Journal of Applied Pharmaceutical Science

Available online at www.japsonline.com

Some socio-demographic features of mood disorders presented by patients attending a northern Nigerian tertiary health institution clinic

Oyeronke M. Aiyelero, Helen O. Kwanashie, Taiwo L. Sheikh and Isa M. Hussaini

Oyeronke M. Aiyelero,
Helen O. Kwanashie
Department of Pharmacology and Therapeutics, Ahmadu Bello University, Main Campus, PMB 1045, Samaru-Zaria, 810261, Kaduna State, Nigeria.

Taiwo L. Sheikh
Department of Psychiatry, Ahmadu Bello University Teaching Hospital (ABUTH), PMB 06, Zaria, 810006, Kaduna State, Nigeria.

Isa M. Hussaini
Department of Pathology, University of Virginia Health Sciences Center, 22911 Charlottesville, VA 22908, USA.

ABSTRACT

The aim of this study was to document some socio-demographic features of mood disorders in a Northern Nigerian tertiary health institution clinic. A retrospective evaluation of patients' hospital records from 1st January to 31st December 2006, using structured data forms which were analyzed with SPSS. All patients diagnosed of mood disorders (n=145) were included in the study sample. Mood disorders accounted for 26.0% of all patients who attended the Psychiatry clinic during the 1-year period, second only to schizophrenia (39.8%). Depression was the most prevalent sub-type of mood disorders (54.5%) followed by bipolar affective disorders (32.4%), hypomania (9.0%) and mania (4.1%). Majority of the patients with mood disorders were female (62.1%), below thirty years of age (57.2%), married (57.2%), had tertiary education (41.8%) and were unemployed (60.7%). Other features seen were: family history of psychiatry disorders in (29.0%) and substance abuse (13.1%), non-psychiatry co-morbid physical conditions (38.0%) were more prevalent than psychiatry co-morbid disorders (27.6%). These known features of mood disorders in this tertiary health institution clinic form valuable baseline data and would contribute to the pharmacological and other managements of the patients.

Key words: Socio-demographic features, Mood disorders, Co-morbidity, Northern Nigeria, Health Institution.

INTRODUCTION

Mood disorders (primary major depressive disorder and bipolar affective disorder) constitute one of the world's greatest public health problems and are associated with significant reductions in productivity and longevity (Thase and Denko, 2008). The magnitude and impact of mood disorders in the community outweighs that of most other chronic diseases (Merikangas and Low, 2004). Percentage of total burden of disease in Disability-Adjusted Life Years (DALYs) due to mood disorders in Africa is 1.5% for unipolar major depression and 0.4% for bipolar affective disorder (WHO, 2001). Major depression is a relatively common disorder with a median onset in the mid to late-20s, and despite high variability in rates around the world, females and youths are consistently at increased risk (Weissman and Gamerof, 2008). Bipolar disorder is a less common disorder with much less variability in rates around the world, with a median onset around the age of 20, earlier than for major depression (Weissman and Gamerof, 2008). Studies describing bipolar disorders in Nigeria and the rest of Africa are limited. Thus, understanding the features of a disease is important for its proper management in developing countries. A study conducted in southern Nigeria, reported that only 11% of those with mood disorders had received some

For Correspondence:
Oyeronke .M. Aiyelero
Department of Pharmacology and Therapeutics, Ahmadu Bello University, Main Campus, PMB 1045, Samaru-Zaria, 810261, Kaduna State, Nigeria. Phone: +2348033767607.

treatment and suggested the poor acceptance of mental health services was due to stigma and poor knowledge of the disorders (Gureje and Lasebikan, 2006). Studies which provide similar and other information for mood disorders were lacking in the northern parts of Nigeria, and hence the aim of this study was to document some socio-demographic features of mood disorders at Ahmadu Bello University Teaching Hospital (ABUTH), Shika, in northern Nigeria.

