Novelty Journals

ISSN 2394-7330

International Journal of Novel Research in Healthcare and Nursing
Vol. 2, Issue 1, pp: (31-35), Month: January - April 2015, Available at: www.noveltyjournals.com

Social-Demographic Correlates and Physical Illness among Inpatients with Schizophrenia at Mathari Hospital, Nairobi, Kenya

[1]Benson N Gakinya, [2]Caleb J Othieno,

[1] MB ChB, M Med (Psych) (Nrb) Senior Lecturer and Head, Department of Mental Health, School of Medicine Moi University School of Medicine Eldoret, P O Box 4606, Eldoret, Kenya
[2]MB ChB, M Med (Psych) (Nrb) Senior Lecturer and Chairman Department of Psychiatry, School of Medicine, College of Health Sciences, University of Nairobi, P O Box 19676 – 00202, Kenyatta National Hospital, Nairobi, Kenya.

Abstract: **This was a cross sectional descriptive study carried out at Mathari Hospital, Nairobi, Kenya. The objective was to describe the social-demographic characteristics and physical illness among inpatients with schizophrenia. A total of two hundred and twenty four patients (137 male and 87 female) were included in the study. Patients who met the diagnostic criteria for schizophrenia according to the Diagnostic and Statistical Manual Fourth Edition (DSM-IV) were assessed using the Adult Personal Data Inventory. Physical complaints were noted and previous medical history was obtained from the case notes. Statistical analysis was done using the Chi-square tests. Most of the patients were young (mean age = 34.62, s.d. = 11.5), came from low socio-economic background and previously worked as unskilled labourers or were unemployed. Thirty-four (15.2%) of the patients had a medical diagnosis. Of these 18 (53%) had an infective condition. Respiratory infection especially pulmonary tuberculosis was commonly encountered. Human Immunodeficiency Virus (HIV) infection was also common. The females had a higher percentage of physical morbidity 19.5% compared to the males 12.4%. History of suicide attempt was recorded in 33 (14.7%) of the patients. the patients with schizophrenia seen at Mathari hospital are young and socio-economically disadvantaged. A significant proportion (15.2%) of the patients has medical conditions that are treatable. These factors should be taken into account when planning treatment and rehabilitation services for the patients.**

Keywords: **Mathari Hospital, patients.**

I. INTRODUCTION

It is estimated that nearly 50% of patients with schizophrenia have a co morbid medical conditions (Goldman, 1999) and that they have a 20% shorter life expectancy than the general population. Much of the mortality and morbidity is due to the co morbid medical conditions. The patients are more vulnerable to diseases such as diabetes, coronary heart disease, hypertension and emphysema. These are attributed to the poor dietary habits and alcohol and substance use, both of which are more common among patients with schizophrenia than in the general population. The antipsychotics used to treat schizophrenia are associated with weight gain, onset of diabetes, increased levels of plasma lipids and abnormal findings on ECGs. Other important side effects include cataract formation, movement disorders and sexual dysfunction. However, the risk of developing certain disorders such as rheumatoid arthritis and allergies has been reported to be low (Goldman, 1999). Given that schizophrenia impairs the individual's ability to communicate and the loss of insight that is common among these patients, the presentation and subsequent management of medical conditions may be adversely affected. Recently, Marder et al. (2004) proposed that mental health care providers should perform physical health monitoring for patients who may not receive such screening at the primary health care level. The recommendations included screening for obesity, diabetes, hyperlipidaemia, ECG monitoring, prolactin levels and extrapyramidal side effects. It was also recommended that clinicians should be on the look out for myocarditis among patients taking clozapine.

Until recently few studies in Africa have focused on medical conditions among patients with mental disorders in general or schizophrenia. In a study of 191 psychiatric inpatients in Nigeria (27.2%) had physical morbidity (Abiodun, 2000). Older patients were more affected and infective processes constituted over half of the cases. Acute organic brain syndrome from septicaemia was the commonest diagnosis followed by cardiovascular and gastrointestinal disorders. He noted that 70% of the disorders were undiagnosed by the referring sources. In Kenya, Gatere et al., (2002) reported high prevalence of tardive dyskinesia among mentally ill patients and Ndegwa (2005) noted the increased risk of diabetes among mentally ill patients.

In Ethiopia, mortality due to infections is reported to be high among patients with schizophrenia (Alem et al., 2006). Although suicide has been reported as a leading cause of death among patients with schizophrenia in the developed world, the studies from Ethiopia did not confirm this. This study aims to describe the socio-demographic correlates and physical conditions found among the admitted patients with schizophrenia.

