Original Article

PSYCHIATRIC MORBIDITY AND PATTERNS OF INPATIENT REFERRAL TO THE CONSULTATION-LIAISON UNIT OF JOS UNIVERSITY TEACHING HOSPITAL, NORTH-CENTRAL NIGERIA

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Abstract

The study of the pattern of inpatients referral to consultation-liaison unit is important as significant proportion of patients with physical illnesses also suffer from psychiatric disorder. It will help in designing better consultation-liaison services that is geared toward holistic health care. The study was aimed at determining the psychiatric morbidity, referral patterns and sociodemographic profiles of in-patients referred to consultation-liaison unit of Jos University Teaching Hospital. It was a descriptive prospective study of all consenting patients. A total of 142 patients were referred to consultation-liaison unit during the study period of August 2014 to July 2015. The referral rate was 1.7%. The mean age$\pm$SD of referred patients was 38$\pm$16.59 years. There were more females 84(59.2%) than males 58(40.8%). Among the referred patients majority had secondary education 60(42.3%) and were never-married 67(47.2%). The major source of referral 97(68.3%) was from medical ward and reasons for referral were; to help in management 68.3%, previous psychiatric contact 12.0% and abnormal behavior 10.6%. The predominant psychiatric diagnoses using ICD-10 criteria were depression 27(19.0%), acute organic brain syndrome 18(12.7%), alcohol dependence 15(10.6%) and puerperal psychosis/depression 12(8.5%). Co-morbid physical conditions were present in 123(86.6%) mainly, infections 25(17.6%), retroviral infections 18(12.7%), neurological conditions 8(5.6%), trauma/head injury 13(9.2%) and cardiovascular diseases 12(8.5%). The low referral rate and reasons for referral revealed the referring physicians scope of the understanding of psychiatry. Therefore, clinicians should be adequately exposed to basic knowledge of psychiatry and should be able to recognize common psychiatric conditions and referred appropriately for a holistic healthcare.

Introduction

Consultation-Liaison (C-L) is a subspecialty of psychiatry that is concerned with the provision of service, teaching and research at the interface of psychiatry and medicine in non-psychiatric hospitals.[1] The consultation-Liaison unit serves as a link between other specialties in a general or tertiary hospital and psychiatry department. The C-L team could be called upon to evaluate and treat wide variety of psychiatric disorders in patients with general medical conditions. For instance, psychiatric emergencies such as suicidal attempts, stupor, violence, substance dependence and delirium among others that were previously seen in psychiatric hospitals are now handled by mental health workers in non psychiatric settings.[2] It is well known that all illnesses have both psychosocial and physical dimensions. The association between physical illness and psychiatric morbidity has been well documented in several studies across the globe.[3,4,5] This relationship could stem from a common aetiological

link like the sympathetic pathway in the mediation of essential hypertension, peptic ulcer and most anxiety disorders.[6] It is equally worthy to note that baseline adverse psychosocial factors, psychological distress or clearly identified psychiatric conditions have been implicated as predictors of some medical conditions like cardiovascular diseases.[7,8] Psychosocial factors could also influence the course of physical illness due to changes and irregularities in autonomic nervous, endocrine and immune systems.[9]

Similarly, physical illness could lead to psychiatric conditions from the mere awareness of the chronic nature of the illnesses, debilitating symptoms, associated disabilities and or poor quality of life.[10,11] Other factors include job adjustment or loss, worries about financial implications and burden of care, long term treatment as well as prolonged stay in the hospital.[12,13] Unfortunately, these aspects of the illness are often overlooked and left unattended to by clinicians in other subspecialties. In addition, certain medication used in the treatment of physical illness can equally give rise to psychiatric symptoms. For examples, some antihypertensive like methyldopa and propanolol have been documented to cause depression and sexual dysfunction.

