patients who admit to overdosing as a means to manipulate others sometimes confess that they had planned to die or sought a momentary distraction from their ongoing problems while about two-thirds of TS patients have a history of overdoses [23]. Intentional overdoses are prevalent among populations with low socioeconomic status, with about fifty percent of patients who overdose being chronically unemployed or have never held a job. Paracetamol is the most frequently used drug for intentional overdoses [24].

Other authors also confirm an increase in prescriptions for psychotropic medication in primary care. The increased severity of psychiatric diagnoses and comorbidities has likely led to this increase in orders of antidepressants and antipsychotics and combinations of antipsychotic-sedative-hypnotic drugs [25]. A study in Spain indicated that thirty percent of patients in primary care present with comorbid depression, anxiety and somatoform illnesses [26]. The explanations for their preoccupying behaviors are not clear. One author reports that patients who feel ashamed of themselves, such as those with MS and BPD, believe that they deserve maltreatment and pain [27].

Materials and methods

The clinical cases analyzed were all patients accessing acute non-forensic psychiatric wards in different (collaborating) towns for a period of assessment and therapy. The regular admission usually occurred via the local Department of Accident and Emergency (A&E) or referral by the Home Treatment Team. Statistical methods included participant observations, structured and unstructured clinical and psychiatric interviews, analysis of electronic records, screening of medical history, review of psychiatric history, the request of collateral history from the family doctor and other medical units that treated the patient, and collection of physiological parameters. The researchers also collected data connected to any medical and surgical intervention undertaken by patients. This process of cross-analysis helped understand possible recurring patterns of illnesses and to match patient's alleged symptoms with clinical evidence. Once a case was suspected of having the tripolar syndrome, the psychiatric staff started to collect evidence of behavior and narratives to reconstruct patient's clinical and behavioral picture.

A multi-professional and liaison consultation occurred between medical and psychiatric specialists to share information and personal opinions about the case. Patients' narratives and behaviors were classified according to recurring themes by using a grounded theory approach. A field study with an ad-hoc observation scale improved the ecological validity of the behavioral observations and refined the diagnostic tools. All patients were weekly reviewed by the multidisciplinary team while nurses in the wards conducted routine observations and completed the electronic records for follow-up. Each suspected case of TS case was discussed in the interdisciplinary team to reach consensus on diagnosis. These meetings within the team also served as focus groups to create a unitary definition of the tripolar syndrome. Standardized psychiatric tests measured depression, anxiety, somatic symptoms together with our Munchausen Syndrome Self-Assessment Scale (MSAS) to identify what traits prevailed in the presentation. Following are the four prototypical cases that formed the basis for the construction of a theory about TS. The authors used the mandatory ethical restraints by keeping information confidential, by not disclosing patients' identity to third parties, by discussing cases in general terms during interprofessional meetings unless known to all staff, and by concealing all data which could help identify a patient. As all clinical cases were anonymized, the approvals from the local ethical committees were weaved.

Case vignette N.1.

Twenty-four-year-old female patient. This young female patient presented with a history of contacts with Children and Adolescent Mental Health Services (CAMHS). The diagnosis at admission to psychiatric hospitals was a mixed factitious disorder, borderline personality disorder, and depression. This patient presented with multiple scars from previous deliberate self-harm or serious bodily injuries, including extensive mutilations of the skin or other organs. In earlier admissions, her self-harming required permanent transfer to surgical units for intensive or invasive medical and surgical treatments. When inpatients on mental health wards, she was prone to self-inflict dangerous wounds or aggravate her vital signs, such as inducing high or low blood pressure, low peripheral oxygen saturation or apnoea conducive to reduced brain perfusion triggering pseudo-fits. Consequently, psychiatric staff would eventually refer this patient to the local Accident and Emergency department and medical wards. When finally

admitted to medical and surgical units, this patient appeared fulfilled and more relaxed. She also looked less challenging in her behavior compared to when she was in a psychiatric ward. With proper medication focused on mood stabilizers but not antidepressants, her harmful behaviors subsided and eventually de-escalated. Nonetheless, to manipulate and control staff, this patient like others with a similar presentation made frequent allegations against the team whenever her efforts to create or maintain factitious illnesses were challenged or disbelieved. Patients following this pattern differ from those with only a diagnosis of BPD, where the level of deliberate self-harm is less severe.

Case vignette N. 2.

