



MOOD DISORDERS AND THEIR MANAGEMENT IN A NIGERIAN TERTIARY HEALTH INSTITUTION

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ABSTRACT

The objective of this study was to evaluate the management of mood disorders at Ahmadu Bello University Teaching Hospital (ABUTH) with a view to suggesting improvements. The method employed was retrospective and utilized patients' hospital records for a period of one year, using structured data forms. All patients diagnosed of mood disorders (n=145) were included in study. Data were analyzed using SPSS version 11. The results showed that patients were managed with pharmacotherapy alone in 35.2% of cases, or with a combination of psychotherapy and pharmacotherapy. Drugs employed mainly were antipsychotics such as chlorpromazine (73.8%) and trifluoperazine (52.4%); antidepressants like tricyclics- amitriptyline (63.4%); sedative-hypnotics which were mainly diazepam (49.7%) and nitrazepam (45.5%). Other drugs included anticonvulsants as mood stabilizers e.g. carbamazepine (35.2%); and benzhexol (83.4%). Most patients (74.5%) experienced side effects to the drugs, such as weakness, headaches and excessive sleep which were managed by reduction in dosage /frequency of administration, discontinuation of the implicated drugs and use of adjunct to treat side effects. Electroconvulsive therapy was the principal form of non-pharmacological management employed, others being counseling, psychotherapy, traditional medicine and religion. Pharmacoeconomic analysis showed the average cost of drugs per patient per annum to be N15,772.27 and N18,136.04 for psychiatry and total drugs (i.e. both psychiatry and non-psychiatry drugs) respectively; which was considered high given the unemployment status of most patients (60.7%). Mood disorders at ABUTH were still being managed by the traditional drugs, mainly typical antipsychotics and tricyclic antidepressants rather than the newer more effective, but expensive drugs like lamotrigine and venlafaxine. It is suggested that concerted efforts to subsidize treatment (including use of newer drugs), be made e.g. via increased enrolment into the National Health Insurance Scheme.

Keywords: Mood disorders, Management, Nigeria, Health institution, Psychotherapy

INTRODUCTION

Bipolar disorder and major depressive disorder are common, chronic and recurrent mood disorders that affect the lives of millions of individuals worldwide (Machado-Vieira *et al.*, 2009). There is increasing evidence from a variety of sources that mood disorders are associated with regional reductions in brain volume, as well as reductions in the number, size and density of glia and neurons in discrete brain areas (Zarate *et al.*, 2003). In the Nigerian context, mental illness is still highly stigmatized (Gureje and Lasebikan, 2006); symptoms of such illness being considered embarrassing and therefore such patients find it difficult to seek proper treatment. Mood disorders are among the most prevalent, recurrent and disabling of all illnesses (Costello *et al.*, 2002). A publication by the World Health Organization (2001) showed that mental health services were hampered by grossly inadequate personnel and facilities. For example, it has been reported that Nigeria had fewer than 100 psychiatrists for its population of about 114

million persons (Gureje and Lasebikan, 2006). It is also clear that in a setting with few specialists, medical or nursing staff, service can only be realistically provided to the many in need by primary health care workers with basic but relevant training in the identification and treatment of common mental disorders (Gureje and Lasebikan, 2006). Effective pharmacotherapy has helped people suffering from mood disorders to recover from potentially devastating episodes of depression or mania, and prevent possible relapses (Kusumakar *et al.*, 1997). According to a finding by Yatham *et al.*, 2006, it was recommended that first line treatment options for acute mania were lithium, valproate and several atypical antipsychotics while lithium and lamotrigine monotherapy, olanzapine plus selective serotonin reuptake inhibitors (SSRI) and lithium or divalproex plus SSRI/ bupropion continued to remain the treatment options for management of bipolar depression. The objective of this study was to evaluate the current management of mood disorders at

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Ahmadu Bello University Teaching Hospital (ABUTH) with a view to suggesting improvements.

MATERIALS

Patient folders, a researcher-designed data form. A total of 145 patients diagnosed to have mood disorders at the psychiatric unit of Ahmadu Bello University Teaching Hospital (ABUTH) were used for the study.

It should be noted that ABUTH where the study is to take place, is a referral hospital owned by the Federal government of Nigeria and a center of excellence by the Federal Ministry of Health. The psychiatry clinic gets referral not only from the different parts of the North but from neighbouring parts of the country. Therefore, data collected from this institution pertaining mood disorders will be highly useful and informative.