MATERIALS AND METHODS

The study was a retrospective evaluation and analysis of data obtained from patients' folders who attended clinic regularly at Psychiatry Department of the Hospital for the period spanning from 1st January to 31st December, 2006. The first stage of data collection involved the use of attendance registers from the Records Department. Only folders of patients who met the inclusion criteria (n=145) were selected for the next stage of study. Basic information on patients' socio-demographic data (age, sex, occupation and marital status) as well as data on specific diagnosis, family history of psychiatry disorders and co-morbid conditions on the total population of patients with mood disorders was collected. The data was coded so that the identity of the patient was kept confidential. Although the study was retrospective and involved the use of hospital records and patients' folders, rather than the patients themselves, consent was sought and obtained from the relevant hospital authorities. Data collected were subjected to appropriate statistical analysis using computerized Statistical Package for the Social Scientist (SPSS) version 11.

Inclusion Criteria: Patients who were diagnosed to have mood disorders based on ICD-10 classification.

RESULTS

Mood disorders accounted for (26.0%) of all patients who attended the Psychiatry clinic during the one year period, second to schizophrenia (39.8%) and more prevalent than seizure disorders (12.9%) and anxiety disorders (8.2%). Depression was the most prevalent subtype of mood disorders (54.5%), while bipolar affective disorders (32.4%), hypomania (9.0%) and mania (4.1%) were other sub-types identified (Table 1).

Table 1: Prevalence of Sub-types of Patients with Mood Disorders Attending Neuro-psychiatric Clinic at ABUTH in 2006.

Sub-type of mood disorders	Frequency	Percent
Depression[a]	79	54.5
Bipolar Affective Disorder	47	32.4
Hypomania	13	9.0
Mania	6	4.1
Total	145	100.0

[a] Includes those diagnosed as mild, moderate, severe, recurrent and depression not otherwise specified.

Majority of the patients with mood disorders were female (62.1%), below thirty years of age (57.2%), married (57.2%), had tertiary education (41.8%) and were unemployed (60.7%)(Table 2). Some of the other features of mood disorders seen were: family history of psychiatry disorders in 29.0% (especially among parents and siblings) and substance abuse (13.1%) of mainly alcohol (5.5%) and tobacco (4.1%). Non-psychiatry co-morbid conditions (38.0%) (notably malaria-15.9%) were more prevalent than

psychiatry co-morbid disorders 27.6% (notably schizophrenia-9.0%)(Table 3).

Table 2: Socio-demographic Data of Patients with Mood Disorders Attending Neuro-psychiatric Clinic at ABUTH, Nigeria in 2006.

Socio-demographic Index		Frequency	Percent
Characteristic	Sub-group		
Sex			
	Male	54	37.2
	Female	90	62.1
	Not recorded	1	0.7
Age (years)			
	10-19	27	18.6
	20-29	56	38.6
	30-39	20	13.8
	40-49	22	15.2
	50-59	11	7.6
	> 59	9	6.2
Marital status			
	Single	48	33.1
	Married	83	57.2
	Divorced	8	5.5
	Widowed	6	4.1
Highest educational level attained[a]			
	None	10	6.9, 11.0
	< Primary	3	2.1, 3.3
	Primary	12	8.3, 13.2
	Secondary	15	10.3, 16.5
	Tertiary	38	26.2, 41.8
	Others[b]	13	9.0, 14.3
	Not recorded	54	37.2, -
Occupation			
Employed	Govt. / Prvt. Sectors	20	13.8
	Self-employed	37	25.5
Unemployed	Housewives	43	29.7
	Students	35	24.1
	Others	10	6.9

[a] Percent data is X, Y where X represents actual value, and Y excluded high numbers not recorded. [b] Quranic school Govt. = Government; Prvt. = Private

Table 3: Family History of Psychiatry Disorders, Substance Abuse and Co-morbid Conditions in Patients with Mood Disorders Attending Neuro-psychiatric Clinic at ABUTH, Nigeria in 2006.

Index	Number of Patients	Percent
Family History		
Parents	15	10.3
Siblings	12	8.3
Others	15	10.3
None[a]	103	71.0
Substance Abuse		
Alcohol	8	5.5
Tobacco	6	4.1
Marijuana	4	2.8
Solvent	1	0.7
None[b]	126	86.9
Psychiatry Co-morbidity		
Schizophrenia	13	9.0
Psychosomatic disorder	11	7.6
Anxiety disorders	6	4.1
Others	10	6.9
None[c]	105	72.4
Non-psychiatry Co-morbidity		
Malaria	23	15.9
Hypertension	19	13.1
Typhoid	4	2.8
Others	9	6.2
None[d]	91	62.0

[a] No family history of psychiatry disorders. [b] No substance abuse.
[c] No psychiatry co-morbid conditions. [d] No non- psychiatry co-morbid conditions.