All these empirical findings are in line with Hippocrates earlier stance for holistic medical approach to treatment. He asserted that in other to cure the human body, it is necessary to have knowledge of whole.[14] Consequently, the management of comorbid psychiatric and physical illness is an important issue if holistic health care services will be achieved.[15] Psychiatric morbidity is reported to be very high among medical in patients, the majority of prevalence reports of mental disorders vary between 30-60%.[16] Patients with chronic physical illness have high prevalence of mental disorder 42% compared to 3% who did not have long term physical disability.[17] Likewise, it has been found that 6-25% of patients in primary care treatment settings[18,19] and 11-19.4%[18,20] of medical patients have major depression compared with 3% in the general population. The co-occurrence of psychiatric and medical problem in a patient often leads to more complex diagnostic assessments, increased health care costs and less satisfactory outcome than in those without co-morbidity.[21]

Studies looking at rates of referral patterns from in patients setting vary across countries. A number of studies have been carried out on psychiatric referral rates in both inpatients and outpatients clinic in Nigeria which ranges from 1.8% to 5.7%[22,23] with the bulk of the patients were referred from internal medicine.[24,25] The predominant diagnoses in Nigeria were delirium, depression and anxiety disorders.[22,24,25] The high comorbidity of physical illness and psychiatric diagnoses requires collaboration between other medical specialties and psychiatry to provide a holistic care approach that considered both psychosocial and physical components of any illness. There is paucity of literature on the profiles of psychiatric morbidity of inpatients referred to cosultation-liason team in North Central Nigeria. Therefore, the present study was aimed to determine the psychiatric morbidity, pattern of referrals and sociodemographic profiles of inpatients referred to consultation-Liaison unit of the Jos University Teaching Hospital.

Materials and Methods

This study was done in Jos University Teaching Hospital, North Central region of Nigeria. The hospital is a multi-specialty tertiary institution with patient's bed capacity of 520. It was a prospective descriptive study of all in-patients referred consecutively to consultation-Liaison unit of the Department of Psychiatry from August, 2014 to July 2015 after ethical clearance was obtained. A detailed psychiatric assessment was carried out by a Psychiatrist once they were medically stable and they consented. Psychiatric diagnoses were made using ICD-10 criteria. A profoma was used to collect sociodemographic data, referral departments and other clinical variables. There were 142 patients referred from different wards including Emergency (only patients that were later admitted into the ward were included) and Intensive Care Units, excluded were patients who did not consent. Data analysis was done using the Statistical Package for Social Sciences 20.0 (SPSS) for frequencies, means, standard deviation and proportions.

Results

A total of 142 patients were referred to consultation-Liaison unit during the study period. Out of the total of 8,052 patients admitted in the Hospital during this

period only 142 in-patients were referred for psychiatric evaluation with a referral rate of 1.7%. The mean age of patients, (Age±SD), was 38.00±16.59 years with the age range of 10 to 80 years. The majority 45 (31.7%) of patients were in the age group of 30-39 years followed by 20-29 age group 32(22.5%). Fifty eight (40.8%) were males and 84(59.2%) were females. The educational status of the patients showed that 60(42.3%) had secondary education. Among the referred patients majority 67(47.2%) were never married followed by married 55(38.7%) (Table: 1)

The major source of referral 97(68.3%) was from the medical ward. The referral from other departments (Obstetrics and gynaecology, surgery, Emergency and casualty, paediatrics and Intensive care unit) was low. The reasons for referral were; to help in management 68.0%, previous psychiatric contact 12.0%, for abnormal behaviour 10.6%, substance abuse 4.2%. Other reasons were for transfer to psychiatric ward 2.8% and suicidal behavior 2.1% (Table: 2).

The psychiatric diagnosis of the referred patients using ICD-10 criteria were: majority 27(19.0%) had depression, 6(4.2%) organic mood disorder, 6(4.2%) mania/BAD, 18(12.7%) acute organic brain syndrome, 12(8.5%)puerperal psychosis/depression, 15(10.6%) alcohol harm/dependence syndrome. Other diagnostic categories include Schizophrenia 8(5.6%), acute and transient psychotic disorder 9(6.3%), and 9(6.3%) has no psychiatric diagnosis (Table: 3).

Co-morbid physical conditions were present in 123(86.6%) of the referred patients (Table: 4). These comprised of cardiovascular diseases like cardiac failure, hypertension, cardiomyopathy 12(8.5%), endocrine diseases namely; diabetes mellitus and thyroid abnormalities 8(5.6%), retroviral infections 18(12.7)%, neurological conditions such as; stroke and parkinsonism 8(3.5%), infections like meningitis, typhoid fever, sepsis and tuberculosis 25(17.6%), trauma/head injury 13(9.2%) among others.