II. METHOD

The study was approved and cleared by the hospital's ethical and research committee. All the patients admitted to Mathari Hospital during the study period were screened. In each ward all the patients' files were studied and then those suspected to have schizophrenic illness were recruited for the study. Consent to participate in the study was gotten from their next of keen with a corresponding accent from the patients. A more detailed assessment was then being done using the Standard Psychiatric Interview (SPI) (Goldberg et al., 1970). All patients who met the diagnostic criteria for schizophrenia according to the Diagnostic and Statistical Manual Fourth Edition (DSM-IV) (American Psychiatric Association, 1994) criteria were then subjected to further assessment using the Adult Personal Data Inventory (Guy, 1976).

The Standard Psychiatric Interview (SPI) is a semi-structured questionnaire. Designed for use by trained personnel (such as psychiatrists or psychologists), the SPI has a set of mandatory questions but it also allows the interviewer freedom to explore in detail any symptoms that may be encountered. Diagnosis was made using the Diagnostic and Statistical Manual Fourth Edition (DSM-IV). The Adult Personal Data Inventory consists of questions designed to record the patient's social and demographic characteristics, family history, past medical illness and details of previous illnesses. The physical conditions of the patients and medical diagnosis were based on the case notes. Patients who refused to give consent were excluded from the study. Those who had gross difficulties in communication or were too ill or lacked insight were assessed with the help of relatives.

The data was analysed using the computer software statistical package for Social Sciences (SPSS) version 10.0. The patient's social-demographic variables were analysed and compared to those from other parts of the world.

III. RESULTS

Two hundred and twenty four (224) patients 137 male and 87 female met the diagnostic criteria for schizophrenia and were included in the study. The social demographic characteristics are summarised in table 1. Most of the patients were young – approximately 75% were under 40 years. The age ranged from 16 to 75 years (mean = 34.62, s.d. = 11.5). Most of the patients (47.3%) recorded their district of origin as Central Province followed by 17.9% from Eastern Province. During the previous 3 years, 39.8% had resided primarily in the urban areas, 10.2% in the sub-urban areas and 50% in the rural areas. Two hundred patients recorded their religion as Christians and only 16 as Muslims. Seventy percent of the patients had only been briefly or not at all employed during the previous three years. Most of the patients previously worked as unskilled employees or were never employed. The majority had had 8 years of schooling or less.

Most of the patients had received psychiatric treatment previously and 144 (64.2%) had been hospitalised before. The number of hospitalisations ranged from one to 33 (mean = 4). Only 35 (15.6%) had never received any type of psychiatric treatment before the current admission but all were on psychotropic medications at the time of the study. The youngest age at which a patient first received treatment was 8 years. Most of the patients were brought by relatives. In only 3 cases did the patients come for admission alone and the help of the police during admission was sought in 10 cases. Aggression and violent behaviour were commonly cited by relatives as reasons for seeking admission.

Physical disorders encountered are shown in table 2, 34 (15.2%) had a medical diagnosis recorded in the files. Of these 18 (53%) had an infective condition. Respiratory infection especially pulmonary tuberculosis was commonly encountered. Human Immunodeficiency Virus (HIV) infection was also common. The females had a higher percentage of physical

morbidity 19.5% compared to the males 12.4%. History of suicide attempt was recorded in 33 (14.7%) of the patients (18 male and 15 female).

IV. DISCUSSION

Most of the patients with schizophrenia were the young and unemployed. Nearly two-thirds were single. It is known that schizophrenia starts mainly in the 10 – 25 years age group and that the patients are less likely to marry compared to the normal population (Sadock & Sadock, 2005). The relatively young age of the general population could also be an explanation for the age distribution seen in this sample of patients. The large number of unskilled workers and the unemployed in this sample could be a reflection of the type of patients who attend public hospitals. Most of the patients came from Nairobi and its environs despite the fact that Mathari is a national referral hospital. Since it is unlikely that the prevalence of mental disorders varies markedly across the country it could probably mean that patients from the rest of the country are managed at the nearest hospitals or that they do not get into the medical system at all. They could perhaps be utilizing alternative forms of treatment. From the patients' records medical diagnoses were found in 34 (15.2%) of the cases. No systematic or routine tests were requested for the patients to rule out medical disorders so this figure is probably an underestimate. For example, brain imaging is not routinely done for all the patients. In this sample only one case is recorded as having brain atrophy, which is most unlikely given that brain atrophic changes are reported in approximately 30% of patients with schizophrenia and that comorbidity with medical conditions, half of which are missed, occur in up to 80% of patients with schizophrenia (Sadock & Sadock, 2005). Infectious diseases were commonly encountered among those patients with medical disorders at Mathari Hospital. Of significance is the occurrence of pulmonary tuberculosis and HIV infections. These diseases would be particularly difficult to treat in a mentally disturbed patient given that long-term follow-up is usually necessary to ensure compliance. It is important to detect and manage the mentally ill patients because the patients may not seek appropriate medical help either due to lack of insight or disordered thought processes. Moreover mental hospitals are usually ill equipped to diagnose and treat medical conditions (Brown et al, 2000; Garden, 2005).

