

The Pattern of In-patient Referral in the Psychiatry Department of a Tertiary Care Hospital in Bangladesh

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Abstract

Background: A referral system allows patients to have optimal care. This study aimed to provide the current referral pattern in the context of a tertiary care hospital in the periphery of Bangladesh.

Materials and methods : This retrospective observational study was conducted from January to December 2020 at the Psychiatry Department of Chittagong Medical College Hospital using data from the referral book. 428 cases were analyzed using SPSS-26, and shown in frequency distribution.

Results: Majority responders were male (53%) and from the 21 to 30 age group (31%). Patients referred to Psychiatry Department were more (66.7%) than referred from. Among 27 departments, internal medicine was the highest in referral in both instances (31.1% and 9.6%), followed by neurology (5.8% and 5.1%). The majority of patients (29.4%) had Schizophrenia Spectrum and Other Psychotic Disorder, followed by Bipolar and Related Disorder (25.4 %). Frequently, the name of psychiatric diagnosis was mentioned wrongly by other departments. In majority of cases, other disciplines did not mention a clinical diagnosis in the referral note.

Conclusions: Proper awareness regarding referral pattern may aware physicians about the importance of referral to psychiatry, resulting in better patient care.

Key words: Liaison service; Psychiatry; Referral.

Introduction

A referral system is a process to seek the assistance of a better or differently resourced facility to aid the patient when the current system

proves insufficient. Thus, it can ensure the receiving of optimal care as well as appropriate specialist service, the effective usage of hospital facilities, and utilization of the primary health service.¹ The three essential components of the referral system are the referring physician, the physician is referred to, and lastly the patient.² A good liaison between the referring doctor and the specialist referred to is essential to ensure quality health provision. So, sound knowledge of the usual referral pattern may help a referring physician regarding better judgment while referring the patient to a specialist care.³ With insufficient number of specialists to meet the ever-increasing demand, the field of psychiatry has not yet been well established in Bangladesh.⁴ For this, psychiatric patients took treatment from various disciplines and increase the chance of inter-disciplinary referral. The limited works on the referral pattern, which are accessible, showed the patients were referred from a diverse array of medical disciplines with diverse psychiatric features.^{5,6,7} However, all of these studies were conducted on outpatient basis. So, the association between physical illness and mental illness is not fully represented, which is necessary to analyze the current referral practice among the physicians of every discipline and to make it better. So, this study aimed to determine the inpatient referral pattern in the psychiatry department in Chittagong Medical College. This study will provide the recent scenario in the context of a tertiary hospital in the periphery of Bangladesh and thus will be able to raise appropriate concern for a better referral system in future.

Materials and methods

It was an observational and retrospective study. The data were collected from the referral record book maintained at the Psychiatry Department during January 2020 to December 2020. The referral book contained the personal information of the patients such as name, age, sex, as well as information such as registration number, the department they were

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referred to or referred from, the date and time of referral, name of the specialists providing the care to the patients, problems mentioned during referral, probable psychiatric diagnosis of the patient, and the management or outcome of the referral. All the patients who were referred to or referred from the Psychiatric Department were included in the study. The data were analyzed by using Statistical Package for Social Sciences 26th version (SPSS-26). The psychiatric diagnoses were categorized according to the Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition (DSM-5). Total 432 cases were recorded during this study period. Among them, 428 cases were selected after exclusion of the cases with incomplete data. Necessary permission was taken from ERC before commence the study.

Results

Table I represents the age group of the patients segregated by age. Most of the patients belong to the 21-30 years age group (132, 31%) and majority of them were male (225, 53%). After separating the age group based on sex, this age group was found to be dominant once again.

Table I Age and sex distribution of the referred patients to and from Department of Psychiatry (n=428)^a

Age (Years)	Sex		Frequency
	Male	Female	
<10	8(2%)	10(2%)	18(2%)
11-20	43(10%)	59(14%)	102(24%)
21-30	65(15%)	67(16%)	132(31%)
31-40	33(8%)	28(7%)	61(14%)
41-50	25(6%)	14(3%)	39(9%)
>50	51(12%)	25(6%)	76(18%)
Total	225(53%)	203(47%)	428(100%)

^a Data are shown in n(%).

Table II represents the departments, 27 in total, involved in the referral to or from Psychiatry Department. The patients referred to Psychiatry Department were the majority (285, 66.7%). Internal medicine formed the majority of the patients in both of the cases (31.1% & 9.6%) followed by Neurology Department (5.8% & 5.1%). No patients were referred to Anesthesiology and Burn & Plastic Surgery Department though they referred patients to Psychiatry Department. Important referrals from COVID unit, One-stop Crisis Center (OCC) & divisional drug rehabilitation center might be the point to be noted.

