Review

The dilemma of diagnosis in bipolar patients with psychiatric disability in the Caribbean setting

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Although there has been a surge in research relating to psychiatric disorders, diagnosing bipolar disorder still proves to be an immense feat. This dilemma can seriously impact on the quality of life of bipolar patients with psychiatric disability. These case studies sought to highlight several factors which may fuel this diagnostic uncertainty. Two in-patients at the Eric Williams Medical Sciences Complex were evaluated. In the first case, the patient admitted for approximately one month, was diagnosed with a co-morbid personality disorder. Although he met the Diagnostic and Statistical Manual (DSM IV) of mental disorders criteria for bipolar II disorder, further evaluation led to the axis II diagnosis with resulting prognostic implications. In the second case, the patient was admitted for six days and his presentation could have been accounted for by several psychiatric disorders. Understandably therefore, the art of diagnosing is complex and numerous factors such as co-morbidity, socio-cultural variations, current DSM IV guidelines, cannabis use and genetics play a major role. Analysis of the DSM IV guidelines and identifying how it can be adapted for a Caribbean setting is necessary. It is also recommended that further exploration of links, if any, between bipolar disorders and personality disorders be done, thus enhancing diagnosis and eventually allowing more complete management of patients with psychiatric disability.

Key words: Bipolar disorder, psychiatric disability, Caribbean, diagnostic and statistical manual of mental disorders (DSM IV).

INTRODUCTION

Bipolar disorder is a common psychiatric condition. In fact, it was touted as one of the ten leading causes of disability worldwide in 1990 measured in years-lived with a disability (BMJ, 2002). However, diagnosis of this disorder has proven to be quite challenging for a number of reasons such as co-morbidity, unique socio-cultural factors inherent to this part of the world and arguably, the current DSM IV classification. Drug use and genetics also have a part to play in this dilemma of diagnosis. The following reports seek to address how these factors interact to complicate the diagnosis of bipolar disorder.

This complex interplay of confounding factors becomes more pertinent when taking into consideration the far reaching implications of psychiatric disorders. One such implication is psychiatric disability which can be defined according to Boston University Centre for Psychiatric Rehabilitation (2010) as “that state when mental illness significantly interferes with the performance of major life activities, such as learning, working and communicating, among others.” This concept of psychiatric disability is noteworthy in the Caribbean setting. In fact, in the year 1990, psychiatric and neurological disorders accounted for 8.8% of the disability-adjusted life years in Latin America and the Caribbean, with a marginal increase to 21% in 2004 (Rodriguez, 2010). Comparatively, neuro-psychiatric disorders are the second cause of disability-adjusted life years (DALYs) in Europe and account for 19% (World Health Organization, 2004). In the United States, neuro-psychiatric disorders accounted for 28.47%.
The following cases were selected primarily for comparative purposes since there are key differences between the two cases such as ethnicity, socio-cultural background, premorbid condition and influence of drugs. It highlights therefore the multifactorial nature of diagnosis in an individual patient and how these entities impact the ultimate management. This dilemma of diagnosis is not a new entity by any means. The following case reports are significant as they demonstrate the complexity of diagnosis. Furthermore, they underscore that each patient is unique and in many ways, the rigid application of the DSM IV criteria has not encompassed their presenting complaints in entirety and subsequently, has denied these patients of appropriate management for their holistic problem.

One article (Gangdev, 2007) echoed that of other publications in which it was felt, most of the recent research in mood disorders stemmed from ‘redefining and often rigidly applying the DSM criteria.’ Basing diagnoses on research and opinions was seen as a hindrance to accurate diagnosing which could be corrected with “new phenomenological understanding.” Additionally, for future research to be meaningful, it was felt that differences in biological depression resulting from psychosocial factors should be examined.

Trinidad and Tobago and by extension the Caribbean has a unique setting whereby a milieu of socio-cultural factors often complicate the diagnosis of a disorder. While illegal drugs such as marijuana are not specific to this country, they can play a part in the diagnostic dilemma. Cannabis use and its relation to psychiatric disorders are seen as an area of ‘nosological uncertainty.’ Konings and Maharajh (2006) presented various case studies showcasing clinical presentations among adolescents using cannabis. Their findings suggest that mood disorders are common among cannabis users in Trinidad and Tobago and that mode and local preparation of the drug could account for the different findings in developed countries.