V. CONCLUSION

Most of the patients seem to have been from low socio-economic background and were previously unskilled workers or jobless. A significant proportion (15.2%) of the patients with schizophrenia has medical conditions that are treatable. Routine screening for physical disorders should be done. It is important to consider the physical disorders when planning services for the mentally ill patients.

VI. ACKNOWLEDGEMENTS

We wish to thank the patients of Mathari Hospital and their relatives for agreeing to participate in the study, the members of staff at the hospital, particularly Dr Hitesh Maru, the immediate former Medical Superintendent for facilitating the study, Jack Obaro Yongo and other staff of the African Mental Health Foundation for their help with the data analysis.

REFERENCES

[1] Abiodun O A (2000). Physical morbidity in a psychiatric population in Nigeria. General Hospital Psychiatry, 22(3):

[2] Alem A, Kebede D, Shibre T, Negash A, Deyassa N & Beyero T (2006). Schizophrenia and mortality in Butajira. Paper presented at the African Association of Psychiatrists & Allied Professionals meeting in Addis Ababa, April 24-25, 2006.

[3] American Psychiatric Association (1994). Diagnostic and Statistical Manual, 4th edition, Text Revised. American Psychiatric Association Press. Washington D C.

[4] Brown S, Inskip H & Barraclough B (2000). Causes of excess mortality of schizophrenia. British Journal of Psychiatry, 177, 212-217.

[5] Garden G (2005). Physical examination in psychiatric practice. Advances in Psychiatric Treatment, Vol. 11, 142-149.

[6] Gatere N, Othieno C J & Kathuku D M (2002). The prevalence of tardive dyskinesia among psychiatric patients at Mathari Hospital, Nairobi. East African Medical Journal, Vol. 79, No. 10, 547-549.

[7] Goldenberg O P, Cooper B, Eastwood M R, Kendward H B & Shepherd M (1970). A standardised psychiatric interview for use in community surveys. British Journal of Preventive and Social Medicine, 24, 18-23.

[8] Goldman L S (1999). Medical illness in patients with schizophrenia. Journal of Clinical Psychiatry, 60 Suppl. 21: 10-5.

[9] Guy (1976). Adult Personal Data Inventory. In ECDU Assessment Manual for Psychopharmacology (ed. Guy W). Pp 93-107. National Institute of Mental Health Psychopharmacology Research Branch. Rockville, Maryland 1976.

[10] Marder S R, Essock S M, Miller A L, Buchannan R W, Casey D E, Davis J M et al., (2004). Physical Health Monitoring of patients with schizophrenia. American Journal of Psychiatry, 161: 1334-1349.

[11] Ndegwa J M (2005). Prevalence of diabetes mellitus among psychiatric patients admitted at Mathari Hospital. Master of Medicine Dissertation in Psychiatry, University of Nairobi.

[12] Sadock B J & Sadock V A (2005). Concise Textbook of Clinical Psychiatry Pp.134-135. 2nd edition. Lippincott Williams and Wilkins. Philadelphia.

APPENDIX - A

Table 1: Socio-demographic variables of the schizophrenic inpatients at Mathari Hospital

