

Pattern and Prevalence of Psychiatric Consultations in Other Non-Psychiatric In-patient Facilities in the University of Port Harcourt Teaching Hospital(UPTH): A 5-year Review.

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ABSTRACT

BACKGROUND

The tendency of other medical conditions to comorbid or present with psychiatric complications is on the increase. Several studies have put the prevalence of psychiatric co-morbidity with medical conditions at about 10- 20%, with an unmatched diagnostic ability by most clinicians. This has resulted in poor management and unfavorable outcomes. The aim of this study was to determine the pattern and prevalence of psychiatric co-morbidity with other medical conditions in other non-psychiatric wards in UPTH.

METHODS

Approval for the study was obtained from the ethical committee of the hospital. A record was kept of all the consultations to psychiatry from every other unit in the hospital over 5 years. Both the psychiatric and non-psychiatric diagnoses made were all noted. Cases selected included any clinical conditions with comorbid psychiatric disorders while patients with only psychiatric diagnosis seen especially in the Accident and Emergency Department were all excluded from the study. The cases were reviewed by consultant neuropsychiatrists and psychiatric diagnoses were made using the DSM-IV TR diagnostic criteria. The total admissions in each unit of the hospital over the period under review were also determined.

RESULTS

The study showed that out of a total admission

of 54,745 in the entire clinical department within the period, 3217 consultations (representing 5.9%) were made to psychiatry. Out of this figure, 2778 cases of psychiatric comorbidities were diagnosed, (representing 86.4% of total consultations). This shows a prevalence of psychiatric comorbidity (consultations) of 5.1%. ($p=0.0001$, Chi value=3330.10). Internal Medicine was the highest, 604(22%) followed by Surgery with 496 (17%), Accident and Emergency, 320 (12%), Obstetrics and Gynaecology 280(10%), Orthopaedic 267(9%), Burns and Plastics 266(9%), Paediatrics 244 (9%), Ophthalmology 147(5.3%), ENT 102(4%) and ICU the least with 27(1%). The observed differences in psychiatric consultations among the department were statistically significant ($p=0.001$).

CONCLUSION

The prevalence of psychiatric comorbidity is 5.1% in UPTH. There is need for sensitization among clinicians to increase their clinical acumen to enable them recognize cases requiring psychiatric attention, in addition to increasing their willingness to make necessary and timely consultations and /or referrals.

KEY WORDS

Pattern; Prevalence; Psychiatric consultations; UPTH.

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INTRODUCTION

Mental illnesses were previously attributed to spiritual or humoral causes; however, with the advances in medical sciences and research, many organic causes of mental illness have been known¹. Among the now known organic causes are a plethora of what the DSM-IV-TR refers to as general medical conditions (GMC)¹, which refers to all clinical conditions in all other specialties of medical practice.

Stigma and cultural belief regarding psychiatric illnesses still constitute considerable barrier to the public acceptance as well as clinical care of the mentally ill²⁻⁸. Furthermore, the concepts of mental health and mental illness have not been well understood, and confusion about mental illness and its symptoms have resulted in fear, misunderstanding, and unnecessary sufferings⁴.

These have equally negatively affected interdisciplinary consultations for and referrals of cases that require the expertise of the mental health physicians.^{2,6,7} However, much progress has been made in recent years and mental health is gradually becoming an acceptable topic of conversation in many social circles and, among some segment of society.⁴ Reaching out for help is now interpreted as a sign of strength, not weakness^{2,4}. Treatment of mental illness has also improved dramatically world over and particularly in the developed countries⁴. In these countries, mental health care and referrals for mental health services are much more available, with larger resources for fighting mental illnesses⁴.

Mental illnesses are commonly comorbid with medical conditions and affect the outcomes⁹⁻¹⁶ as well as treatment adherence.^{2,7,12} Existing data shows that as high as 30-40% of all medical admissions and about 20% of surgical admissions have comorbidity with psychiatric conditions¹⁷.