DISCUSSION

Depression (54.5%) was the most common sub- type of mood disorders reported (Table 1). This finding is consistent with a study which reported that depression was the most prevalent among patients diagnosed with mood disorders (Mclntyre *et al*., 2007). From Table 2, which shows several socio-demographic characteristics of the patients, there were more female patients with mood disorders (62.1%) than male (37.2%). This is similar to what was obtained in some past studies globally, indicating that there are higher incidences of mood disorders in female than male (Gorman, 2006 and Rouillon, 2008). Most of the patients with mood disorders were in their 20s (38.6%) or younger, (18.6%), while 13.8% and 15.2% were in their 30s and 40s respectively. The mean age for patients diagnosed with mood disorders in this study, was 28.3 years which was similar to the median age of mood disorders, 26 years, reported by WHO (WHO, 2000). The present data therefore shows that 86.2% of the patients were below 50 years and within the productive class of society.57.2% of these patients were married while 33.1% were single and 9.6% were either divorced or widowed at first presentation. This marital status was not surprising considering the ages of the patients. This result is in line with a study which reported that the number of patients who have never been married decreases during the course of illness (Kessing, 2000). Most of the patients that had their educational level recorded had tertiary education (41.8%) or secondary (16.5%). This is consistent with a study conducted in Canada which found that the highest rates of depression were seen among individuals with 'other post-secondary' education (Akhtar-Danesh and Landeen, 2007). However, only 27.5% of patients in this study had low level of education (i.e. below secondary education), or had no education at all (11.0%). This is at variance with a finding that majority of depressed patients in Nigeria had low level of education (Ihezue and Kumaraswamy, 1986). More than half of the patients were unemployed (60.7%) falling into the categories of housewives (29.7%), students (24.1%) and 'other unemployed' (6.9%). This can be explained by the fact that mood disorders are more common in women and they belonged to the group of housewives. This is consistent with a finding which reported that depressed female were less educated and more likely to be married (Okulate *et al*., 2001).

Table 3 summaries the family history of psychiatry disorders, substance abuse and co-morbid conditions in these patients. Family history of psychiatry disorders occurred only in (29.0%) of the patients, mainly among parents and siblings (18.6%) while (71.0%) had no history of such occurrence in their families. This is at variance with available literature which showed familial aggregation among mental disorders (Hettema *et al*., 2001 and Niemi *et al*., 2004). Most of the patients had no history of substance abuse (86.9%) whereas (5.5%) and (4.1%) had abused alcohol and tobacco. The levels of substance abuse found in this study are somewhat low when compared to studies elsewhere dealing with mood disorders and other psychiatry disorders; for example, a report showed that co-morbidity of mood disorders and psychoactive substance use disorder was highly prevalent (Salloum and Thase 2000).

Co-morbid disorders (both psychiatry and non-psychiatry) were present in about 65% of patients which agrees with an earlier report that depression is highly co-morbid with both psychiatric and chronic somatic diseases (Nuyen *et al*., 2005). The most frequently reported psychiatry co-morbid disorder was schizophrenia (9.0%) which was not surprising since schizophrenia accounted for (39.8%) of all neuro-psychiatry patients who attended this clinic in 2006. This result is supported by the report of a study which observed similar coexistence between mood disorders and schizophrenia (Brieger *et al*., 2005). Psychosomatic disorder (7.6%) was second only to schizophrenia in this study. Others were mainly anxiety disorders (4.1%) which are consistent with previous reports which reported that there were high levels of co-morbidity between major depression and generalized anxiety disorder and that these disorders were closely related genetically (Middeldrop *et al*., 2005 and Kendler *et al*., 2005). The prevalence of non-psychiatry co-morbid disorders (38.0%) was observed to be higher than that of psychiatric co-morbid disorders (27.6%). Malaria was the most frequently occurring non psychiatric co-morbid disorder (15.9%) which is not surprising as malaria is endemic in the study area. Hypertension is the second most prevalent co-morbid non-psychiatric disorder (13.1%). Again, this is in line with results of a study which reported that there was strong public health concern for cardiovascular disease in psychiatric patients (Kinzie *et al*., 2008).

