Socio-demographic and clinical pattern of patients attending a neuropsychiatric hospital in Nigeria: A five-year retrospective study

Shehu Sale

Federal Neuropsychiatric Hospital Kware, Sokoto, Nigeria

Abstract

Psychiatric disorders contribute significantly to disability worldwide. The various risk factors associated with their prevalence and outcomes are also influenced by the region individuals live in. This study was carried out to assess the sociodemographic and clinical pattern of patients attending a neuropsychiatric hospital. It was a retrospective descriptive study of patients managed for psychiatric disorders at the hospital. Medical case notes of 246 patients were selected by simple random sampling. A sociodemographic and clinical variables questionnaire was designed to collate the data. The mean age of patients was 29.1 years and consisted mostly of young adults. There was approximately an equal number of patients of both genders. Approximately 66.3% of the patients were married, and 98.4% had no formal education. More than half were unemployed and a great number (37.4%) was being managed for epilepsy. The report of a family history of mental illness was relatively low compared to other studies. The sociodemographic and clinical pattern of mental disorders are embedded in the regional and cultural settings patients find themselves and this may lead to unique or differing risk factors across study settings.

Introduction

Sociodemographic factors have been linked to the occurrence of psychiatric disorders.[1] These factors have also been used to predict the prognosis of these disorders especially among patients with Schizophrenia. However, a lot of factors come into play in different ways to influence the social milieu of these patients. Most importantly is the environment and culture where the patients live. It is therefore necessary to explore how these factors vary across cultural settings. This will then elicit differences across settings in a bid to show how these differences affect the presentation of psychiatric disorders in the settings. The clinical presentation and management are also related to or determined by these regional and cultural factors.[2]

Mental health professionals need to understand the social milieu and the pattern of clinical presentation in their patients for effective management. Decisions both at individual and governmental levels need a lot of inputs from such findings. There is, however, an inadequate number of these studies from the different regions in Nigeria, especially in the North-Western region of the country. This has led to the generalization of findings in the southern regions to represent what happens in the north. This makes the understanding of psychiatric disorders and their associated risk factors difficult to infer at times.

A current survey of 26 countries by World Health Organization reported that 14 countries had anxiety disorders as the most common psychiatric disorders in all, with a prevalence in the prior 12-month period of 2.4% to 18.2%. Mood disorders were the next most common (12-month prevalence of 0.8% to 9.6%), while substance disorders (0.1–6.4%) and impulse-control disorders (0.0–6.8%) were least common.[3] This is similar to the findings in United States of America,[4] but differs from a study in southern Nigeria where most patients were having schizophrenia.[5] These differences are likely due to differences in the design of the studies. Hospital based studies may not reflect what obtains in the community.

Patients are defined by their culture, sociodemographic and clinical factors. This may also influence cultural principles and beliefs towards health care.[6] Several studies have also revealed that satisfaction with hospital-based health services may influence perceptions of access to health care and pattern of clinical presentation in the health facility.[7,8]

Mental health professionals are expected to listen to patient's own view of his or her health and also to acknowledge differences in culture. This will enable them to appreciate the unique sociodemographic and clinical pattern of each patient. Furthermore, it will help to create specific treatment options, interventions and policies for implementation or resource allocation. It is believed that these findings will shed more light on the sociodemographic and clinical pattern of psychiatric disorders in this setting. This is likely to be influenced by the socio-cultural environment of the study setting.

Aim of the study

To describe the sociodemographic and clinical pattern of patients attending Federal Neuropsychiatric Hospital Kware, Sokoto.

Correspondence: Shehu Sale, Federal Neuropsychiatric Hospital, PMB 2196, Kware, Sokoto State, Nigeria.
Tel.: +234703 4631 928
E-mail: shehusale@yahoo.com

Key words: Socio-demographic, clinical pattern, neuropsychiatric.

Conflict of interest: The author declares no potential conflict of interest.

Ethics approval and consent to participate: Ethical approval for the research was obtained from the Health Research Ethics Committee of the Federal Neuropsychiatric Hospital Kware, Sokoto.

Received for publication: 8 January 2020.
Accepted for publication: 6 February 2020.