Due to either the acuteness or chronic nature of these general medical conditions,^{10-14,18-24} their direct effects on the central nervous

system(CNS)¹², the varying degrees of functional limitations,^{9,15} or the consequences of labeling²⁻⁸ and other adverse psychosocial factors,¹⁸⁻²⁰ the patients commonly present with varying degrees of psychopathology.¹⁰⁻¹⁶ Furthermore, the long term treatment, drug interactions using multiple drug therapy and indeed some of the medications employed in the management of these conditions have been associated with inherent neuropsychiatric complications.³⁰⁻³¹

There appears particularly in the developing countries, and more so in the Niger Delta region, to be a rising incidence of cases of mental illnesses due to general medical conditions with an unmatched clinical or diagnostic ability on the part of the non-psychiatric clinicians.^{24,34} Increasing the awareness and ability to recognize the common mental illnesses among clinicians will invariably foster a more multidisciplinary and better holistic approach to the management of these patients who have double²¹⁻²⁸ and in some cases triple diagnoses,^{40,44} and enhance interdisciplinary collaboration within the health institutions.^{29,38,39}

The aim of this study was to determine the pattern and prevalence of co-morbidity of psychiatric disorders associated with other general medical conditions in other non-psychiatric wards in UPTH.

METHODS

Following approval from the ethical committee of the hospital, a record was kept of all the consultations to psychiatry from every other unit in the hospital over 5 years. Both the psychiatric and non-psychiatric diagnoses made were all noted. Cases selected included any clinical conditions with comorbid psychiatric disorders while patients with only psychiatric diagnosis seen especially in the Accident and Emergency Department were all excluded from the study. The cases were reviewed by Consultants neuropsychiatrists and diagnoses were made using the DSM-IV TR diagnostic criteria. The total admissions in

each unit of the hospital over the period of the study were also determined. The data obtained were analysed using Microsoft Excel and GraphPad Prism statistical software's.

RESULTS

Prevalence: The study showed that out of a total admission of 54,745 in all the Clinical Departments within the study period, 3217 consultations were made to psychiatry (Figs.1 & 2). Out of this figure, 2778 cases of psychiatric co-morbidities were diagnosed. This shows a prevalence of comorbidity of 5.1%.(p=0.0001, Chi square value= 3330.10). Internal Medicine was the highest with psychiatric comorbidity of 604(22%) followed by Surgery with 496 (17%), Accident and Emergency ,320 (12%),Obstetrics and Gynaecology 280(10%), Orthopaedic 267(9%), Burns and Plastics 266(9%), Paediatrics 244 (9%), Ophthalmology 147(5.3%), ENT 102(4%) and ICU the least with 27(1%).(co-efficient of variation=63.63%). (Table 1)

Pattern: The common cases found were acute and chronic organic mental disorders, reactive depression, substance abuse, puerperal psychosis, generalized anxiety, adjustment disorders, but of particular note was acute organic mental disorders and reactive depression which were the most common in the department of Internal Medicine, which has the highest comorbidity. (Table 2)

Table 1: Yearly departmental admission in UPTH – showing distribution of psychiatric comorbidities with GMC

Department	2006	2007	2008	2009	2010	Total admission	No. of psychiatric consultations
A&E	2225	2315	2701	3604	3805	14650 [26.7%]	320 [12%]
Surgery	632	647	702	750	864	3595 [6.6%]	496 [17%]
Internal Medicine	384	475	668	679	696	2900 [5.3%]	624 [22%]
Paediatrics	616	737	890	1,120	1,216	4579 [4.7%]	249 [9%]
Gynaecology	2451	3344	4030	4369	5520	17709 [36%]	280 [10%]
ENT	95	124	133	142	166	660 [1.2%]	102 [4%]
Ophthalmology	198	237	245	258	272	1210 [2.2%]	147 [5.3%]
ICU	48	55	56	58	63	280[1%]	27 [1%]
Burns/Plastics	155	170	173	199	215	912 [1.8%]	266[9.6%]
Orthopaedic	1260	1490	1774	820	806	6150 [11.2%]	267 [9.6%]
Total						54,745	2,778