CONCLUSIONS

As far as published literature is concerned, this is the first study of this type on mood disorders; its prevalence and associated characteristics in northern Nigeria. These known features of mood disorders reported in this study, as expected, form valuable baseline data against which future trends can be followed and for comparative purposes vis-à-vis other parts of Nigeria, and elsewhere in the world. This data should also inform the health care team on the pharmacological and other management of patients with mood disorders.

ACKNOWLEDGEMENTS

REFERENCES

Akhtar-Danesh N, Landeen J. Relation between depression and socio demographic factors. Int J Ment Health Sys 2007; 1:4.

Brieger P, Hensel J, Marneros A. Bipolar affective and schizoaffective disorders of older age-Classification, symptoms and course. Fortshr Neurol Psychiatr 2005; 73: 343-351.

Gorman JM. Gender differences in depression and response to psychotrpic medications. Gend Med 2006; 3:93-109.

Gureje O, Lasebikan VO. Use of mental health services in developing countries. Result from the Nigerian survey of mental health and well being. Soc Psychiatry Psychiatr Epidemiol 2006; 41:44-49.

Hettema YM, Neale MC, Kendler KS. A review of meta-analysis of the genetic epidemiology of anxiety disorders. Am J Psychiatry 2001; 158:1568-1578.

Ihezue UH, Kumaraswamy N. Socio-demographic factors of depressive illness among Nigerians. Acta Psychiatr Scand 1986; 73:128-132.

Kendler KS, Gardner CO, Gatz M, Pedersen NL. The sources of co-morbidity between major depression and generalized anxiety disorder in a Swedish national twin sample. Psychol Med 2007; 37:453- 462.

Kessing LV, Andersen EW, Andersen PK. Predictors of recurrence in affective disorder- analyses accounting for individual heterogeneity. J Affect Disord 2000; 57:139-145.

Kinzie JD, Riley C, McFarland B, Hayes M, Boehnlein J, Leung P, Adams G. High prevalence rates of diabetes and hypertension among refugee psychiatric patients. J Nerv Ment Dis 2008; 196:108-112.

Mclntyre RS, Soczynska JK, Mancini D, Woldeyohannes HO, Konarski JZ, Kennedy SH. Comparing features of bipolar disorder to major depressive disorder in a tertiary mood disorders clinic. Ann Clin Psychiatry 2007; 19: 313-317.

Merikangas KR, Low NC. The epidemiology of mood disorders. Curr Psychiatry Rep 2004; 6:411-421.

Middeldrop CM, Cath DC, Van Dyck R, Boomsma DI. The comorbidity of anxiety and depression in the perspective of genetic epidemiology. A review of twin and family studies. Psychol Med 2005; 35:611-624.

Niemi LT, Suivisaari JM, Haukka JK, Werde G, Lonngvisit JK. Cummulative incidence of mental disorders among offsprings of mothers with psychotic disorders. Results from the Hesinki High-Risk Study. Br J Psychiatry 2004; 1851:11-17.

Nuyen J, Volkers AC, Verhaak PF, Schellevis FG, Groenewergen PP, Van den Bos GA. Accuracy of diagnosing depression in primary care: the impacts of chronic somatic and psychiatric co-morbidity. Psychol Med 2005; 35:1185-1195.

Okulate GT, Oladapo HT, Osibogun A. Comparison of three subtypes of depression. Niger Postgrad Med J 2001; 8: 41-45.

Rouillon F. Epidemiology of mood disorders. Rev Prat 2008; 58:361-365.

Salloum IM, Thase ME. Impact of substance abuse on the course and treatment of bipolar disorder. Bipolar Disord 2000; 2:269-8.

Thase EM, Denko T. Pharmocotherapy of mood disorders. Annual Review of Clinical Psychology 2008; 4:53-91.

Weissman MM, Gamerof MJ. Cross National Epidemiology of Mood Disorders: An update www.pasteur.fr/applications/euro conf/depression/weissman.pdf (Retrieved 23rd April, 2008).

World Health Organisation (WHO). The World Health Report 2001. Mental Health: New understanding, New Hope. Geneva: World Health Organisation; 2001.

World Health Organization (WHO). Bulletin of the World Health Organization: Special Theme-Mental Health Geneva: World Health Organization; 2000.