Table 1: Sociodemographic characteristics of referred patients

sex	*Number of Patients (n)*	*Percentage (%)*
Male	58	40.8
Female	84	59.2
Educational status		
No formal education	13	9.2
Primary	32	22.5
Secondary	60	42.3
Tertiary	37	26.1
Marital status		
Married	55	38.7
Never married	67	47.2
Widow/widower	16	11.3
Divorce/separated	4	2.8
Age group		
10-19	27	19.0
20-29	48	33.8
30-39	26	18.3
40-49	17	12.0
50-59	9	6.3
≥60	15	10.6
Mean Age±SD	38.0±16.59 years	

Table 2: Sources and reasons for referrals

	Number of patients (n)	*Percentage (%)*
Sources		
Medicine	97	68.3
Surgery	14	9.9
Obstetrics & Gynaecology	14	9.9
Paediatrics	7	4.9
Accident & Emergency	4	2.8
Intensive Care Unit	6	4.2
Reasons for referrals		
Previous psychiatric illness	17	12.0
Help manage	97	68.3
Abnormal behavior	15	10.6
Transfer to psychiatric ward	4	2.8
Substance abuse	6	4.2
Suicidal attempt/behavior	3	2.1

Table 3: Psychiatric diagnoses according to ICD-10 criteria

	Number of patients (n)	*Percentage (%)*
Depression	27	19.0
Schizophrenia	8	5.6
Acute organic brain syndrome	18	12.7
Postpartum psychosis/depression	12	8.5
Dementia	4	2.8
Alcohol harm/dependence syndrome	15	10.6
Mania/Bipolar	6	4.2
Adjustment disorder	6	4.2
Acute and transient psychotic disorder	9	6.3
Childhood psychiatric disorder	5	3.5
Sexual disorder	3	2.1
Anxiety spectrum disorder	8	5.6
Organic mood disorder	6	4.2
Psychoactive drug harmful use	6	4.2
No psychiatric diagnoses	9	6.3
Total	**142**	**100.0**

Table 4: Medical/surgical diagnoses of the referred patients

	Number of Patients (n)	*Percentage (%)*
Cardiovascular diseases	12	8.5
Endocrine conditions	8	5.6
HIV/AIDS	18	12.7
Infections	25	17.6
Liver conditions	4	2.8
Dementia	2	1.4
Poisoning	2	1.4
Head injury/trauma	13	9.2
Epilepsy	5	3.5
Obstetrics/Gynaecological conditions	5	3.5
Acute/Chronic kidney diseases	7	4.9
Cancer	3	2.1
Neurological diseases	8	5.6
Musculoskeletal diseases	4	2.8
Other surgical conditions	7	4.9
No medical diagnoses	19	13.4
Total	**142**	**100.0**

Discussion

The referral rate for psychiatric consultation was 1.7% in our study is low. This rate is in keeping with previous studies of 1.8% in Nigeria[22] and 1.4 to 3.6% in others parts of the world.[26,27] This rate is considered low because robust literature has shown that 30-60% of in patients in medical settings have mental disorders.[16] It may be a reflection of stigma and social rejections associated with psychiatric disorders in our environment as well as believe by some clinicians of the resolution of psychiatric symptoms if the underlining organic disorder is treated.

Majority of the patients belong to the middle age groups 20-49 which is consistent with many other studies including Nigeria.[22,24,28] There was a preponderance of females (59.2%) in the referred patients which is in concordance with previous studies.[24,29] This may not be unconnected to women being better seekers of healthcare compared to men (30). Hence, they may be readily available for referral. It could also be explained by the fact that psychiatric morbidity is high in women who give birth during the post-partum period.[31] The study showed that majority of the referred patients had secondary education which is in contrast with previous studies in Nigeria where majority had no primary education.[24,29] The variation could be because the hospital where this study took place is located in an urban area where public primary and secondary education is encouraged, affordable and is accessible. The marital status of the patients was predominantly never-married 47.2%. This finding is similar to studies of in-patients referred for consultation-Liaison services.[22,25] Patients that suffer from psychiatric illness are vulnerable to discrimination and social distance especially to issues such as marriage, employment and accommodation which may explain the predominance of never married in the sample.[32]