Forty-year-old female patient. This patient is a prototypical case commonly presenting with the tripolar syndrome and mixed anxiety-depressive disorder. This typical patient presented with a history of chronic depression, poor interactions with her social network, social isolation, low motivation, most of her time spent at home watching television, chronic pain, asthma, multiple painkillers and metabolic syndrome. This woman and similar cases are commonly admitted to hospitals with numerous physical conditions and relative medication, chronic pain, and insomnia. She formed a psychological dependence on her medical prescriptions and was resistant to having these prescriptions reviewed. Additionally, she might regularly complain of pain despite a lack of objective and instrumental evidence (e.g., she was periodically seen smiling and relaxed just before asking nurses for her painkillers). This lady reported a history of multiple physical assessments which have, indeed, always had negative results. Furthermore, she might show a marked resistance to change her unhealthy habits and lifestyles. Instead, she was prone to reinforce and adapt to the role of a chronically sick patient, inclusive of multiple physical and mental problems for which psychiatric and medical teams found no objective evidence. Also, this patient, like others with the tripolar syndrome, was prone to complain about her treatment by hospital staff. In some instances, the team found passive-aggressive traits in her personality together with chronic dysthymia. This patient tended to have limited social and communication skills, and she communicated personal distress and anger by somatizing them through physical symptoms and sick roles. As a final point, this patient as others with the tripolar syndrome is hard to discharge home once on a psychiatric or medical ward. Instead, they show a proclivity to become adapted to an inpatient role and to become chronic patients into medical and mental health teams. These typical patients perceive any change in treatment as a challenge, and they might also report multiple somatosensory deficits which are not supported by specialist visits and instrumental investigations, such as partial blindness, partial deafness, partial numbness, diffuse musculoskeletal aches and emotional slowness. Typically, they refuse any examination and treatment which could improve, modify or rule out their deficits as it was also occurring in this clinical case.

Case vignette N. 3.

Thirty-year-old male patient. This patient is another typical case representing others who often are admitted to psychiatric wards with a dual diagnosis of polysubstance misuses, dissociative personality disorder, and tripolar syndrome. This patient had criminal records or previous contact with police. He tended to report multiple physical or psychiatric symptoms and could easily list to doctors the medications that he was supposedly taking before admission. He managed to direct doctors' choices regarding psychotropic prescriptions, painkillers, antipsychotics and benzodiazepines that would allegedly help him. This patient (representing a typical case of mixed TS with an antisocial personality disorder) intensified his symptoms with complex histories, pseudologia fantastica and an alleged constellation of significant neurological or mental symptoms that are comorbid with pseudologia fantastica [28]. Therefore, he gave an articulated and embellished account of his unproven psychiatric or physical illness often inclusive of severe depression, and ongoing severe suicidal thoughts. This patient often claimed that only opioid-based painkillers and benzodiazepines had helped him in the past to solve his unproven symptoms. Therefore, he tended to exaggerate withdrawal symptoms from undocumented illicit substances or alcohol to access high dosages of benzodiazepines, methadone, and pregabalin. He also reported high levels of subjective anxiety and depression which did not correspond to objective evidence and continuous behavioral observations while in the ward.

Case vignette N. 4.

Fifty-year-old male patient. This patient, like similar cases clustering in this clinical category, presented with a history of chronic depression together with the tripolar syndrome. This patient as similar ones in this cluster suffered from an avoidant personality disorder, and he also had a history of unemployment, marital separation, little family contact, dependence on social welfare benefits, problems with alcohol, social isolation, and sleep problems. He frequently alleged severe depression and was admitted to hospital with incipient suicidal ideation. However, the presentation was not conducive to reinforce the diagnosis of severe depression, as in this case, subjective feelings are usually paired with objective observations in the psychiatric ward to confirm a diagnosis. Instead, the hypothesis

is that patients who cluster in this category find hospitals to be places of respite with opportunities for social interactions. Once in the hospital, they firmly resist discharge to the community, claiming they still feel actively suicidal and have extreme anxiety and sleep problems.

Results and discussion

Tripolar Syndrome syndrome is a complex psychiatric illness provided by the comorbidity of depression with a borderline personality disorder and factitious disorders. This syndrome is characterized by a complex array of behaviors (Table 1) that, in the long-term, become maladaptive and can lead to chronicization:

