Bipolar disorders in Uganda

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This chapter has been written from the perspective of clinicians with experience in treating bipolar disorders. Dr. Birabwa-Oketcho has worked in the field of mental health for almost 15 years (inclusive of the time of training to become a psychiatrist) and nine of these years have been spent at the National Psychiatric Referral Hospital where she has worked mainly as a general adult Ppsychiatrist with special interest in bipolar disorders. Professor Seggane Musisi is a Ugandan psychiatrist who trained as psychiatrist in Canada. In the late 1990s he decided to come back to Uganda and that was at a time when Uganda had less than 10 psychiatrists. He became quite instrumental in training psychiatrists in Uganda including the co-author and until recently, he has been Chair of the Department of Psychiatry, Makerere University, the only training institution for psychiatrists in Uganda. He is also involved in offering mental health services at the general National Referral Hospital and also runs one of the most successful private psychiatric service at a general hospital in Kampala. He has wide experience in the treatment of bipolar disorders and has published a number of articles, several of which are on HIV/AIDS and mental illness including bipolar disorders.

Introduction

The information in this chapter is from published work in Uganda, student dissertations on bipolar disorders, and observations in the public and private hospitals where we work as well as upcountry places where we regularly go for support supervision of psychiatric services. This chapter includes a brief background of Uganda and describes the organization of mental health services in this country. We describe the burden of mental illness/bipolar disorder in Uganda and the lay concepts of the illness among some cultural groups in Uganda. The age of onset, presentation and course of bipolar disorders in Uganda, the relationship between life events and bipolar disorders as well as the prevalence of substance abuse among patients with bipolar disorder is then described. We also describe psychosocial functioning among patients with bipolar disorder, the relationship between bipolar disorders and HIV and the treatment of bipolar disorders in Uganda. Lastly, we have included challenges faced in offering mental health services to patients with bipolar disorders in Uganda as well as a list of the relevant references.

Background

Uganda is located in East Africa, sharing its borders with Kenya on the East, Sudan on the North, Democratic Republic of Congo on the West, Rwanda on the South-West and Tanzania on the South. The country capital is Kampala city. Uganda has a total area of 241,038 square kilometres. The population of Uganda in 2011 was 33 million (Population secretariat). Population growth is estimated at 3.4% per year, making it the third fastest-growing population in the world. The median age is 15.1 years, with 49.9% of the

population aged below 14 years and the elderly (over 65 years) contributing 2.1% of the population. Uganda's Human Development Index (HDI) as of 2010 was 0.422, ranking 43 out of 169 countries. This places Uganda below the world average (HDI score 0.619), but above the regional average for Sub- Saharan Africa (HDI score 0.389) (UNDP 2011). The average per capita income is USD 300 and 31% of the population lives below the poverty line. Since mental illness and poverty have a relationship, this has economic implications for mental health in Uganda (Kigozi et al 2010)

Organisation of Mental Health services in Uganda

The Uganda National Health policy recognizes mental health as one of the priority areas within the Ministry of Health's strategic plan and it's one of the components of the National Minimum Health Care package. The mental health programme was initiated in Uganda in 1996 by the establishment of a mental health co-ordination desk at the Ministry of Health headquarters. The main roles of the Principal Medical Officer at this desk include policy development, resource mobilization, planning, as well as monitoring and quality assessment of mental health services in the country (Kigozi et al 2010).

A draft mental health policy was developed in 2000 and though this has for long remained in a draft form, a number of key issues have been addressed in this policy. The policy has informed service reforms which has resulted into strengthening mental health services in the country. For example, there is decentralization of services and mental health services have been integrated within the Primary Health Care. The National Psychiatric Referral Hospital was refurbished with a bed capacity reduction from 920 beds to 500 beds. Mental health units were constructed within the Regional Referral

Hospitals to accommodate for this change. There has also been pre-service and in-service training of staff (including general staff) in mental health and increasing involvement of Civil Society Organisations and other sectors.