Table II Source of referred patients (n=428)^a

Name of the Department	Referral type ^b		Frequency
	In	Out	
Anesthesiology	2(0.5%)	0	2(0.5%)
Burn and plastic surgery	13(3.0%)	0(0.0%)	13(3.0%)
Cardiology	2(0.5%)	15(3.5%)	17(4.0%)
Casualty	3(0.7%)	1(0.2%)	4(0.9%)
COVID Unit	2(0.5%)	0(0.0%)	2(0.5%)
Dermatology	3(0.7%)	10(2.3%)	13(3.0%)
Divisional Drug Rehabilitation Center, Chattogram	2(0.5%)	0(0.0%)	2(0.5%)
Endocrinology	2(0.5%)	11(2.6%)	13(3.0%)
ENT	4(0.9%)	3(0.7%)	7(1.6%)
Gastroenterology	2(0.5%)	6(1.4%)	8(1.9%)
General surgery	14(3.3%)	5(1.2%)	19(4.4%)
Gynae and Obstetrics	21(4.9%)	3(0.7%)	24(5.6%)
Internal Medicine	133(31.1%)	41(9.6%)	174(40.6%)
Neonatology	1(0.2%)	0(0.0%)	1(0.2%)
Nephrology	5(1.2%)	2(0.5%)	7(1.6%)
Neurology	25(5.8%)	22(5.1%)	47(11.0%)
Neurosurgery	8(1.9%)	3(0.7%)	11(2.6%)
One stop crisis center (OCC)	1(0.2%)	0(0.0%)	1(0.2%)
Ophthalmology	1(0.2%)	7(1.6%)	8(1.9%)
Oral and maxillofacial surgery	2(0.5%)	2(0.5%)	4(0.9%)
Orthopedics	10(2.3%)	2(0.5%)	12(2.8%)
Pediatric surgery	3(0.7%)	0(0.0%)	3(0.7%)
Pediatrics	18(4.2%)	1(0.2%)	19(4.4%)
Physical Medicine	5(1.2%)	2(0.5%)	7(1.6%)
Radiotherapy	0(0.0%)	1(0.2%)	1(0.2%)
Respiratory Medicine	0(0.0%)	6(1.4%)	6(1.4%)
Urology	3(0.7%)	0(0.0%)	3(0.7%)
Total	285(66.7%)	143(33.3%)	428(100%)

^a Data are shown in n(%).

^b Referred in = referred to Psychiatry dept & out = referred from Psychiatry dept.

Table III represents the categorization of the probable psychiatric diagnosis based on Diagnostic and Statistical Manual of Mental Disorder (DSM-5). The patients were further separated based on the nature of their referral. Most of the patients presented with features of Schizophrenia Spectrum and Other Psychotic Disorder (134, 29.4%), followed by Bipolar and Related Disorder (116, 25.4%). Interestingly, 3 (0.7%) had no psychiatric problems.

Table III Psychiatric diagnosis^a among the referred patients to and from the Department of Psychiatry (n=428)^b