The discrepancies in diagnosis have risen with respect to other disorders such as schizophrenia whereby the relationship between religion and mental illness has been questioned (Maharajh, 2010). This same study by Maharajh (2010) further corroborates the idea of psychiatric disability when the “approach of dealing with diseases and not their context or causation appeared to be a denial of patients’ belief and inability to speak in the language of the people.” The difficulty of diagnosis stemming from cultural idiosyncrasies is also a Caribbean phenomenon. A term ‘Caribbeing Psychiatry’ (Maharajh, 2010) has been used to seemingly promote Caribbean identity bereft of European and North American standards. Furthermore, the study describes the DSM IV and ICD-10 as ‘picture fitting and menu driven’ and therefore inadequate for the varied presentations arising from a Caribbean population.

New inroads into the genetic aetiology of psychiatric disorders can cause some confusion and perhaps loss of faith in the current psychiatric classifications. In a recent study by Craddock et al. (2006) examining genes for schizophrenia and bipolar disorder, it is noted that there is now a specific relation between genotype and psychopathology and evidence of genes conferring susceptibility to an illness with mixed features of schizophrenia and mania. Additionally, the study recommended the need for “alternative approaches to classification and conceptualization for psychiatric research.”

The concept of co-morbidity presenting a formidable challenge to diagnosis has been considered on the international scene. The British Journal of Psychiatry (2010) (Goldberg, 2010) highlighted that problems with both DSM and ICD classifications include the high rates of comorbidity. This is further substantiated by an assessment of literature (Rama Krishnan, 2005) where it was found that the majority of patients with bipolar I and II possess at least one co-morbid psychiatric or medical disorder. Lifetime psychiatric co-morbidity in bipolar I ranges from 50 to 70%. Of significance, there was reference to a study whereby axis II co-morbid personality disorders occurred in 28.8% of 52 remitted DSM-III-R bipolar patients. It was concluded that patients with bipolar disorder should be monitored for the development of co-morbid psychiatric and medical conditions. This should form the basis for ‘greater diagnostic vigilance and more thorough diagnostic assessment’ leading to treatment tailored specifically for the particular patient.

A study by Garno et al. (2005) using 100 bipolar I patients, using structured clinical interviews for DSM IV Axis I and cluster B Axis II disorders, illustrated that 30% of subjects met DSM IV criteria for Cluster B personality disorder. Thus the conclusion generated was that Cluster B personality disorders are prevalent co-morbid conditions in a substantial number of individuals, independently contributing to an increased lifetime suicide risk. It should be noted that the additional diagnosis of Cluster C personality disorder is not unrealistic. Another evaluation by George et al. (2003) showed the prevalence of axis II disorders in 52 bipolar patients who were clinically remitted. The results showed that co diagnosis occurred in 28.8% or patients with Cluster B and Cluster C personality disorders more common than Cluster A. This study highlighted the need for further examination of this occurrence in bipolar spectrum patients to further clarify the linkage between these disorders. Obtaining an accurate diagnosis is even more important for patients with psychiatric disability. This is highlighted in the study by Colom et al. (2004) who examined the efficacy of psychoeducation as an additional form of treatment in bipolar I patients with a co existing personality disorder, as opposed to those with bipolar disorder alone. Results showed that those in the psychoeducation group had a higher time-to-relapse and a significantly lower mean number of total, manic and depressive relapses.

The purpose therefore of these reports is to illustrate the
very real problem currently encountered in diagnosing bipolar patients especially in the Caribbean setting and to hopefully, encourage creation of solutions for this dilemma. Better patient management can result if this perennial predicament in psychiatric diagnosis, with specific reference to bipolar disorder, can be resolved.

CASE STUDY 1

Background

Mr. C. J. is a thirty nine year old male of East Indian descent from Maracas, St. Joseph, presented to Adult Priority Care Facility, Eric Williams Medical Sciences Complex in May, 2010. He is single, has no children and is currently employed as a Labourer. He is of the Christian faith; more specifically Pentecostal but was previously a Hindu ten years ago. He is right handed.