METHODS

The study was a retrospective one involving analysis of data obtained from patient folders who attended clinic regularly at the Psychiatry Unit of ABUTH for the period spanning from 1st January 2006 to 31st December, 2006. The first stage of data collection involved use of attendance registers from the Records Department of the Unit. Only folders of patients diagnosed to have mood disorders were selected for the next stage of study. Researcher-designed-and-administered data form to guide the collection of data on medical history, drug and non drug management, side effects and their management were used on the selected sample. Data obtained were subjected to analysis using Statistical Package for the Social Scientist (SPSS) version 11.

RESULTS

The results of the study showed that majority of the patients were treated with typical antipsychotics which included chlorpromazine (73.8%), trifluoperazine (52.4%), haloperidol (49.0%) and thioridazine (30.3%); while those less frequently used were the atypical antipsychotics like risperidone (2.1%), olanzapine (1.4%) and sulpiride (1.4%) - Table 1. Nearly a quarter of the patients were on depot antipsychotics which were either fluphenazine (13.8%) or flupenthixol (9.7%). Antidepressants most commonly employed in treating the patients were tricyclic antidepressants (TCAD)- 83.3% particularly amitriptyline (63.4%); while the class used less frequently was the selective serotonin reuptake inhibitors (SSRI) which included paroxetine (6.2%), setraline (2.8%) and fluoxetine (0.7%). Benzodiazepines were the sedative-hypnotics prescribed to these patients with diazepam being used by 49.7% and nitrazepam by 45.5% while chlorthalidopoxide and flunitrazepam were used by only 2.1% and 1.4% of the patients respectively. Other drugs taken by these patients included

anticonvulsants (used as mood stabilizers) like carbamazepine (35.2%); and drugs for treating side effects such as benzhexol taken by 83.4% of the patients. Most patients (74.5%) experienced side effects to the drugs, such as weakness, headaches and excessive sleep which were managed by reduction in dosage (22.8 %), discontinuation of the implicated drugs/use of alternative drugs (13.1%), in addition to use of other drugs to remedy side effects (22.1%) - Table 2. Altogether, the most commonly used drugs in decreasing order, were: chlorpromazine, amitriptyline, trifluoperazine, diazepam and haloperidol. Electroconvulsive therapy (ECT) was the principal form of non-pharmacological management employed (30.3%), others being counseling (29.7%) and psychotherapy (4.8%) - Table 3. Non-orthodox management measures employed by some of the patients were traditional medicine and religion. Pharmacoeconomic analysis showed the average cost of drugs per patient per annum to be N15,772.27 and N18,136.04 for psychiatry and total drugs (i.e psychiatry and non psychiatry drugs) respectively; which was considered high given the unemployment status of most patients (60.7%).

DISCUSSION

Results as presented in Table 1, showed that majority of the patients were treated with typical (old generation) antipsychotics. This is in line with a

Table 1: Psychiatric drugs routinely used in patients with mood disorders attending Neuro-psychiatric clinic at ABUTH in year 2006

Class	Sub-class	Drug prescribed	Frequency	Percent
Antidepressants	TCAD	Amitriptyline	92	63.4
		Imipramine	18	12.4
		Cloimipramine	6	4.1
		Trimipramine	5	3.4
		Moclobemide	11	7.6
	MAOI	Paroxetine	9	6.2
		Setraline	4	2.8
	SSRI	Fluoxetine	1	0.7
Sedative- Hypnotics	Benzodiazepines	Diazepam	72	49.7
		Nitrazepam	66	45.5
		Clonazepam	9	6.2
		Bromazepam	7	4.8
		Lorazepam	5	3.4
		Chlorthalidopoxide	3	2.1
		Flunitrazepam	2	1.4
Antipsychotics	Phenothiazines	Chlorpromazine	107	73.8
		Trifluoperazine	76	52.4
		Thioridazine	44	30.3
		Fluphenazine	20	13.8
	Butyrophenone	Haloperidol	71	49.0
		Flupenthixol	14	9.7
		Diphenylbutylpiperidine	5	3.4
		Fluspirilene	3	2.1
		Risperidone	2	1.4
		Sulpiride	2	1.4
Anticonvulsants	Thienobenzodiazepine	Olanzapine	2	1.4
		Carbamazepine	51	35.2
		Sodium Valproate	11	7.6
		Valproic acid		
Miscellaneous (for side effects)		Benzhexol	121	83.4
		Biperidine	3	2.1

TCAD- Tricyclic antidepressants, MAOI- Mono amine oxidase inhibitors
SSRI- Selective serotonin reuptake inhibitors

Table 2: Management of side effects of patients with mood disorders attending Neuropsychiatric clinic at ABUTH in year 2006