Name of the disorder (According to DSM-5)	Referral type ^c		Frequency
	In	Out	
Neurodevelopmental disorders	14(3.1%)	4(0.9%)	18(4.0%)
Intellectual disability with behavioral problems	11(2.4%)	4(0.9%)	15(3.3%)
Autism spectrum disorder	1(0.2%)	0(0.0%)	1(0.2%)
Attention-deficit/hyperactivity disorder	1(0.2%)	0(0.0%)	1(0.2%)
Unspecified intellectual disabilities	1(0.2%)	0(0.0%)	1(0.2%)
Schizophrenia spectrum and other psychotic disorders	90(19.8%)	44(9.7%)	134(29.4%)
Delusional disorder	2(0.4%)	1(0.2%)	3(0.7%)
Brief psychotic disorder (Including postpartum onset)	9(2.0%)	2(0.4%)	11(2.4%)
Schizophrenia	34(7.5%)	24(5.3%)	58(12.7%)
Schizoaffective disorder	1(0.2%)	1(0.2%)	2(0.4%)
Psychotic disorder due to another medical condition	11(2.4%)	0(0.0%)	11(2.4%)
Catatonia	2(0.4%)	2(0.44%)	4(0.9%)
Unspecified schizophrenia spectrum and other psychotic disorders	31(6.8%)	14(3.1%)	45(9.9%)
Bipolar and related disorders	44(9.7%)	72(15.8%)	116(25.5%)
Bipolar I disorder	38(8.3%)	70(15.4%)	108(23.7%)
Unspecified Bipolar and related Disorder	6(1.3%)	2(0.4%)	8(1.8%)
Depressive disorders	51(11.2%)	4(0.9%)	55(12.1%)
Major depressive disorder	32(7.0%)	2(0.4%)	34(7.5%)
Major depressive disorder with anxious distress	9(2.0%)	0(0.0%)	9(2.0%)
Major depressive disorder with peripartum onset	5(1.1%)	0(0.0%)	5(1.1%)
Depressive disorder due to another medical condition	4(0.9%)	1(0.2%)	5(1.1%)
Unspecified depressive disorder	1(0.2%)	1(0.2%)	2(0.4%)
Anxiety disorders	23(5.0%)	8(1.8%)	31(6.8%)
Separation anxiety disorder	1(0.2%)	0(0.0%)	1(0.2%)
Specific phobia	1(0.2%)	0(0.0%)	1(0.2%)
Panic disorder	1(0.2%)	0(0.0%)	1(0.2%)
Generalized anxiety disorder	16(3.5%)	7(1.5%)	23(5.0%)
Unspecified anxiety disorder	4(0.9%)	1(0.2%)	5(1.1%)
Obsessive compulsive disorder	3(0.7%)	0(0.0%)	3(0.7%)
Trauma and stressor related disorders	13(2.9%)	0(0.0%)	13(2.9%)
Acute stress disorder	2(0.4%)	0(0.0%)	2(0.4%)
Post-traumatic stress disorder	2(0.4%)	0(0.0%)	2(0.4%)
Adjustment disorder	8(1.8%)	0(0.0%)	8(1.8%)
Unspecified Trauma- and Stressor-Related Disorder	1(0.2%)	0(0.0%)	1(0.2%)
Somatic symptom and related disorders	42(9.2%)	8(1.8%)	50(11.0%)
Somatic symptom disorder	9(2.0%)	1(0.2%)	10(2.2%)
Conversion disorder	33(7.2%)	7(1.5%)	40(8.8%)
Disruptive, impulse-control, and conduct disorders	2(0.4%)	0(0.0%)	2(0.4%)
Oppositional defiant disorder	1(0.2%)	0(0.0%)	1(0.2%)
Unspecified disruptive, impulse-control, and conduct disorders	1(0.2%)	0(0.0%)	1(0.2%)
Substance-related and addictive disorders	7(1.5%)	1(0.2%)	8(1.8%)
Substance use disorder			
(Cannabis, amphetamine)	3(0.7%)	1(0.2%)	4(0.9%)
Amphetamine withdrawal	1(0.2%)	0(0.0%)	1(0.2%)
Unspecified other (or unknown) substance-related disorder	2(0.4%)	0(0.0%)	2(0.4%)
Gambling disorder	1(0.2%)	0(0.0%)	1(0.2%)
Neurocognitive disorder	5(1.1%)	5(1.1%)	10(2.2%)
Unspecified delirium	2(0.4%)	0(0.0%)	2(0.4%)
Unspecified neurocognitive disorder	3(0.7%)	5(1.1%)	8(1.8%)
Personality disorders	6(1.3%)	2(0.4%)	8(1.8%)
Borderline personality disorder	4(0.9%)	1(0.2%)	5(1.1%)
Histrionic personality disorder	0(0.0%)	1(0.2%)	1(0.2%)
Antisocial personality disorder	1(0.2%)	0(0.0%)	1(0.2%)
Unspecified personality disorder	1(0.2%)	0(0.0%)	1(0.2%)
Unspecified paraphilic disorder	3(0.7%)	0(0.0%)	3(0.7%)
Unspecified Mental disorder	1(0.2%)	0(0.0%)	1(0.2%)
No psychiatric disorder	1(0.2%)	2(0.4%)	3(0.7%)
Total	305(67.0%)	150(33.0%)	455(100.0%)

a) On the spot diagnosis, actual diagnosis may differ.

b) Data are shown in n (%).

c) Referred in = referred to Psychiatry dept. & out= referred from Psychiatry dept.

Table IV represents the problems or diagnoses mentioned by different disciplines during referral to the Psychiatry Department and their actual diagnosis or outcome based on the DSM-5. Many a times, diagnosis mentioned was different from the actual diagnosis. Internal medicine presented the most diverse presentation of complaints.