Current problem

Mr. C. J was subsequently admitted to the medical ward due to ingestion of two ‘mouthfuls’ of bleach with water. This was preceded three days before by ingestion of bleach and water (to make about a ½ cup). Before that, a quantity of bleach, approximately a teaspoon, mixed with a quarter cup of mouthwash was taken two days before, preceded by ‘sleeping pills’ (unknown quantity), the night before. At time of the interview (June 2010), the patient was still suicidal. He planned to do this by going deep in the forest once discharged from the hospital, drinking bleach and jumping off a precipice. He indicated that he would leave a suicidal note. With respect to the most recent suicidal attempt, patient stated that he was not planning to do this. He wanted to terminate his life because he did not want to live any more; claiming that ‘people blame you for things that you never did.’ He started feeling depressed and he recounted crying. He went to a private doctor in Curepe, Trinidad who gave him approximately (20 to 30) sleeping pills (unknown name) and referred him to the St. Joseph Psychiatric Clinic. This was the source of ‘sleeping pills’ which he used. The other substances (the bleach and mouthwash) were household items.

Patient indicated he was not drunk at the time and was not using any alcohol or drugs before the incident. He was feeling very sad at the time. He was alone when it occurred as he had been renting by himself for 3 years now. He did not try to contact anyone but Mr. M* (a pastor at his Church) who would normally visit him sometimes, saw him a few days before admission and suggested that he should go to the hospital. This was because the patient was visibly upset and in some discomfort after ingestion of those substances. There was no indication on the part of the patient that he was relieved to have survived the attempt. Patient attempted to kill himself two times previously.

Four weeks ago, patient recounted only sleeping during the day. His typical day at the time consisted of getting up at 6 am to eat breakfast then returning to sleep until 8 pm, after which he would watch television/movies until 2 am, then return to sleep until 6 am the following morning. This is in contrast to his usual sleeping pattern whereby he would sleep from 11 pm to 5:30 am. He felt as though he had lost weight (unsure of the quantity) but he definitely lost his appetite. He felt ‘depressed’, lost interest in women and in sports. Additionally, he did not feel like going out at all. He felt somewhat guilty or in some way responsible for what took place at work. He noted decreased energy, decreased concentration and felt that he could no longer feel happy. He said he felt like this four times before for varying reasons. Patient felt hopeless and indicated that he did not like to feel lonely. Also of significance, the patient did not experience increase in self esteem/feeling of importance, an excessive focus on achieving things or increased talking. He felt his thoughts racing only when he was feeling to kill himself. He did notice that he was easily distracted. He was not irritated easily.

Past psychiatric history

Patient said that for nine years now he noted times when he would feel extremely happy and energetic (especially around Christmas time) and then other times when he would be sad. During these periods of ‘extreme happiness,’ he felt ‘invincible’ and had more positive ideas, was more focussed on his work’ and slept well. The patient was never hospitalised during these times and he was still able to work.

Medications

(Currently) Depakote 500 mg po am; 1 g po nocte, Paxil 40 mg po od, Diazepam 10 mg po nocte. Previously on Prozac (unknown dose).

Social history

He stopped drinking alcohol 9 years ago. Previously, he drank 6 beers once a week. Screening with ‘CAGE’ questionnaire did not suggest any alcoholic tendency, non smoker and no history of marijuana/cocaine use. He previously lived at home with his mother until 7 or 8 years ago when he was forced to leave because he changed his religion to Christianity. He moved to his Aunt and Uncle’s house (maternal aunt). However, she died and his uncle verbally abused him. He sought aid at his younger brother’s home. He stayed for three months and then left because he overheard negative comments about him while his brother and sister in law were conversing. He returned to his uncle’s home for some time and then moved out 3 years ago. He went to rent by himself and this is where he currently resides. The pastor at his Church considers him a son, according to the patient, and is helping him pay his rent.

Family history

He is one of 9 children; 7 boys and 2 girls ranging from 56 (oldest brother) to 30 years (youngest brother). He does not have a good relationship with one of his brothers (45 years) and one of his sisters (48 years) because firstly, he had changed his religion for which they did not approve and secondly, because he did not accept his family’s request to get married.