Figure. 1 Graph showing total admissions versus total psychiatric consultations

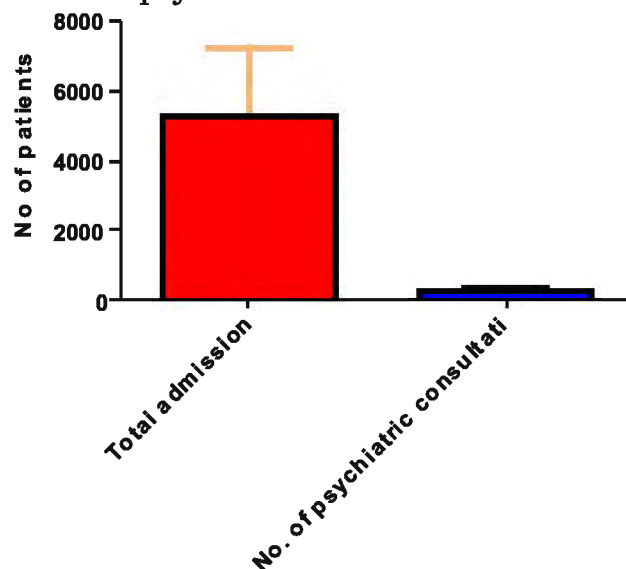


Figure 2. Departmental admissions and psychiatric consultations

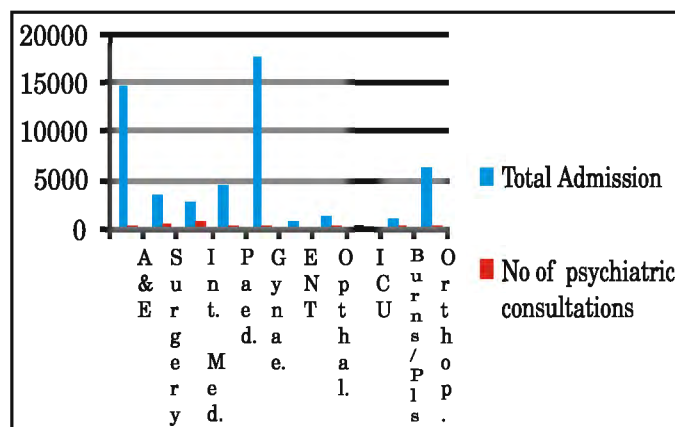


TABLE 2: Medical Co-morbidities With Psychiatric Disorders

Dept	Total no of patients	No of psychiatric consultations	Common medical conditions	Common psychiatric conditions.
A&E	14,650	320	1. Deliberate self harm 2. Injection of poison 3. hypertensive disease 4. CVDs 5. Complicated diabetes 6. HIV encephalopathy 7. Head injuries 8. Status epilepticus	1. Acute organic mental disorders 2. Acute on chronic organic mental disorders 3. Depressive illness 4. substance abuse/depression 5. anxiety disorders [panic adjustment disorders, acute PTSD] 6. BAD 7. schizophrenia [paranoid, catatonic] 8. sexual abuse [rape] 9. suicide attempts 10. conversion disorders
Surgery	3,595	496	1. Pre and post operative conditions 2. Prostatic cancer 3. BPH 4. Malignancies	1. Organic mental disorder [acute and chronic] 2. Depressive disorders with anxiety features 3. Schizoaffective disorder 4. Substance abuse/ 5. Mixed anxiety depression 6. Adjustment disorders 7. Schizophrenia 8. DRUG Induced psychiatric complications