- One common presentation is the problematic management of these patients who tend to undermine the therapeutic alliance with their primary carers and to use false allegations to proceed undisturbed in their maladaptive behaviors. These last are a whole array of self-harming behaviors, exaggeration of subjective symptoms of depression with no objective and behavioral confirmation, and intensification of physical symptoms from allegedly ‘serious’ pathologies.
- Patients suffering from the Tripolar Syndrome tend to put themselves voluntarily at risk of serious health and physical illnesses. They can use deliberate self-harm, self-inflicted wounds, and parasuicidal acts to achieve the goal of a high dependence from hospitals and healthcare services and to gain access to medical and surgical wards and potent psychotropic medications and painkillers, possibly administered intramuscularly and intravenously.
- Patients presenting with comorbid Tripolar Syndrome and Dissocial Personality Disorder might feign physical and mental symptoms to access healthcare services and resources, restricted sedative drugs, painkillers, hospital admission. In these patients, Pseudologia Fantastica can be found as well [28].
- Patients with the Tripolar Syndrome tend to play a chronic-patient role. There is a proclivity to control healthcare resources, staff, and care plans.
- Tripolar syndrome frequently resolves in lengthy admissions, constant conflicts between staff and patients with the syndrome, and expensive and unnecessary medical and surgical treatments. As the subjective degree of severity of depression does not correspond to the objective and euthymic behavior, conflicts exist between staff and patients regarding the actual existence of clinical depression.
- A blend of deliberate self-harm, challenging behaviors, self-mutilation, chronic-patient role, chronic pain, mixed depression and anxiety, and addiction to hospitals and emergency departments are common presentations in the Tripolar Syndrome.
- Ultimately, patients with Tripolar Syndrome are difficult to be discharged from hospital or community psychiatric services. In fact, they actively resist any clearance from medical and psychiatric services. Instead, they become intense consumers of healthcare resources.

Table 1. Clinical presentation of Tripolar Syndrome

PROBLEMATIC BEHAVIORS	CHARACTERISTICS AND CONSEQUENCES
Factitious behaviors:	Claiming to have physical and mental health problems, inclusive of severe depression and suicidal ideation <i>more serious</i> than they are.
Self-inflicted wounds and illnesses, more serious than superficial deliberate self-harm:	Can raise <i>concern in staff</i> and lead to an urgent referral to Accident and Emergency (A&E) departments in a hospital.
Request for invasive diagnostic and therapeutic interventions:	Pseudo-complexity of clinical and symptomatological presentation or <i>claiming history of rare diseases</i> that ‘could not be clarified’ during previous investigations.
Claiming constant or intense pain:	Aiming to have the constant prescription of <i>painkillers</i> . No objective evidence of the presence of pain but only subjective accounts. The patient does not appear to be undergoing pain attacks. The ‘addiction’ to paracetamol has been reported by patients as due to its ‘relaxing’ effects.
Shopping for medication:	<i>Accessing different healthcare services</i> and general practitioners, also in different geographical areas, to obtain a sequence of medical prescriptions not available from the counter.
Dramatization of symptoms to get to hospital Accident and Emergency department:	<i>Recurrent admissions to psychiatric hospitals via A&E</i> or other medical departments. They do not easily access their general practitioners. Self-referral preferred. They can travel to different towns to access local hospitals

	via local A&E.
Escalation of behaviors if the level of staff's observation in the psychiatric or medical ward is reduced:	Absence of physical or mental symptoms when under close observation by staff in psychiatric and medical wards. An <i>escalation in presentation</i> and increase of physical and depressive symptoms <i>when the intensity of staff's observation is reduced</i> .
Prone to false allegations towards staff when challenged on their presentation:	Deterioration of physical and psychiatric symptoms, inclusive of depressive symptoms and suicidal thoughts when staff challenges patients about their misbehaviors and symptoms. <i>Frequent allegations against staff</i> .
Claiming multiple allergies to medications to exert control over prescriptions of therapeutic drugs:	<i>Frequently reporting allergies to numerous medications</i> . As no immediate confirmation is always available, their medication cards are compiled with a long list of 'allergies' to multiple medications. It is another way to drive medics toward the desired treatment.