Table IV List of problems or diagnosis mentioned for referral to the Department of Psychiatry and their outcome

Problems/diagnosis mentioned ^a	Outcome/psychiatric diagnosis ^b
Anesthesiology Schizophrenia Multidrug poisoning, Suicidal attempt	Unspecified schizophrenia spectrum & other psychotic disorder Major depressive disorder, Borderline personality disorder
Burn & Plastic surgery For psychiatric evaluation, 26% flame burn with psychosis, Suicidal attempt, Postpartum psychosis, MDD, burn injury; Psychosis, Burn injury, Anxiety disorder, seizure disorder	Intellectual disability with behavioral problems, Major depressive disorder, Major depressive disorder with anxious distress, Major depressive disorder with psychotic feature, Psychotic disorder due to burn, Brief psychotic disorder (Postpartum onset)
Cardiology Bipolar-I disorder, Aggressive behavior	Bipolar-I disorder, Unspecified bipolar & related disorder
Casualty PTSD, Mood disorder	Acute stress disorder, Bipolar-I disorder, currently depressed
COVID unit Depressive disorder, Post covid complication with diabetes with hypertension	Depressive disorder due to COVID-19,
Dermatology Bipolar-I disorder, Parasitosis, Psychotic disorder	Bipolar-I disorder, Delusional disorder, Schizophrenia
Divisional Drug Rehabilitation Center, Chattogram Substance related disorder	Schizophrenia, Cannabis use disorder, Polysubstance use disorder (alcohol, cannabis), Antisocial personality disorder
Endocrinology Delirium/psychosis	Unspecified delirium
ENT Hearing problem, Psychotic disorder For psychiatric evaluation	Generalized anxiety disorder, Unspecified schizophrenia spectrum & other psychotic disorder, Bipolar-I disorder
Gastroenterology Psychogenic vomiting	Generalized anxiety disorder
General Surgery Psychogenic vomiting, Psychotic disorder, Scrotal swelling with psychosis, Schizophrenia, Mood disorder, FB in rectum, Anxiety disorder, Post-operative psychosis Psychotic disorder due to ileostomy	Generalized anxiety disorder, Unspecified Bipolar & related Disorder, Unspecified schizophrenia spectrum & other psychotic disorder, Intellectual disability with behavioral problem, Bipolar-I disorder, Schizophrenia, Unspecified anxiety disorder, Unspecified paraphilic disorder, Somatic symptom disorder
Gynecology and Obstetrics HCR, Psychosis, Schizophrenia with LUCS, Psychological evaluation of rape case, Postpartum psychosis, Postpartum blue, Anxiety disorder, Depressive disorder, Post-partum depression, MDD	Conversion Disorder, Schizoaffective disorder, Major depressive disorder peripartum onset, Schizophrenia, Post-traumatic stress disorder, Brief psychotic disorder (Postpartum onset), Unspecified Anxiety Disorder, Generalized anxiety disorder, Adjustment Disorder

Problems/diagnosis mentioned ^a	Outcome/psychiatric diagnosis ^b
Internal Medicine MDD (Severe), MDD with Suicidal attempt, H/O multiple drug abuse, Schizophrenia, Conversion disorder, Catatonia, Bipolar-I disorder, Sedative overdose, Anxiety disorder, Deliberate self-harm (OPC poisoning, Bleaching powder ingestion), HCR, Psychotic disorder, COVID-19 Phobia, ASD, PPP (Postpartum psychosis), Behavioral problems with COVID-19 positive, EPSE, Neurodevelopment disorder	Delusional disorder, Major Depressive Disorder, Polysubstance use disorder (Cannabis, Amphetamine), Schizophrenia, Conversion Disorder, Catatonia, Bipolar-I disorder, Unspecified Bipolar & related Disorder, EPSE, Borderline Personality Disorder, Somatic symptom disorder, Generalized anxiety disorder, Unspecified schizophrenia spectrum & other psychotic disorder, Psychotic disorder due to SLE Specific phobia (COVID-19), Obsessive compulsive disorder, Autism spectrum disorder with behavioral problem, Brief psychotic disorder (Postpartum onset), Psychotic disorder due to another medical condition (COVID-19)
Neonatology** For psychiatric evaluation (Mother)	Unspecified schizophrenia spectrum & other psychotic disorder
Nephrology Psychotic disorder and SLE, Catatonia, Depressive disorder	Psychotic disorder due to SLE, Unspecified schizophrenia spectrum & other psychotic disorder, Major depressive disorder, Depressive disorder due to CKD
Neurology Complex partial seizure with psychosis, Conversion disorder, Intellectual disability with psychotic behavior, Somatic symptom disorder, Pseudo seizure, Psychotic disorder, Acute psychosis (SLE, RF), Schizophrenia, EPSE, Cerebral palsy, Anxiety disorder, Depression, For psychiatric evaluation, Behavioral problems, Phobic anxiety disorder	Conversion Disorder, Generalized anxiety disorder, Intellectual disability with behavioral problem, Seizure disorder, ADHD, Somatic symptom disorder, Major depressive disorder, Unspecified schizophrenia spectrum & other psychotic disorder, Unspecified neurocognitive disorder, Psychotic disorder due to another medical condition (SLE, RF), Schizophrenia, EPSE, Obsessive compulsive disorder, Depressive disorder due to another medical condition (Post-stroke), Unspecified Anxiety Disorder, Unspecified bipolar & related disorder
Neurosurgery Psychotic disorder, Psychosis, Suicidal attempt (Hanging) For psychiatric evaluation, Depressive disorder, Schizophrenia, RTA & PTSD, MDD, Depressive disorder, Schizophrenia	Unspecified schizophrenia spectrum and other psychotic disorder, Major depressive disorder, Unspecified personality disorder, Schizophrenia, Adjustment disorder, Post-traumatic stress disorder, Unspecified schizophrenia spectrum and other psychotic disorder
One stop Crisis Center (OCC) MDD	Post-traumatic stress disorder
Ophthalmology Blurring of vision	Generalized anxiety disorder
Oral and Maxillofacial Surgery For evaluation & management, Perforation of sinus by self-inflicted injury	Somatic symptom disorder, Major depressive disorder with anxious distress
Orthopedics PTSD, MDD, Mania, Bipolar disorder, Schizophrenia, RTA & Psychotic disorder, Acute stress disorder	Adjustment disorder, Unspecified Bipolar & related Disorder, Bipolar-I Disorder, Schizophrenia, Unspecified schizophrenia spectrum & other psychotic disorder, Bipolar-I Disorder with Psychotic Feature, Acute stress disorder