Mental health services to communities are organized on the basis of catchment areas at regional and district level. At the National level we have the National Referral Mental Hospital (Butabika Hospital), which offers both outpatient and inpatient psychiatric services to people from the surrounding community, as well as those referred from other areas. The specialized clinics in this hospital include units for alcohol and drug abuse, trauma, forensic services as well as children and adolescents. A weekly mood disorder clinic had been started by the author but this has not been sustained due to the challenges in human resource and finances. However, plans are underway to revamp this, since the mission of this hospital includes offering superspecialised mental health services. Butabika National Mental Hospital also offers general outpatient services to the surrounding community. Mulago Hospital in Kampala is still the main general National Referral and Teaching hospital with its accompanying outpatient in inpatient mental health service. A number of other private hospitals also offer psychiatric services but on a minimal basis since they also employ the psychiatrists at the referral hospitals.

At the regional level, all the 13 Regional Referral Hospitals have mental health units, but none with specific clinics for patients with bipolar disorder and only four of these units have psychiatrists. The mental health services in this area and the district hospitals are run by Psychiatric Clinical officers (PCOs), a category of mental health workers who have a diploma in Clinical Psychiatry. These are usually assisted by psychiatric nurses. The PCOs provide a major back up of the personnel offering mental health services since

the number of psychiatrists in the country is less than 40, giving a psychiatris:population ratio of 1:1,000,000. Psychiatric clinical officers also assist psychiatrists at the national level to offer services. There are usually few registrars and senior house officers at this level.

At the lower levels, psychiatric nurses and other general practitioners offer the psychiatric services and at the village level, lay people who constitute the village health team undergo basic sensitization in mental health so that they can learn to identify and refer those with mental illness.

How common is bipolar disorders

Although no major studies have been done to establish the burden of mental disorders in Uganda, there is anecdotal evidence the burden of mental illness is high and increasing in the country. The Uganda Bureau Of Statistics, UBOS (2006) estimated that 7% of the households in the country had disabled members, of which 58% had at least one person with a mental disorder. This implies that about 4% of the households have at least one member with a mental disability.

It's been estimated from small community and hospital based studies that the prevalence of depression varies from 6-35% (Akena et el 2010, Kinyanda et el 2009). Some of these depressed patients especially the young people may actually be having bipolar disorders presenting with an initial episode of depression. An earlier community study from rural Uganda by Orley and Wing found a prevalence of bipolar disorders to be 4.9% (Orley and Wing 1979). Abbo et al (2009) found that 10.6% of all patients with mental illness handled by traditional healers in Uganda had mania. This figure was only exceeded by

that of psychotic depression whose prevalence was 12.4%. It's still important to note that some of these patients with psychotic depression might have had bipolar depression. Data from mental health outpatient facilities reveal that the majority of the users suffer from mood disorders and epilepsy (Kigozi et al 2010). Bipolar disorders alone account for 30-35% of admissions at the National Psychiatric Referral Hospital (Apio 2011, Birabwa 2002, Butabika Hospital Annual report)

Lay concepts of bipolar disorders in Uganda.

Previous studies that have looked at the lay concepts of depression and psychosis in two tribes in Uganda have found that both symptoms of mania and depression are recognized in these cultures (Abbo et 2008, Okello and Ekblad 2006). These authors found that both the Baganda from Central Uganda and the Basoga from Eastern Uganda used the term *Kazoole* to describe manic illness. They believed that *Kazoole* is an episodic condition whereby the individual could still function and live in the community when free from symptoms. A temporary and less severe form of K*azoole* which is less stigmatized, called *Kalogojjano* was also described. Kalogojjano means continuous talkativeness and is the term used for hypomania. Some people however did not view mania as an illness but rather an experience that demonstrated God's power over people (Abbo et al 2008).

Depressive illness, on the other hand is described depending on whether there psychotic symptoms or not (Okello and Ekblad 2006). Depression without psychotic features is associated with thinking too much and is referred to as an *illness of thoughts.* Spiritual, economic and other psychosocial factors are considered to contribute to it's cause.

Depression that is recurrent or episodic and has psychotic features including bipolar illness is usually regarded as a clan illness *'byekika'.* Such clan illness is regarded to be caused by *Misambwa/* Clan Gods or *Mizimu/* ancestral spirits or even witchcraft as well as physical illness, particularly HIV/AIDS especially if the illness is chronic (Abbo et al 2008, Okello and Ekblad 2006). However, sometimes severe mental illness is all lumped together by traditional healers without making clear distinctions between the different types (Abbo et al 2008). It's important to understand the lay concepts that people have about mental illness and therefore bipolar disorder in particular. These concepts influence the pathways to care and it's no wonder that majority of our patients first seek traditional or spiritual healers before they come to the hospitals and some still continue to do so even when they are in hospital.