Conclusion

In the current article, the authors explored a particular form of comorbidity in psychiatry with interest in liaison with medicine. However, the concept of comorbidity is not new in psychiatry. Furthermore, the idea of comorbidity does not provide a clear difference between the coincidence of symptoms collections like the presentation of different symptoms in the same pathology or different psychiatric pathologies with similar symptoms [29]. Authors also believe that factitious disorders are more a striking emotional and interior feature of these patients involving the fabrication of medical and individual accounts or pseudologia fantastica to hide their internal world [30]. Besides, the diagnosis is not straightforward as patients with factitious disorders are reluctant to disclose personal data on psychiatric assessment, and hesitant and unreliable in revealing their medical accounts [31]. The novel approach of the current article is to consider that some mental disorders might co-occur as being triggered by the same underlying psychopathological mechanisms or needs, although these are not immediately evident at the first analysis of cases of TS. In the current article, the terms 'Munchausen' and 'factitious' have been used as representing the same syndrome [32]. Besides, a collaboration within medical and psychiatric specialists is needed as diagnosis needs to be guided by facts and results of investigations and outcomes in different medical and psychiatric specialties who have treated the same patient [33]. The comorbidity of persistent depressive disorder with personality disorder presents with more marked symptoms, more prominent relational difficulties, and a less satisfactory effect of therapy [34]. Management is not easy as unresolved conflicts, neglected long-term needs, and a history of abuse during childhood might reduce the ability of TS patients to obtain attention and compassion from others using conventional communication strategies or when minimizing the degree of severity of their mental and physical symptoms. Furthermore, patients with TS believe instead that the only way to receive attention and care is to present to hospitals with debilitating and preoccupying physical symptoms and severe depression. They might assume that the only method to foster close attachments and unlimited caring is via a debilitated body, serious physical and psychiatric illness, and a sophisticated medical and psychiatric presentation. In any instance, the tripolar syndrome has equal importance for psychiatrists and specialists in other branches of medicine as the assessment and intervention need to be coordinated for a successful outcome, and to avoid misinterpretations in patients' physical and mental symptoms [34].

Acknowledgements

The authors are thankful to doctors and nurses in their teams that regularly provide support and professional attention to patients with Tripolar Syndrome.

Conflict of interest

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article. Besides, the clinical cases described are not directly linked to the actual affiliations of the authors as these examples were extracted from clinical research which occurred in separate institutions and during different periods.

References

1. Raspe RE. The surprising adventure of Baron Munchausen. Irvine, CA: Xist Publishing; 2015
2. Merriam-Webster Dictionary Online [homepage on the Internet]. Munchausen Syndrome (2017). Available from: <https://www.merriam-webster.com/dictionary/Munchausen%20syndrome>, accessed December 15, 2017.

3. WHO (World Health Organization). ICD-10 International Statistical Classification of Diseases and Related Health Problems. Vol. 1, Geneva, p. 368; 1993
4. NHS (National Health Service). Munchausen Syndrome. Available from: <http://www.nhs.uk/Conditions/Munchausens-syndrome/Pages/Introduction.aspx>; accessed: 20 September 20, 2017.
5. Lazzari C, Shoka A, Kulkarni K. Are psychiatric hospitals and psychopharmacology the ultimate remedies for social problems? A narrative approach to aisociopsychopharmacological assessment and treatment. *IJMRPS*2017; 4: 38–44.
6. Findaci I, Ozturk O. A Munchausen Syndrome case manifesting as a need for intravenous fluid therapy. *Family Practice & Palliative Care* 2016;2: 58–60.
7. Malatack JJ, Consolini D, Mann K, Raab C. Taking on the parent to save a child: Munchausen syndrome by proxy. *Contemporary Pediatric*2006;23: 50–63.
8. McEwen D R. Recognizing Munchausen’s Syndrome. *AORN Journal*1998; 67: 440.
9. Lazzari C, Shoka A, Masiello I. Chapter 3: Maladaptive behaviors in inpatients with Borderline Personality Disorder: A Behavioral game theory explanation (pp. 63-96). In: Anderson R (Ed.), *Borderline Personality Disorder (BPD): Prevalence, management options and challenges*. New York: Nova Publisher; 2016.
10. Lazzari C, Shoka A, Papanna B, Mousailidis G. Chapter 2. Advancing healthcare leadership: theories of analysis and intervention in Borderline Personality Disorder (pp. 45–96). (1stedn) In: Columbus AM (Ed.), *Advances in Psychology Research*, Vol. 131, Nova Publisher, New York; 2017
11. Bronisch Y. The concept of comorbidity in psychiatry and its influence on research of risk factors. *Integrative Biological Psychiatry* 1992; 241.
12. NIDA (National Institute on Drug Abuse) (2010). Comorbidity: Addiction and Other Mental Illnesses. Available from: <https://www.drugabuse.gov/publications/research-reports/comorbidity-addiction-other-mental-illnesses>, accessed October 17, 2017.
13. Pincus HA, Tew JD, First MB. Psychiatric comorbidity: Is more less? *World Psychiatry*2004; 3: 18–23.
14. Desay NG. Comorbidity in psychiatry: Way forward or a conundrum? *Indian J Psychiat* 2006; 48: 75–77.
15. Herpertz S, Steinmeyer EM, Sag H. “Patterns of comorbidity” among DSM-III-R and ICD-10 personality disorders as observed with a new inventory for the assessment of personality disorders. *Eur Arch PsyClin* 1994; 244: 161–169.
16. Maj M. ‘Psychiatric comorbidity’: an artefact of current diagnostic systems? *Brit J Psychiat*2005; 186: 182–184.
17. Smirnova M, Owens JG. Medicalized addiction, self-medication, or nonmedical prescription drug use? How trust figures into incarcerated women’s conceptualization of illicit prescription drug use. *Soc Sci Med*2017; 183: 106–115.
18. Lydon-Staley DM, Cleveland HH, Huhn AS, Cleveland MG, Harris J., et al. Daily sleep quality affects drug craving, partially through indirect associations with positive affect, in patients in treatment for nonmedical use of prescription drugs. *Addictiv Behav* 2017; 65: 275–282.
19. Lazzari C, Mousailidis G, Shoka A. A case study of Munchausen Syndrome: Assessment and management [Version 1, not peer reviewed]. *F1000 Research* 6:1985 (slides); 2017; doi: <http://dx.doi.org/10.7490/f1000research.1115064.1>
20. Lazzari C, Shoka A, Masiello I. Chapter 2. Corporate Management of Patients with Borderline Personality Disorder through Integrated Care (pp. 17–62). In: Anderson R (Ed.), *Borderline Personality Disorder (BPD): Prevalence, management options and challenges*. 1stedn, New York: Nova Publisher; 2016.
21. Huffman JC, Stern TA. The diagnosis and treatment of Munchausen’s syndrome. *Gen Hosp Psychiat* 2003; 25: 358–363.
22. Fox KR, Millner, AJ, Franklin, JC. Classifying nonsuicidal overdoses: Nonsuicidal self-injury, suicide attempts, or neither? *Psychiat Res* 2016; 244: 235–242.
23. Buyx P, Ritter A, Loxley W, Dietze P. Patients who attend the emergency department following medication overdose: Self-reported mental health history and intended outcomes of overdose. *Int J Mental Health Addict* 2012; 10: 501–511
24. Wazaify M, Kennedy S, Hughes CM, McElnay JC. Prevalence of over-the-counter drug-related overdoses at Accident and Emergency departments in Northern Ireland—a retrospective evaluation. *J Clin Pharm Ther* 2005;30: 39–44.
25. Mojtabai R, Olfson M. National trends in psychotropic medication polypharmacy in office-based psychiatry. *Arch Gen Psychiat*2010; 67: 26–36.