Pre/perinatal history

He believes his father started to drink when he was born. He was told by his mother that he was a ‘blue baby’ because he could not breathe at the time of birth.

Mental state examination

Young, clean, tidy patient who was appropriately attired for a hospital setting. Mild psychomotor retardation was observed. Patient was quite co-operative. Speech was of normal volume, at times spontaneous flow but at other times a marked rapid flow of sentences. His mood was one of sadness and he seemed unsure of himself. His affect was congruent with mood but also constricted to some extent. In terms of thought form, there was a spontaneous
flow of ideas with an overproduction of ideas at times. Answers were relevant, logical and goal directed. Circumstantiality was evident at times. Regarding thought content, on evenings, obsessive rumination about killing himself was present. Perceptual disturbances were minimal. Hypnagogic auditory hallucinations were present in the past. Patient’s cognition was good. His memory proved good with the exception of recall which was poor (1 out of 3 objects remembered). He has intellectual insight in that he is not sure what exactly is occurring but is aware something is not right. He believes he can be treated. Future plans are morbid; he wants to die.

Differential diagnoses

The differential diagnosis includes: bipolar II disorder (most recent episode depressed), mood disorder (secondary to general medical condition) or substance induced mood disorder. The axis II diagnosis which was made was dependent personality disorder.

Investigations performed were complete blood count (CBC) and blood film (to ascertain if there is perhaps an anaemia for example, macrocytic anaemia due to vitamin B12 deficiency), erythrocyte sedimentation rate (ESR)/C reactive protein (CR-P) (in case of underlying inflammation/infection), urinalysis, urine drug screen/toxicology, HbA1c, blood pressure testing, thyroid function tests, liver function tests and renal function tests. Imaging studies proposed include computer tomography (CT) scan of brain/MRI of brain (given his neurological history) and Chest X-Ray (given history of bronchitis).

The patient was managed with performance of investigations as outlined previously. He would then be reassessed to ascertain if there are any problems (for example, thyroid or CNS abnormalities) after acquisition of results of the blood investigations and imaging. Pharmacotherapy consisted of sodium valproate (mood stabilizer) and Fluoxetine (antidepressant) 20 mg po od

Past psychiatric history

Mr A. B. has a history of hypomanic episodes in the past. The patient experienced visual and auditory hallucinations on a few occasions which only occurred when he smoked marijuana. Mr A. B. had one previous hospitalisation at St. Ann’s Psychiatric Hospital in 1999. The patient claimed to have been diagnosed with Temporal Lobe Epilepsy. The patient has a history of drug abuse, hypomanic episodes and mood disturbances.

Social history

Alcohol, approximately once per month. He has about 5 drinks (usually beers). He used marijuana and cigarettes from the age of 13; 10 cigarettes per day. He stopped for approximately 9 years and restarted using the drugs 1 year ago. Currently, he smokes 20 cigarettes per day and 3 joints of marijuana per week on average but states that he has not used marijuana for the past 2 weeks. He lives with his two children ages 5 (female) and 3 (male) and his wife (aged 29). He has no family history of psychiatric illnesses or substance abuse. The patient has no knowledge about his prenatal, natal and postnatal history.

Mental state examination

Well dressed and groomed patient. His mood was described as depressed but ‘getting better.’ His effect was neutral generally although he seemed depressed when speaking about certain topics. Speech was soft yet audible and there was reduced spontaneous speech. It was rational and logical with no loosening of associations, tangentiality or obsessions. In terms of cognition, patient was oriented in time, person and place and had good memory, attention, concentration and general knowledge. He displayed good judgement and abstract thinking and has intellectual insight.