Age of onset, Presentation and Course of Bipolar disorders in Uganda

Studies in Uganda indicate that in over 90% of patients with bipolar disorder, the age of onset of mental illness is below 30 years and the mean age of onset ranges from 21-23 years (Apio 2011, Ashaba 2008, Birabwa 2002, Nakimuli-Mpungu et al 2006). This is not different from the figure quoted in many textbooks. Late onset mania (above the age of 30 years) is likely to be secondary mania and in our setting has been associated with HIV infection (Nakimuli-Mpungu et al 2006).

The most common symptoms reported among patients who present with mania include, overtalkativenss, sleeplessness, increased activity, racing thoughts and elevated mood (Ashaba 2008, Birabwa 2002). Another study in an African setting by Makanjoula (1982) in Nigeria who also found a higher rate of the above symptoms except for thought racing.

The difference could have been because of the use of different instruments. The Present State Examination test used in this Nigerian study had a much more strict definition of thought racing or flight of ideas.

The only study that has looked at the course of bipolar disorder in Uganda has only evaluated the demographic and clinical predictors of time to discharge among patients with bipolar disorders at Butabika Hospital (Apio 2011). In this study, Apio (2011) found that the median time to discharge a hospitalized bipolar patient from the hospital was 2.9 weeks. The factors that predicted a better outcome for bipolar patients were later age of onset, being a family head and having employment (Apio 2011). A longer duration of untreated symptoms, absence of a family history of mental illness and substance use predicted a poorer outcome for bipolar patients in the acute phase of their illness (Apio 2011).

It has been found that bipolar disorder is among the most common psychiatric disorders associated with readmission in Uganda (Birabwa et al 2006, Bwambale 2013). The factors associated with readmission among psychiatric patients in Uganda include lack of psychoeducation about the nature of the illness, medication non compliance, inadequate community support and psychosocial problems (Birabwa et al 2006, Bwambale (2013). Uganda has very few mental health workers. Most of the treatment at the mental health units includes mainly drug treatment with little emphasis on non pharmacotherapy measures. Therefore psychoeducation and psychotherapy to address psychosocial problems are not adequately addressed. The factors that contribute to non compliance to medication include the cultural beliefs that the illness is not “medical”, but is due to demons or witchcraft, the side effects associated with taking the medication and a lack of

adequate finances for fare to come for the medication (Opio 2007). Prost et al (2013) found that psychoeducation helped increase the rate of compliance to treatment in patients with severe mental illness in Uganda including bipolar disorder.

Life events and bipolar disorders

Stressful life events have been associated with onset of mood episodes among patients with both unipolar and bipolar diorder (Hosang et al 2010).. In Uganda Birabwa 2002 found that patients with mania reported a significantly higher mean number of independent life events at the onset of manic symptoms as compared to a control group. However,the association between independent events and onset of manic episodes has been inconsistent. Kennedy et al (1983) reported an association between independent events and mania while Hosang et al (2012) found that independent events were more likely to preceded depressive episodes in patients with bipolar disorders as compared to manic episodes. A significant increase in work related events and positive family events (events that are likely to disturb the social rhythm) was also noted among the patients with mania in the Uganda study (Birabwa, 2002; Birabwa et al 2008). The finding that schedule disrupting events are associated with onset of manic episodes has also been reported in other studies done in Western settings (Malkoff-Schwartz (2000), Malkoff-Schwartz (1998). The association between life events and onset of mood episodes among patients with bipolar disorders has important implications for the practice of psychiatry in Uganda as they show the need to diversify the range of therapeutic services offered to our patients to especially include socio-culturally relevant psychotherapeutic interventions. This is a great challenge in a setting where there are very few mental health workers

Psychosocial functioning among patients with bipolar disorders.

The World Health Organization (2000) reported bipolar disorder to be the sixth leading cause of worldwide disability. Murray and Lopez (1998) showed that bipolar disorder is associated with a greater degree of disability than a number of prominent medical conditions such as HIV and diabetes. In Uganda, Ashaba (2008) found that 68% of patients with bipolar disorder in remission had impairment in social functioning. The ability to form and maintain relationships were the most affected areas. Young age of onset, long duration of illness, being single, rural residence and unemployment were most associated with the impairment in functioning (Ashaba 2008).