26. Roca M, Gili M, Garcia-Garcia M, Salva J, Vives M, Garcia Campayo J, Comas A. Prevalence and comorbidity of common mental disorders in primary care. *J Affect Disorders* 2009; 119: 52–58.
27. Feldman, MD. *Playing sick: Untangling the web of Munchausen Syndrome, Munchausen by Proxy, Malingering, and Factitious Disorders*. Istedn, New York: Brunner-Routledge; 2004.
28. Lazzari C, Shoka A, Kulkarni K. Dissocial personality disorder and pseudologia fantastica. Unmasking factitious disorders in psychiatric inpatients. *IJMRPS* 2017;4: 110–120.
29. Krasnov VN. Controversies in the contemporary understanding of comorbidity in psychiatry. *Int J Cult Ment Health* 2018; 11(1): 42-45.
30. Caselli I, Poloni N, Ielmini M, Diurni M, Callegari C. Epidemiology and evolution of the diagnostic classification of factitious disorders in DSM-5. *Psychol Res Behav Manag* 2017; 10: 387–394.
31. Hamilton JC, Kouchi KAK. Factitious disorders and the adjudication of claims of physical and mental injury. *Psychol Inj Law* 2018; 11:9–21.
32. Yates GP, Feldman MD. Factitious disorder: a systematic review of 455 cases in the professional literature. *Gen Hosp Psychiatry* 2016; 41:20–28.
33. Erkens N, Schramm E, Kriston L, Hautzinger M, Härter M, Schweiger U, Klein JP. Association of comorbid personality disorders with clinical characteristics and outcome in a randomized controlled trial comparing two psychotherapies for early-onset persistent depressive disorder. *J Affect Disord* 2018; 229: 262–268.
34. Lazzari C, Shoka A, Papanna B, Mousailidis G. A Case Study of Munchausen Syndrome: Developing a Self-Assessment Scale. Proceeding of the 26th Congress of the European Psychiatric Association, 3–6 March, Nice, France, 2018. *European Psychiatry*, 48: PW0345