Internal Medicine	2,900	624	<ol style="list-style-type: none"> 1. Hypertensive disease 2. Coronary heart disease 3. Other cardio myopathies 4. Diabetes mellitus 5. HIV infection 6. Kock's disease 7. Chronic Renal pathologies 8. CVDs 9. Chronic liver pathologies 10. Seizures disorders 11. Thyroid dysfunction 12. Electrolyte imbalance 11. Side effect of medications 	<ol style="list-style-type: none"> 1. Depression 2. Organic mental disorders [acute and chronic] 3. Substance abuse/depression 4. BAD 5. Anxiety disorders [G AD, panic disorder, PTSD] 6. mixed anxiety and depression 7. seizure disorders in psychiatric complications 8. Parkinson dx 9. TLE 10. Sexual dysfunctions 11. Drug induced psychiatric conditions (Acute dystonia, NMS)
Paediatric	4,579	249	<ol style="list-style-type: none"> 1. Pervasive childhood developmental disorders 2. Non-organic failure thrive 3. Childhood malignancies 4. Childhood mental disorders 5. Child abuse 	<ol style="list-style-type: none"> 1. Learning disabilities 2. ADHD 3. conduct disorders 4. Autistic spectrum disorders 5. Acute organic mental illness 6. Rape
ENT	660	102	<ol style="list-style-type: none"> 1. Retained foreign bodies 2. Deliberate self harm affection the larynx 3. Malignancies 4. Chronic infective conditions 5. Hearing impairment 	<ol style="list-style-type: none"> 1. Suicide attempt 2. Depression 3. Adjustment disorders 1. Anxiety disorders 2. Mixed anxiety depression 3. Acute organic mental disorders
Ophtalmology	1210	147	<ol style="list-style-type: none"> 1. Pre and post operative condition 2. Glaucoma 3. Infective conditions 4. Partial or total blindness 	<ol style="list-style-type: none"> 1. Depression 2. Mixed anxiety depression 3. Adjustment disorders 4. Acute organic mental illness 5. Anxiety disorders
O&G	19,709	280	<ol style="list-style-type: none"> 1. Pre and post operative conditions 2. Post partum conditions 3. Pre eclampsia 4. 1^o and 2^o infertility 5. Malignancies 6. Infective conditions 	<ol style="list-style-type: none"> 1. Acute organic mental illness 2. Depression 3. Substance abuse 4. Adjustment disorders 5. Seizure disorders 6. Peuperal blues,depression and psychosis
Burns/Plastic	912	266	<ol style="list-style-type: none"> 1. Various degrees of burns 2. Electrolyte imbalance 3. Pre and post operative conditions 	<ol style="list-style-type: none"> 1. Depression 2. Anxiety disorders 3. Acute organic mental disorders
Orthopaedic	6,150	267	<ol style="list-style-type: none"> 1. Fractures 2^o RTA and falls 2. Pre and post operative conditions 3. Slipped disc 4. Malignancies 	<ol style="list-style-type: none"> 1. Depression 2. Anxiety disorders 3. Acute organic mental disorders
ICU	280	27	<ol style="list-style-type: none"> 1. Head injuries 2. CVDs 3. severe burns 4. DKA 	<ol style="list-style-type: none"> 1. Acute organic mental illness 2. Acute on chronic mental illness 3. Depression 4. Substance abuse

DISCUSSION

The study revealed a prevalence of psychiatric comorbidity of 5.1% and equally revealed a higher diagnostic reliability from referring physicians. This is an indication that the rate (5.1%) of consultations in this study in comparison with other studies (10-30%) might not be a reflection of the inability of the non-psychiatric clinicians in UPTH to recognize

psychiatric comorbidity or symptoms. Rather, it may appear to be a general unwillingness on their part to invite psychiatrists to see their patients.³⁸⁻⁴⁰ this may be largely due to the stigma and social rejection with which psychiatric disorders are associated, particularly in our environment.³⁻⁸ Secondly, a good number of clinicians may believe that the psychiatric symptoms that accompany some physical illnesses may equally resolve following adequate management of the organic conditions, the inertia to invite or consult the psychiatrist.

The finding of the highest psychiatric comorbidity in medical wards(22%) followed by surgical wards(17%) in this study (p=0.0001) is consistent with other studies.¹⁷ Although, previous studies have put the figures at 30-40% and 20-30% respectively,^{1,17} the differences in this study might be due to difference in study criteria. Hypertensive and other cardiovascular diseases, followed by infective conditions (e.g HIV and Koch's disease), and diabetes mellitus were the commonest in Internal Medicine^{34, 41} while malignancies, BPH, chronic ulcers and some pre- and post-operative conditions were most prevalent in Surgery. These equally were associated with the highest rate of psychiatric morbidity particularly depression and anxiety disorders.²¹⁻²⁸ In general, the chronicity associated with most medical and surgical conditions tend to make the patients vulnerable to mental illness.¹⁰⁻¹⁶ Furthermore, a common aetiological link – the sympathetic pathway, seems to mediate both essential hypertension, peptic ulcer disease and most anxiety disorders.²⁸ Anxiety states amplify the sympathetic systems causing a rise in noradrenaline that is responsible for the rise in B.P. Some studies have argued that depression and anxiety are associated with low blood pressure rather than hypertension.^{42,43} It is also thought that the mere awareness of ones hypertensive status can precipitate psychological symptoms.²⁸