Bipolar disorders and substance abuse

The burden of bipolar disorders is often complicated by the presence of various co-morbidities with anxiety being the most common condition followed by impulse control disorders and substance use disorders (Merikangas et al 2007)In Uganda studies of the prevalence of substance abuse among patients with bipolar disorder show ranges from 9.5%- 34.3% (Apio 2011, Maling 2002, Opio 2007). In Maling's study (2002) the most commonly abused substance among patients with mania was alcohol at a rate of 47.1%, followed by cannabis at a rate of 20.3% and Nicotine at a rate of 20.3%. Mubangizi (2012) found a higher rate of nicotine use (39%) as compared to Cannabis use (28%) and khat use at 13% while another 4% were using anxiolytics. Opio (2007) found prevalence rates of alcohol use of 63%, khat use of 21% and of other drug use at 19% in his study. such co-morbidities are often associated with more severe illness, longer stays in hospitals, higher rates of nonadherence, low recovery rates, greater risk of aggression and

violence, increasedrate of suicidal attempts and suicidal as well as an earlier age of onset of mood disorders. However, the above mentioned studies that have looked at co-morbidities among patients with bipolar disorders in Uganda are small studies and they have not explored these factors in detail and they had no controls.

Bipolar disorders and HIV

Uganda is one of the countries worst hit by the AIDS epidemic and this has affected the presentation and treatment of several physical and mental illnesses (Lundberg et al, 2013). (Maling et al 2005) found the rate of HIV infection among patients with severe mental illness in the Butabika National Psychiatric Referral Hospital 18.4%. The prevalence of bipolar disorders in the HIV population is said to be five times more than in the general population (Nakimuli-Mpungu 2011).

Primary mania may be a risk factor for HIV transmission because it increases impulsivity, disinhibition and hypersexuality and may cause elevated use of drugs and alcohol which factors may interfere with safer sex practices (Rabkin 2008). A manic episode could also be HIV-related secondary mania as was well described by Nakimuli-Mpungu et al (2006) in Uganda as well as in other countries by Lyketos et al (1997). In Uganda, Nakimuli-Mpungu and others (2006) found that with secondary mania compared to those with primary mania tended to have a later age of onset of mania; it was more common among females and the less educated and was associated more with cognitive impairment. Patients with HIV-related secondary mania had more severe manic symptoms: they were more irritable, more aggressive, more talkative, and had higher rates of paranoid delusions and hallucinations. Their CD4 counts were more likely to

below 350cells/mm^3. Nakimuli –Mpungu et al (2009) also found that the HIV-positive patients with bipolar mania had more immune suppression and more cognitive impairment. In a follow up study, Nakimuli-Mpungu et al (2010) found that acute mania in HIV-infected persons responded faster to psychotropic drugs compared with that in HIV-negative persons.

Factors such as opportunistic infections like Cryptococcus and Toxoplasmosis, HIV related Lymphomas, ARV drugs and factors which require specific interventions may be contributing to the HIV related mania.These need to be explored even though it may be a challenge in Uganda and especially in upcountry places that may not have specific investigations and interventions for these disorders.

Another study by Nakimuli-Mpungu et al (2011), found that the prevalence of any depressive disorder was 46.4% among rural HIV positive patients in Uganda. In the same study, it was found that a diagnosis of past mania was one of the factors that were independently associated with having a depressive disorder. Bipolar depression occurred in 3.6% of the patients in this study population. This has been said to have implications in the management of patients with bipolar depression as prescription of antidepressants in this group of patient may result into a switch to mania (Nakimuli-Mpungu (2011) which was in agreement with the findings of Rabkin et al (2008).

Treatment of Bipolar disorders in Uganda

The small studies that have looked at the type of medication given to patients with bipolar disorders have found that a majority of these patients are maintained on a combination of drugs, especially mood stabilizers and antipsychotics (Apio 2011, Ashaba

2008). Carbamazepine and first generation antipsychotics such as haloperidol and chlorpromazine are the most common combinations used. Though carbamazepine is not a first line treatment for bipolar disorders and is associated with a number of drug interactions, this drug is widely available in Uganda and is frequently used as a mood stabilizer in the public hospitals. Lithium and Sodium Valproate are also available but sodium valproate is relatively more expensive than carbamazepine, while lithium carbonate requires more frequent monitoring of blood levels as well as Renal and Thyroid Function Tests, which are not readily available in most places in the country.