Pyramid Journal of Medicine 2020; 3:76
doi:10.4081/pjm.2020.76

Objectives

To determine the sociodemographic pattern of patients managed for mental disorders at the tertiary psychiatric hospital.

To determine the pattern of clinical presentation of patients managed for mental disorders at the tertiary psychiatric hospital.

Materials and Methods

Study design

It is a retrospective descriptive study. The patient's medical case notes that were accessed and used for the study are those that are being managed for mental disorders at the outpatient clinic of Federal Neuropsychiatric Hospital Kware, Sokoto Nigeria.

Setting

The Federal Neuropsychiatric Hospital Kware, Sokoto, is a tertiary specialist psychiatric hospital located in Kware local government area of Sokoto State, North-west Nigeria. It is one of the eight (8) Federal specialist psychiatric hospitals in Nigeria. The hospital provides mental health services to patients with mental disorders mostly from Sokoto, Kebbi, Zamfara, and Niger states. These are mainly Hausa–speaking states. It also attends to patients from Niger and Benin Republic.

pagepress

Ethical consideration

Ethical approval for the research was obtained from the Health Research Ethics Committee of the Federal Neuropsychiatric Hospital Kware, Sokoto.

Instrument

Proforma Questionnaire: A questionnaire for data on socio-demographic factors and clinical variables like age, sex, marital status, diagnosis, duration of illness etc. was developed.

Selection of patients

The sampling frame was the list of patients that were attended to from 2013 to 2017. Forty-nine (49) patients were selected in each year except in 2017 where fifty patients were selected. The patients for each year were randomly selected by ensuring also that at least four (4) patients were randomly selected each month of that year. The medical case notes of sampled patients were retrieved, accessed and relevant data obtained for analyses.

Data Analysis

Data was analysed with Statistical Package for the Social Sciences software Version 20. Descriptive statistics were obtained from the medical case notes for the variables. For categorical variables, the proportions were calculated. For continuous variables, means and standard deviations (SD) were computed.

Results

Sociodemographic factors of patients

Most of the patients were between 21-45 years (57.3%) and the majority had no formal education (98.4%). Full details are shown in Table1.

Occupation of Patients

The majority of the patients were housewives (36.6%), and 24.8% were farmers. Full details are shown in Table 2.

Clinical History of Patients

The majority reported no family history of mental illness (91.1%). Full details are shown in Table 3.

Medication prescribed to patients and duration of illness

Most of the patients were on at least three (3) medications (38.2%). See Table 4 for full details.

Mental state of patients and diagnosis

The majority of patients were being treated for epilepsy (37.4%) and the next common diagnosis was affective disorders (28.9%). Full details are shown in Table 5.

Discussion

This study highlights the pattern of sociodemographic and clinical variables in patients managed at the study setting over a period of five years.

Table 1. Sociodemographic factors of patients.

S/N	Variables	Frequency (n = 246)	Percentage (%)
1.	*Age distribution (in years)**		
	=<20	74	30.1
	21- 45	141	57.3
	>45	31	12.6
2.	Sex		
	M	115	46.7
	F	131	53.3
3.	*Marital Status*		
	Divorced	5	2.0
	Married	163	66.3
	Single	77	31.3
	Widow	1	0.4
4.	*Country*		
	Benin Republic	4	1.6
	Nigeria	211	85.8
	Niger Republic	31	12.6
5.	*Religion*		
	Islam	1	0.4
	Christian	245	99.6
6.	*Tribe*		
	Dakarkar	1	0.4
	Fulani	22	8.9
	Hausa	221	89.8
	Idoma	1	0.4
	Zabarmaw	1	0.4
7.	*Education*		
	Nil	242	98.4
	Secondary	2	0.8
	Tertiary	2	0.8
8.	*Work status*		
	Employed	94	38.2
	Unemployed	152	61.8

*Mean = 29.1, Median = 25.0, Range = 2 – 79 S.D = 1.4

Table 2. Occupation of patients.