Differential diagnoses

These include: bipolar 1 disorder, bipolar 2 disorder, major depressive disorder, conversion disorder, substance induced psychosis, substance abuse, schizophrenia and underlying borderline personality disorder. Investigations were as follows: complete blood count, renal function tests, liver function tests, thyroid function tests and ELISA test for HIV status. An electroencephalogram and a CT scan (head) were also listed in the patient’s management. Patient was admitted to the ward. His treatment consisted of halol, cogentin, risperidone and valium.
DISCUSSION

Based on the patient’s history in Case Study 1, the suicidal risk based on the patient’s risk factors and using the ‘Sad Persons Screening Tool For Suicide Risk; Hamilton 1987,’ was high. Risk factors included male gender, depression, previous attempts, lack of social support, no spouse, co-existing illnesses (bronchitis) and feelings of hopelessness. Moreover, at the time of the interview, the patient was still expressing suicidal ideations and had obsessive ruminations of suicide. This was clearly an indication for hospitalisation. The patient satisfied the DSMIV-TR criteria (>5 out of 9 criteria) for a major depressive disorder (Sadock and Sadock, 2005). The definitive diagnosis was given, however, based on the past history of hypomanic episodes. The patient had no accompanying psychotic features, was never hospitalised during these episodes and social and occupational functioning were not impaired during these episodes. Since subsequent laboratory tests and imaging were unremarkable, the disorder could not be attributed to a general medical condition or to substance abuse.

In terms of the suicidal attempt, based on the absence of a plan, choice of substances and method of execution of the suicidal attempt and given the precipitating factor, there is an indication of some underlying unresolved personal and interpersonal issues. The additional diagnosis of Dependant personality disorder (Cluster C) was confirmed after further evaluation of the patient. Based on the DSM-IV Criteria for Dependent personality disorder (Sadock and Sadock, 2005), the patient satisfied 5 of the criteria. He needed others to take responsibility for major areas of his life (attributing his present status to the treatment he received from his family). He did not confront his uncle who verbally abused him and accused him yet he continued to live there for some time (difficultly expressing disagreement with others because of fear of loss of support). He is uncomfortable when alone and does not like to ‘feel lonely.’ He was never fully independent although working and had to be housed by varying members of his family. Now, the pastor, Mr. M, who visits him, assists with his rent.

In the second case study, the patient’s impulsive behaviour as demonstrated by his indiscriminate sexual practices and substance abuse and his presentation of affective instability led to the possibility of an underlying borderline personality disorder. He was mildly suspicious of his wife’s infidelity and this may be an example of projection, whereby he directs his unacceptable feelings and thoughts about his own actions onto his wife and uses this to cope with his guilt about his infidelity. However, these aspects account for only three of the criteria (Sadock and Sadock, 2005) (namely unstable and intense interpersonal relationships alternating between extremes of idealization and devaluation, affective instability due to a marked reactivity of mood and impulsivity in at least two areas which are potentially self-damaging) needed for diagnosis. Five or more are needed for diagnosis.

The above examples highlight how co-morbid disorders can complicate a diagnosis. This corroborates studies done by Colom et al. (2004), Rampersad (2007) and Newton-Howes and Johnson (2006), linking personality disorders with bipolar disorders. However, it is recommended that comorbid personality disorders should not be diagnosed in patients who are not yet in remission (Colom et al., 2004). This differs from the assessment done in the case studies whereby the patients were still in-patients at the hospital when evaluated. Also, comorbid personality disorders will need a longer time for evaluation of the patient and is not often apparent from the first interview. This may in part be due to many overlapping symptoms.

Additionally, in one study (Garno et al., 2005), lifetime substance abuse and previous suicide attempts were also used as diagnostic indications for Cluster B personality disorders. However, no evaluation by way of questioning was done to rule out other personality disorders in that study. Authors also stated that distinguishing between bipolar disorder and Cluster B personality disorders still proves to be ‘a source of unresolved clinical controversy.’ Of significance, the patient in the first case study was evaluated as having a Cluster C personality disorder (Dependent Personality Disorder). This provides further validation that Cluster B and C personality disorders are more prevalent in persons with bipolar disorder. This underscores the reality that diagnosing patients with psychiatric disorders, primarily in the case of dual diagnoses, can become quite complex.