Management of side effects	No. of patients	Percent
Reduction in dosage	33	22.8
Use of other drugs to remedy side effects	32	22.1
Discontinuation and use of alternative drugs	19	13.1
Reduction in frequency of administration	9	6.2
Counseling	4	2.7
Not recorded	48	33.1
Total	145	100.0

Table 3: Non pharmacological management of patients with mood disorders attending Neuropsychiatric clinic at ABUTH in year 2006

Non-pharmacological management	No. of patients	Percent
Electroconvulsive therapy (ECT)	44	30.3
Counseling	43	29.7
Insight	22	15.2
Go follow-up	14	9.7
With family	7	4.8
Psychotherapy	7	4.8
Not recorded	51	35.2
Total	145	100.0

finding which reported that antipsychotics were prescribed for a larger percentage of bipolar disorder patients than mood stabilizers (Deep *et al.*, 2008). Atypical antipsychotics used by these patients were risperidone (2.1%) and olanzapine (1.4%) which usage was lower when compared to a study which stated that 13.3% and 8.8% of patients used risperidone and olanzapine respectively (Castle *et al.*, 2002). Depot antipsychotics were used by 23.5% of the patients and this is consistent with the finding which reported that 24.8% of the patients used depot form of antipsychotics (Castle *et al.*, 2002). Antidepressants employed mainly were tricyclic antidepressants (particularly amitriptyline in 63.4% of patients). This was however different from a finding conducted in Europe which reported that there was growing evidence suggesting that tricyclic antidepressants were no longer justified as first line antidepressant therapy in most settings (Mendlewicz and Lecrubier, 2000). In addition, medications used as adjunct in this study included carbamazepine (6.1%) and sodium valporate (1.4%); results which are dissimilar to a finding which stated that lithium remains the cornerstone of maintenance therapy for bipolar disorder despite the growing use of other agents including

carbamazepine and atypical antipsychotics (Muzina and Calabrese, 2005). Sedative-hypnotics prescribed to these patients were mainly benzodiazepines which is however at variance with that from a study conducted in Japan which reported that use of benzodiazepine as anxiolytics was approximately 60% in all age categories including older patients (Uchida *et al.*, 2009). These disparities between what is obtained at ABUTH and the reported practices in the developed world, may be attributable partly to economic factors which translate into lower use of the newer, more expensive, though better drugs. Most patients (74.5%) experienced side effects to the drugs, such as weakness, headaches and excessive sleep which were managed by reduction in dosage/frequency of administration, discontinuation of the implicated drugs. This is similar to a finding which reported that management of neuropsychiatric side effects ranges from supportive measures, dose reduction and cessation of therapy (Malek-Ahmadi and Hilsabeck, 2007). In Table 3, electroconvulsive therapy was shown to be the principal form of non-pharmacological management employed, others being counseling and psychotherapy. This is similar to a finding which stated that combination of pharmacotherapy plus psychotherapy, and electroconvulsive treatment had clearly proven to be efficacious in most types of unipolar depressive disorder (Owashio and Kamijima, 2001).

Non-orthodox management measures employed by some of the patients were traditional medicine and religion, a finding that is similar to another study where it was revealed that 39.9% of patients who attended a mental health service in Ilorin (Nigeria) had first contacted traditional or religious healers when they became mentally ill (Abiodun, 1995). The discordance from the finding of a study conducted in USA by Roy-Byrne *et al.*, 2005 who reported that the rate of use of herbal medicine in depressed patients was only 11% may be explained by the fact that alternative therapy such as herbal/traditional medicine is more popular in the less developed world.

Pharmacoeconomic analysis showed the average cost of drugs per patient per annum to be N15,772.27 and N18,136.04 for psychiatry and total drugs (i.e both psychiatry and non-psychiatry drugs) respectively; which was considered high given the unemployment status of most patients, which comprised largely of housewives and students who depended on their husbands or parents for financial support. This data is in line with a report by Ohaeri (2001) who reported that in Nigeria, there is no national social welfare and community rehabilitation programmes for the

In conclusion, mood disorders were still managed at ABUTH, with conventional drugs such as typical antipsychotics and tricyclic antidepressants rather than novel drugs like the mood stabilizers (e.g. lamotrigine) and serotonin-norepinephrine reuptake inhibitors (SNRI), venlafaxine, for example. Finally, the economic cost of mood disorders should be made known to government, such that, commitment of resources for partial or full subsidy of treatment of mood disorders can be from the government and international health organizations as is being done for HIV/AIDS.

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