S/N	Variables	Frequency (n = 246)	Percentage (%)
1.	Business	15	6.1
2.	Civil Servant	6	2.4
3.	Driver	1	0.4
4.	Farmer	61	24.8
5.	Houswife	90	36.7
6.	Labourer	1	0.4
7.	Nil	4	1.6
8.	Motorbike transport	2	0.8
9.	Rearing	10	4.1
10.	Student	14	5.7
11.	Tailoring	2	0.8
12.	Teacher	1	0.4
13.	Trader	2	0.8
14.	Under Care	36	14.6
15.	W/attend	1	0.4

The median and mean age shows that most of the patients are young adults. This is similar to the findings of the Nigerian survey of mental health and wellbeing[9] in Bauchi (north-east) Nigeria[10] and Ilorin (north-central) Nigeria.[11] Similar findings exist in western countries.[12] This shows that the onset of psychiatric disorders and presentation at the hospital is quite early. This is mostly seen in bipolar disorder, epilepsy and substance use disorders. It is also possible that the onset of these disorders was much earlier but considered not disturbing enough by relatives to warrant hospital treatment. They might have resorted to traditional and spiritual forms of treatment before seeking psychiatric intervention. The implication of these is that without appropriate mental health intervention and treatment, the outlook of psychiatric disorders in developing countries like Nigeria is poor considering the early onset of the disorders. This also has antecedent socio-economic and public health problems associated with it.

The male to female ratio was approximately equal. Numerous studies from outside Africa have shown that there are differences in the rates of occurrence of mental disorders between the two sexes, with females generally having higher prevalence rates compared with males.[13-16] In one study conducted in Africa however, the prevalence rate was approximately equal among males and females.[17] This finding does not however fully represent the prevalence of mental disorder according to gender in this setting. It may reflect gender similarity in their access to mental health services. However, it has been reported that over 45% of the population of patients in all mental health facilities in Nigeria are females.[18] A study in United States of America reported similar findings of women using significantly more mental health services than men.[19]

Most of the patients were married. This differs from a study in India where mental disorders were more common in unmarried or separated patients.[20] Divorce and separation among these patients are mostly due to stigma and discrimination. However, patients are not formally divorced in northern Nigeria in such circumstances. The common pattern is for the extended family of patients to take responsibility for the female patients care with needed support from the husband, until she is fit enough to return to him; more so that polygamy is common and culturally or religiously acceptable for men.[21] Male patients with mental illness are usually supported by their relatives by taking over the responsibilities of his children and wife until he is well. Marriages are also easily organised by relatives for patients who are unable to do so on their own.[22]

Most patients do not have a formal education. This can be attributed mainly to poor school enrollment rather than the mental disorder in the core north-western region of the country. This is usually the situation for females.[23] However, this pattern has improved over the years due to creation of more awareness on education and encouragement by state governments in this region.

More than half of the patients are unemployed. This portends a high-risk factor for relapse among these patients since they have to depend on financial support from relatives and other support systems. Much of these cases of unemployment are also due to stigma and discrimination. Most of the females were typically housewives without any other work outside the home. This is generally a common pattern in the core north-western region, unlike in the southern part of the country where women are more likely to combine housework with other jobs outside the home. The advantages of this differing pattern are well known but with its peculiar challenges for women in particular. Women that are divorced due to mental disorders become more vulnerable when they lack means of livelihood having been housewives when married. Also married women with jobs outside home have a lot of challenges managing the work load and the antecedent stress that may predispose them

Table 3. Clinical history of patients.

S/N	Variables	Frequency (n = 246)	Percentage (%)
a.	*Past Psychiatric illness*		
	No	218	88.6
	Not documented	25	10.2
	Yes	3	1.2
b.	*Other Medical illness*		
	No	215	87.4
	Not documented	31	12.6
c.	*Family history of mental illness*		
	No	224	91.1
	Not documented	20	8.1
	Yes	2	0.8
d.	*Substance abuse*		
	No	183	74.4
	Not documented	43	17.5
	Yes	20	8.1
e.	*Delayed developmental*		
	No	198	80.5
	Not documented	47	19.1
	Yes	1	0.4
f.	*Forensic history*		
	No	161	65.4
	Not documented	84	34.1
	Yes	1	0.4

Table 4. Medication prescribed to patients and duration of illness.