Another interesting point to note was that a differential diagnosis for the patient in Case Study 2 was Conversion disorder. This disorder is characterized by involuntary alteration or limitation of voluntary motor and sensory functioning that result from voluntary psychological conflict or need (Sadock and Sadock, 2005). The patient presented with mutism and immobility along with a psychological stressor (extreme guilt about infidelity). However, this was ruled out since he had a more apt diagnosis of bipolar disorder (Bipolar II). This shows the reality of mixed or atypical presentations which exacerbates the dilemma of diagnosing bipolar patients.

These patients presented in the case studies were affected by varying socio-cultural factors that are uniquely Caribbean in nature. In the first case study, the patient’s psychosocial stressors stemmed from conflict with his family. This was as a result of his change of religion and his non-compliance with the status quo of marriage in an Indo-Caribbean family to a girl of whom the family approves (Rampersad, 2007). Additionally, unresolved separation issues are present and this can be linked to the patient’s separation from his mother to whom he was once very close. Coupled with his pre and perinatal history creates an individual with a presentation that
cannot be wholly accounted for by a single diagnosis.

In the second case study, the patient grew up in a home with an absent father figure. This may have affected the patient psychologically from a young age. Sharpe (1996) noted the following: “A study conducted with students from the University of the West Indies suggested that Caribbean men have poor emotional relationships with their children. As a result, young boys may view family patterns such as matriarchal households, male absenteeism, and extramarital relationships as norms and continue them as adults” (JRank, 2011). In the Caribbean, it is common to find matriarchal households. The ‘Caribbeing psychiatry’ concept (Maharajh, 2010) is thus a fitting description for what is needed to aid diagnosis in bipolar patients especially in a Caribbean setting.

Furthermore, it is evident that the current classification systems are not adequate for the varying psychiatric presentations and thus further add to the confusion in diagnosis. Some studies (Gangdev, 2007; Maharajh, 2010; Goldberg, 2010) have shown that emerging differences in bipolar presentations and also co-morbidity challenge the usefulness of the DSM IV in making accurate diagnoses.

Although in the first patient (case study 1) there were no substance abuse issues, this was not the case for the patient in case study 2 who was a cannabis user from the age of thirteen with intermittent breaks from the drug. This can make the diagnosis of bipolar disorder more complex. As noted in a previous study (Konings and Maharajh, 2006), the current DSM IV does not acknowledge mood disorders as an effect of cannabis use. However, finding from this study suggested otherwise. Therefore, it is clear that a major flaw in diagnosis can result in a patient who is a cannabis user if there is strict adherence to the DSM IV.

While it is not possible to examine the patient’s DNA, it should be noted that advances in genetics (Craddock et al., 2006) are showing that genes for two major psychiatric diagnoses-bipolar disorder and schizophrenia are stealthily undermining the power of discrimination on the part of the psychiatrist. This complicates diagnosis and can account for many atypical presentations of psychiatric disease. This has important implications in Mr. C. J and Mr. A. B’s prognosis. With appropriate treatment, prognosis can be favourable but according to a meta-analysis (Newton-Howes and Johnson, 2006), combined depression and personality disorder is associated with a poorer outcome than depression alone. Thus, given the co-existence of bipolar disorder with his personality disorder, perceived ‘loss’ of a relationship (in the form of a colleague or spouse) and the lack of free access to psychotherapy (cognitive behavioural/insight oriented) at the hospital, it is likely that only partial recovery may be possible. It is crucial therefore that patients are thoroughly assessed and accurately diagnosed since this impacts on the ultimate management of the patient and can contribute to or worsen psychiatric disability.

Conclusion

It is therefore clear that diagnosis of bipolar disorder is made increasingly difficult due to a number of factors, primarily co-morbidity, socio-cultural variations, inadequacy of current DSM IV guidelines for changing phenolmenology, cannabis use and genetics. It is evident that there is need for more services available in hospital setting such as psychotherapy to more effectively and holistically manage psychiatric patients, especially those with dual diagnoses who may benefit from a better prognosis. Moreover, a closer inspection of any links between personality disorders and bipolar disorders and evaluation of the most effective time for diagnosing co-morbid conditions would aid the diagnostic process significantly. A closer inspection and modification of the DSM to incorporate some of these factors is needed if this dilemma of diagnosis is to be resolved. In the final analysis, it is evident that these factors can have a profound impact on prognosis and ultimately psychiatric disability.

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