It is equally important to note that baseline adverse psychosocial factors, psychological

distress or clearly identified psychiatric conditions have been implicated as predictors of some medical conditions like hypertension or HIV infection (by causing poor judgement in the later).¹⁸⁻²⁰ It has also been suggested that HIV infection can directly impair relevant neurotransmitter functions due to direct toxic effects on the brain cells (neurons) either by the viral cells or other opportunistic infections.^{12,17} Again, certain medications used in the treatment of some medical conditions can equally give rise to psychiatric side effects.^{12,29-31} This is clearly seen with some antihypertensive agents like methyldopa and propranolol which have both been associated with depression and sexual dysfunctions in males.^{17,29}

Psychiatric conditions in other specialties were mainly reactionary. Apart from the biological pathway explained above, general medical conditions also have psychological pathway of causation of psychiatric comorbidities.^{33,35} These could arise from the mere awareness of the chronic nature of the illnesses, debilitating symptoms, associated disabilities and or poor quality of life,^{9,15,33,47} issues of stigma and social rejection, job adjustment or loss, and other adverse psychosocial consequences. Others include worry about financial implications and burden of care as well as long term treatment,⁴⁶ and in most cases prolonged stay in the hospital.^{35,46} Unfortunately, these aspects of the illness are often overlooked and left unattended to particularly by many of the non-psychiatric clinicians with monumental adverse health consequences.

The focus of medical practice has always tended towards relieving physical symptoms in medical illnesses, which often leads to a neglect of the huge impact on psychological well-being, psychiatric co-morbidity and the overall quality of life, and thus ultimately affecting their prognoses.³²⁻⁴⁰ The quality of life of these patients may be more adversely affected in the presence of comorbid psychiatric conditions.^{9,15,33} For instance, the quality of life and well-being of people living

with HIV/AIDS has been observed to be lower in those who were depressed compared with those without depression.³³ Psychiatric comorbidities affect the course of medical conditions by either increasing the severity and mortality or slow down the rate of recovery.³²⁻³⁷ They may cause these by presenting with management difficulties including poor adherence to medications and other medical advice.³⁵⁻³⁷

It is important to note therefore that many patients attach much importance to their illness judging mainly from the level of their functional affectation. In other words, the perception of ill-health is not just the appearance or the presence of physical symptoms, but more importantly the degree of affectation of their well-being that ensues and the impairment of their functional capability imposed by the illness.^{9,15,33} In fact, in most cases, it has been observed that this is often the one factor that brings them to health care facility. This is in line with the focus of the WHO definition of health, as “a state of complete, physical, social and mental well-being and not just the mere absence of disease or infirmity”, which emphasizes on all components of health.¹⁷

CONCLUSION

The prevalence of psychiatric comorbidity is low in UPTH, reflecting either a decreased ability of medical specialists to recognize psychiatric cases, or reluctance of some non-psychiatric specialists or even the relations of the patients, to invite fellow psychiatrists. Greater attention is rather paid to the physical illness alone in most cases, often resulting in the neglect of issues of psychiatric comorbidity, psychological well-being and indeed the overall quality of life of the patients. There is therefore need from the study to recommend that the target of medical care should include improving the Quality of Life of patients by incorporating mental health objectives in the treatment of people with these medical conditions. This will no doubt constitute a more comprehensive approach in their management and make for effective

consultation liaison medical practice. In addition, all clinicians should be adequately exposed to basic knowledge of psychiatry and should be able to recognise the common psychiatric conditions and make necessary consultations or referrals. Finally, there may be need for further enlightenment, perhaps through medical education for clinicians as part of proactive measures to reduce stigmatizations of mental illnesses among non-psychiatric clinicians.

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