S/N	Variables	Frequency (n = 246)	Percentage (%)
a.	*Number of medications**		
	1	4	1.6
	2	90	36.6
	3	94	38.2
	4	48	19.5
	5	8	3.3
	6	2	0.8
b.	*Duration of Illness (in months)*		
	Mean	39.0	
	Median	12.0	
	Range	0.09 – 240	
	S.D	5.5	
c.	*Long acting antipsychotic injection*		
	No	240	97.6
	Yes	6	2.4

* Mean = 2.89, Median = 3.00, Range = 1 – 6, S.D = 0.91.

to various psychological problems.

The median and mean duration of illness reflects that the patients have had to live with the illness for about one or three years. Although the present mental health condition of these patients could not be determined, this may be worrisome for patients who may be tired of taking medication for that long. Also, the burden on relatives over the period of medication use needs to be assessed periodically for appropriate intervention.

Epilepsy accounted for the largest number of patients managed over this period. This is unlike the studies in the southern part of the country, where most of the patients had schizophrenia,[5] and in north-central area.[8] This pattern appears to be due to the awareness of response to treatment by patients with epilepsy and easier access to treatment at the study center. It is also possible that patients with epilepsy in other regions were able to receive treatment in other non-psychiatric departments, like neurology clinics, than in this study setting. The awareness in this setting was created by regular mental health radio programmes organized by the hospital. The response of patients with epilepsy might have been more obvious especially in the typical communal life in this area. This usually leads to testimonials that influence the presentation of relatively more patients with epilepsy at this facility.

The percentage of patients on depot First Generation Antipsychotics (FGA) is quite low (2.4%). Though this is more likely to be prescribed for schizophrenia patients, who are only about 18% of the total number of patients whose medical history were analyzed for this study. A study in the southern part of Nigeria reported that 58% of schizophrenia patients were on depot FGA.[24] This low percentage was also found for the number of patients with hallucinations, delusions and poor judgment. This might be due to the low number of patients with schizophrenia in the study. Schizophrenia patients are more likely to be associated with these psychopathologies. However, the documentation of mental state findings was generally inadequate. This has negative consequences on clinical management, research activities and medico-legal reporting.

The number of people with a family history of mental illness is also low. This was much lower than that found in a similar study in Benin, in the southern part of the country, where 17.3% of the psychiatric patients reported a family history of mental illness.[5] However, another study in Ethiopia found also a lower report of a family history of 3.7% in a community.[25] The number of undocumented information on family history of mental illness might have contributed to this finding of low number of patients with a family history of mental illness. These findings, however, show that the occurrence of mental disorder depends on an interplay of risk factors and not just a family history of it.

Table 5. Mental state of patients and diagnosis.

S/N	Variables	Frequency (n = 246)	Percentage (%)
a.	*Delusion*		
	No	121	49.2
	Not Recorded	123	50.0
	Yes	2	0.8
b.	*Hallucination*		
	No	67	27.2
	Not documented	159	64.6
	Yes	20	8.1
c.	*Judgment*		
	Poor	52	21.1
	Not documented	182	74.0
	Good	12	4.9
d.	*Concentration*		
	Impaired	35	14.2
	Not documented	210	85.4
	Sustained	1	0.4
e.	*Memory*		
	Impaired	26	10.6
	Not documented	219	89.0
	Intact	1	0.4
f.	*Intelligence*		
	Below Average	27	11.0
	Not documented	219	89.0
g.	*Diagnosis*		
	Affective disorder	71	28.9
	Anxiety disorder	7	2.9
	Dementia	1	0.4
	Obsessive-Compulsive Disorder	3	1.2
	Organic psychosis	2	0.8
	Other Psychotic disorders	2	0.8
	Schizophrenia	46	18.7
	Epilepsy	92	37.4
	Substance use disorder	22	8.9

Conclusions

These findings highlight not only the risk factors associated with the occurrence of mental disorder in this study setting, it also attempts to describe the current state of psychiatric practice and the likely consequences of neglect of mental health services.

The documentation of findings from psychiatric interviews must be emphasized not only for clinical management and research purposes but also for medico-legal reasons.

Government and other stakeholders need to be more involved in addressing some of the psychosocial issues identified in this study and to put in place appropriate mental health policies to make psychiatric practice more effective and efficient.

Limitations

It is a hospital-based study and these findings may not fully reflect what obtains in the community and the country at large.

There were unrecorded or missing information about the patients in some of the medical case notes.