The bulk of the referral was from internal medicine 69% which is comparable to the findings of previous researchers.[22,24] It may be related to the fact that infectious diseases which constitute the commonest conditions encountered in the tropics are within the purview of the internal physicians as well as neurological conditions which are usually complicated by neuropsychiatric features.[24,33] This assertion concurred with the high rate of infective conditions including retroviral infection 30.3%, followed by head injury/trauma 9.2% and cardiovascular diseases 8.5% found in this study. The low referral rate of 10.6% from the obstetrics and gynecology department is not a true reflection of the prevalence of psychiatric morbidity among patients seen in this specialty.[33] Likewise surgery and pediatrics departments had low referral rates of 14.8% and 5.6% respectively. Co-morbid psychiatric conditions in these departments are often neglected because of urgency of treatment of the primary presenting complaints and lack of experience in the field of psychiatry. In addition factors such as stigma, concerns about effect of referral on self-esteem of patients and about the effectiveness of psychiatric treatment could have contributed to the low referral rates. The referring team could not diagnosed physical illness in 13.4% of the in patients sent to consultation-liaison Unit. Depression and anxiety can present with somatic symptoms and are often presented in non psychiatric settings.

Detailed psychiatric evaluation of these referred in-patients revealed the commonest diagnosis to be depression 19%, followed by acute organic brain syndrome 12.7% and alcohol use disorders 10.6%. This finding is similar to those of Clarke and Smith[34] who found that depression accounted for 55% and organic brain disorder 35% as being the commonest. Risal and colleagues[35] also found that depression accounted for 34%, alcohol dependence syndrome 28% and personality disorder 16.8% as the most common psychiatric diagnoses. However, these findings are at variance with some other studies that found organic brain disorder and schizophrenia and related psychotic disorders as the commonest diagnoses among in-patients referred for consultation-liaison services. There was no psychiatric diagnosis in 6.3% of the referred patients which is far less compared to previous study of 17% in another teaching hospital in Nigeria.[25] It may be that the referring physicians in the study center have good knowledge of psychiatric symptomatology or they only referred patients they considered problematic for psychiatrists to help them managed as reflected in the pattern of referrals.

The reasons for consultation were; to help in management, previous psychiatric diagnosis and abnormal behavior in 68.0%, 12.0% and 10.6%

respectively. These finding is in agreement with previous studies done in Nigeria by[22,24] and in Asia by.[28,36] It has been opined that the need for referral to a psychiatrist is determined more or less by the presence of symptoms. It could also be that attending physicians in other departments are becoming aware of the need for treatment of psychiatric symptomatology by psychiatrists. In this study only 2.8% of the referral rate was for transfer of the patients to the psychiatric ward. This is in contrast with previous study which found that the main concern of referring physicians from other specialties when seeking consultation-liaison services is for immediate transfer of the patients to psychiatric ward[24]. A high proportion of referral for suicide attempts in the western samples 43-59%[37] and India 4.5%[28] has been reported. In our study the referral rate for suicidal behavior was only 2.1% which may be associated with sociocultural factors and the fact that suicidal attempt is a crime against the state in our environment could have deterred many to seek for help in a government hospital where this study was conducted. There was no referral to the unit for medico legal reasons such as evaluation for competence. This may be as a result of low level of medico legal litigations in our environment.

This study had some limitations as it was limited to hospitalized patients only in a metropolitan hospital who were referred to consultation-liaison unit by the attending physicians in other specialties. Coupled with the small sample size it posed limit to generalize the result in the region. Standardized psychiatric scales and structured clinical interviews were not used in this study.

Conclusion

The study had attempted to examine the possibility of the presence of psychosocial factors that are associated in a wide range of physical illnesses among in-patients referred from other specialties for consultation-liaison services. The psychiatric consultation was sought mostly by the internal physicians with the bulk having infective disorders. The psychiatric diagnoses were mainly depression, acute organic brain syndrome and alcohol use disorders. This has highlighted the importance of the awareness of the co morbidity of psychiatric illness and physical illness.

Recommendation

The low referral rate underscore the need for physicians and nurses to be adequately exposed to basic knowledge of psychiatry to help them recognize the common psychiatric conditions and make necessary consultations and or referrals. However, further study is required to assess the attitude and knowledge of both the hospital doctors and patients which are important factors in referral for psychiatric consultation.

Conflict of interest

None

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