It's important to note that changes in these regimens are currently taking place in Uganda and especially in the private settings where patients are able to afford drugs from the open market. Many patients are now being treated with second generation medications such as olanzapine, risperidone and more recently quetiapine and ziprasidone. A few patients who are non compliant to medication are also being given injectable depot preparations of haloperidol and fluphenazine decanoates since long acting atypical antipsychotic drugs like risperidone consta are not readily available in Uganda. Nevertheless, I have seen many patients who prefer these long acting depot medications to other medicines for maintenance treatment.

For the acute treatment of manic episodes, haloperidol and chlorpromazine are the most frequently used parenteral drugs in Uganda, since the atypical antipsychotic drugs like aripiprazole and olanzapine are not readily available especially in the Government tun hospitals. The antipsychotics are often combined with a benzodiazepine (most commonly diazepam and oral clonazepam) and mood stabilizers for those with recurrent mood episodes.

Among the antidepressants, fluoxetine has taken over as the most frequently prescribed antidepressants administered together with mood stabilizers for bipolar depression, especially at Butabika National Referral Mental Hospital. Other SSRIs, such as sertraline and citalopram, are available on the open market. Otherwise, away from the urban areas, the Tricyclic Antidepressants of, amitriptyline and imipramine are the most commonly prescribed antidepressants. Other antidepressants like bupropion, which are associated with less switching to mania in patients with bipolar disorder are not readily available. However, Quetiapine and Lamotrigine, which are useful in bipolar depression, are becoming more and more available.

Both the National and Regional Referral Hospitals have Electroconvulsive Therapy (ECT) equipment. ECT is sometimes given to patients with mania who haven't responded to medications (treatment refractory mania) and those with very severe depression. Many clinician do offer psychoeducation to patients with bipolar disorder however the sessions are usually brief and yet most patients still do not have access to written information about their illness. Other psychotherapeutic interventions , that have been found to be useful among patients with bipolar disorder such as IPSRT, FFT and CBT are also rarely offered because of limited training and personnel.

Challenges in the provision of mental health services for patients In Uganda

The Uganda Mental Health Act, last revised in 1964, often fails to protect and promote the human rights of people with mental disorders and undermines the progressive mental health care policy (Kigozi et al 2010). Patients with mental disorders, therefore, still face widespread abuse in terms of violence, stigma and employment exploitation because of

the antiquated mental health law (Kigozi et al 2010).

There is scarcity of funding for mental health since only about 1% of health care expenditures is spent on mental health (Kigozi et al 2010). Consequently, there is a lack of trained/skilled human resources, including all categories of mental health workers: psychiatrists, psychologists, social workers, psychiatric nurses/clinical officers and occupational therapists.

Though there is free access to essential psychotropic medication, access to the second generation atypical antipsychotics and other newer drugs is inadequate. There are very few consumer/user associations and many do not interact with mental health facilities. There is also limited access to psychosocial interventions or services for patients and a lack of proper integration with alternative and complementary healing practices. There is also a lack of reliable and routinely collected data that can be used to plan and improve on the mental health services (Kigozi et al 2010). Very little research has been done on bipolar disorders in Uganda with most of the work is not been published in peer reviewed journals) being done by students as part of their training.

CONCLUSION

Bipolar disorder is one of the leading causes of admission to psychiatric units in Uganda and places a high burden on the already meager resources for mental health in the country. This may result in inadequate care for these patients in terms of the assessment of patients and appropriate drug treatment and psychosocial interventions. Inadequate care may result into long duration of the illness and frequent readmissions which factors are associated with impairment in social functioning even when the patient is in remission. This increases on the degree of disability associated with this illness in this Uganda.

Secondly, patients with bipolar disorder in Uganda usually present with various comorbidities including substance abuse and HIV/AIDS. This affects the presentation and course of the illness and has implications on the treatment. These calls for adequate training of all health workers involved in management of this illness.

The lay views that patients have about the cause of the illness, the association between stressful events and onset of manic episode and non compliance to medication among patients with bipolar disorder calls for the use of culturally appropriate psychosocial interventions for this group of patients. Very few of these have been developed in this country and it's a big challenge for a service with very few psychologists, social workers and occupational therapists.

And lastly, the need to collect data and carry out research on the various aspects of bipolar disorder is of paramount importance in the Ugandan setting. Such studies would inform care and improve on the management of this very common psychiatric condition.

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