References

1. Jacob KS. Social context and mental health, distress and illness: critical yet disregarded by psychiatric diagnosis and classification. Indian J Soc Psychiatry 2016;32:243-8.
2. Viswanath B, Chaturvedi SK. Cultural Aspects of Major Mental Disorders: A Critical Review from an Indian Perspective. Indian J Psychol Med 2012;34:306–12.
3. Demyttenaere K, Bruffaerts R, Posada-Villa J, et al. Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. JAMA 2004;291:2581–90. Available from: doi:10.1001/jama.

291.21.2581.
4. Kessler RC, Berglund P, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005;62:593–602. Available from: doi:10.1001/archpsyc.62.6.593.
5. Esohe OO, Vivian OO, Otaniyenuwa EO, et al. Pattern of psychiatric disorders among young persons attending psychiatric clinics in Benin city: implications for health. Int J Community Med Public Health 2018;5:500-5.
6. Sias JJ, Loya AM, Rivera JO. Cultural Competency. Pharmacotherapy: A Pathophysiologic Approach. 8th ed. New York: McGraw-Hill. 2011. Available from: www.accesspharmacy.com
7. Akinci F, Sinay T. Perceived access in a managed care environment: determinants of satisfaction. Health Serv Manage Res 2003;16:85-95.
8. Meng YY, Jatulis DE, McDonald JP, Legorreta AP. Satisfaction with access to and quality of health care among Medicare enrollees in a health maintenance organization. West J Med 1997;166:242-7.
9. Gureje O, Uwakwe R, Udofia O, et al. Common psychiatric disorders over a lifetime: age of onset, risk and treatment contact in the Nigerian survey of mental health and wellbeing. Afr J Med Med Sci 2008;37:207-17.
10. Kazeem AA, Dauda S. The predictors of psychiatric disorders among people living with epilepsy as seen in a Nigerian Tertiary Health Institution. Nigerian Med J 2016;57:24-30.
11. Isssa BA, Yussuf AD, Ajioboye PO, et al. Pattern of psychiatric admission in a Nigerian teaching hospital: a five-year retrospective study. Res J Med Sci 2008;2:231-5.
12. National Institute of Mental Health Disorders. United States of America;2019.
13. Dohrenwend BP, Dohrenwend BS. Social status and psychological disorder: a causal inquiry. New York: John Wiley and Sons; 1969.
14. Dohrenwend BP, Dohrenwend BS. Sex difference and psychiatric disorders. Am J Sociol 1976;81:1447-54.
15. Goldman N, Ravid R. Community surveys: sex differences in mental illness. In Guttentag M, Salasin S, Belle D (eds.), The Mental Health of Women. New York: Academic Press; 1980.
16. Goldberg D, Huxley P. Common mental Disorders. A Bio-social Model. London: Routledge/Tavistock; 1992.
17. Gureje O, Obikoya B, Ikuesan BA. Prevalence of specific disorders in an urban primary care clinic. E Afr Med J 1992;69:282–7.
18. World Health Organization. Aims report on mental health system in Nigeria; 2006. Available from: https://www.who.mindbank.info
19. Wells KB, Manning WG, Duan N, et al. Sociodemographic factors and the use of outpatient mental health services. Med Care 1986;24:75-85.
20. Paharam A, Anjana N, Sunil KA, et al. Assessment of socio-demographic determinants of psychiatric patients attending psychiatry outpatient department of a tertiary care hospital of Central India. Int J Community Med Public Health 2016;3:764-9.
21. Weeks RV. Muslim peoples: a world ethnographic survey. 2nd ed. Westport, CT: Greenwood Press; 1984.
22. Akande, JO. Law and the status of women in Nigeria. Report prepared for the African Training and Research centre for women; 1979.
23. UNICEF; 2007. unicef.org
24. Igbinomwanhia NG, Olotu SO, James BO. Prevalence and correlates of antipsychotic polypharmacy among outpatients with schizophrenia attending a tertiary psychiatric facility in Nigeria. Ther Adv Psychopharmacol 2017;7:3-10.
25. Gari H, Mulugeta, G, Tesfaye D, Fitsum W, Assefa T. Prevalence and determinants of common mental illness among adult residents of Harari Regional State, Eastern Ethiopia. Pan Afr Med J 2017;28:262.