Variable	Male (%) N = 137	Female (%) N = 87	Total (%) N = 224
Residence: Urban	42 (31.8)	44 (52.4)	86 (38.4)
Sub-urban	22 (16.7)	0 (0)	22 (9.8)
Rural	68 (51.5)	40 (47.6)	108 (48.2)
Province of origin:			
Central	65 (47.4)	41 (47.1)	106 (47.3)
Coast	2 (1.5)	1 (1.1)	3 (1. 1)
Eastern	28 (20.4)	12 (13.8)	40 (17.9)
Nairobi	6 (4.4)	6 (6.9)	12 (5.4)
North-eastern	5 (3.6)	0 (0)	5 (2.2)
Nyanza	9 (6.6)	6 (6.9)	15 (6.6)
Rift valley	8 (5.8)	10 (11.5)	18 (8.0)
Western	9 (6.6)	5 (5.7)	14 (6.3)
Other countries	0 (0)	2 (2.3)	2 (0.9)
Missing	5 (3.6)	4 (4.6)	9 (4)
Age: 10-19	4 (2.9)	3 (3.4)	7 (3.1)
20-29	51 (37.2)	27 (31.0)	78 (38.4)
30-39	43 (31.4)	32 (36.8)	75 (33.4)
40-49	25 (18.2)	10 (11.5)	35 (15.6)
50-59	10 (7..3)	8 (9.2)	18 (8.0)
60-69	4 (2.9)	3 (3.4)	7 (3.1)
> 70	0	2 (2.3)	2 (0.8)
Marital status:			
Single	98 (71.5)	47 (54.0)	145 (64.7)
Married	33 (24.1)	29 (33.3)	62 (27.7)
Divorced	6 (2.7)	10 (11.5)	16 (7.1)
Missing	0	1 (1.1)	1 (0.4)
Religion: Christian	123 (89.8)	77 (88.5)	200 (89.3)
Muslim	9 (6.6)	7 (8.0)	16 (7.1)
Other	5 (3.6)	3 (3.5)	8 (3.6)
Previous Psychiatric treatment:			
Yes			
No	95 (69.3)	66 (75.9)	161 (71.9)
Missing	23 (16.8)	12 (13.8)	35 (15.6)
	19 (13.9)	9 (10.3)	28 (12.5)

Current tobacco use: smoking Sniffing:	69 (50.4) 2 (1.5)	10 (11.5) 2 (2.3)	79 (35.3) 4 (1.8)
Education level			
Graduate professional training	7 (5.1)	6(6.9)	13 (5.8)
College/technical school	2 (1.5)	6(6.9)	8 (3.6)
High school graduate	11 (8.0)	12 (13.8)	23 (10.3)
Some high school	2 (1.5)	5 (5.7)	7 (3.1)
Secondary	14 (10.2)	31 (35.6)	45 (20.1)
Primary (≤ 8 years school)	39 (28.5)	58 (66.7)	97 (43.3)
Not ascertained	10 (7.3)	16 (18.4)	26 (11.6)
Socio-economic status			
Higher executive	4 (2.9)	2 (2.3)	6 (2.7)
Business manager	5 (3.6)	1 (1.1)	6 (2.7)
Administrative personnel	7 (5.1)	10 (11.5)	17 (7.6)
Clerical or sales worker	14 (10.2)	7 (8.0)	21 (9.4)
Skilled manual worker	9 (6.6)	2 (2.3)	11 (4.9)
Machine operator	2 (1.5)	0 (0)	2 (0.9)
Unskilled employee	40 (29.2)	8 (9.2)	48 (21.4)
Never employed	37 (27.0)	40 (46.0)	77 (34.4)
Not ascertained	16 (11.7)	11 (12.6)	27 (12.0)

Table 2: Medical conditions among the schizophrenic patients

Variable	**Male (%)** **(N = 137)**	**Female (%)** **(N = 87)**	**Total (%)** **N = 224**
Pulmonary tuberculosis	3 (2.1)	2 (2.2)	5 (2.2)
Other Respiratory infection	2 (1.4)	2 (2.2)	4 (1.8)
HIV	1 (0.7)	3 (3.4)	4 (1.8)
Fracture	1 (0.7)	1 (1.1)	2 (0.8)
Arthritis	0 (0)	1 (1.1)	1 (0.4)
Asthma	0 (0)	1 (1.1)	1 (0.4)
Brain atrophy	0 (0)	1 (1.1)	1 (0.4)
Epilepsy	0 (0)	1 (1.1)	1 (0.4)
Epilepsy with mental retardation	1 (0.7)	0 (0)	1 (0.4)
Haemorrhage	1 (0.7)	0 (0)	1 (0.4)
Head injury	0 (0)	1 (1.1)	1 (0.4)
Hypertension	0 (0)	1 (1.1)	1 (0.4)
Mental Retardation	0 (0)	1 (1.1)	1 (0.4)
Poor eyesight	1 (0.7)	0 (0)	1 (0.4)
Osteoarthritis	1 (0.7)	0 (0)	1 (0.4)
Otitis media	1 (0.7)	1 (1.1)	2 (0.8)
Pellagra	1 (0.7)	0 (0)	1 (0.4)
Peptic Ulcer Disease	1 (0.7)	0 (0)	1 (0.4)
Soft tissue injuries	1 (0.7)	0 (0)	1 (0.4)
Tinea corporis	1 (0.7)	0 (0)	1 (0.4)
Tremors and slurred speech	1 (0.7)	0 (0)	1 (0.4)
Ureterovaginal fistula (UVF)	0 (0)	1 (1.1)	1 (0.4)
Total	**17 (12.4)**	**17 (19.5)**	**34 (15.2%)**