Problems/diagnosis mentioned ^a	Outcome/psychiatric diagnosis ^b
Pediatrics MDD with Suicidal attempt, Anxiety disorder, Psychogenic breathing, Intellectual disability, Phobia, Conversion disorder, OPC poisoning with behavioral problems	Oppositional Defiant Disorder, Generalized anxiety disorder, Unspecified Stress Related Disorder, Panic disorder, Intellectual disability with behavioral problems, Seizure Disorder, Phobic disorder, Conversion Disorder, Unspecified disruptive, impulse-control, and conduct disorder
Pediatric Surgery Psychiatric evaluation for post laparoscopy, Psychiatric evaluation of abdominal pain, Conversion disorder	Generalized anxiety disorder, Unspecified anxiety disorder, Conversion Disorder
Physical Medicine Bipolar-I disorder, Conversion disorder SSD, Anxiety disorder	Bipolar-I disorder, Unspecified neurocognitive disorder, Conversion Disorder, Somatic symptom disorder
Urology Psychotic disorder, FB introduction through urethra	Intellectual disability with behavioral disorder, Seizure disorder, Unspecified paraphilic disorder

*As per written on referral form

** Highlighted the diagnosis only while excluded management given without mentioning diagnosis, admission, transfer, review, and investigations suggested in case of outcome.

Table V denotes the classification of the patients based on the physical ailments for which they were referred from the psychiatry department from other disciplines. In this case, Internal medicine and Neurology presented were the mostly referred disciplines. Omission of the mentioning the diagnosis was done as in most cases, referred department gave the management only without mentioning any diagnosis.

Table V Problems mentioned^a for referral from the Department of Psychiatry (n=140)

Cardiology	ECG-Old MI, Troponin I -22.48mg/dL, Antero-septal ischemia, Uncontrolled HTN Chest discomfort, WPW syndrome, Decreased blood pressure, RBBB, Bradycardia, For CVS evaluation, Inferior ischemia, ECG abnormalities
Casualty	For dressing of injury site
Dermatology	Itchy skin lesion, Eczematous lesion
Endocrinology	For management of diabetes, Raised RBS, For management of hypothyroidism, Serum TSH-13.35 MIU/ml, TSH-0.18 MIU/ml, Evaluation of endocrine status
ENT	Hearing problem, Ear infection, Hearing loss, Aphasia
Gastroenterology	GIT problems, Constipation, Loose watery stool
General Surgery	For management of ulcerated injury site, For dressing of injury site, Rectal bleeding, No defecation for 5 days, Accidental nail injury
Gynecology and Obstetrics	Excessive menstrual bleeding, Follicular cyst,
Internal Medicine	Pyrexia of unknown origin, Cough, Fever, Electrolyte imbalance, Anemia, Severe respiratory distress, Serum LDH and CRP increased, Evaluation of high CRP and ESR UTI, SGPT-60, Sudden syncopal attack ESR-71 mm, RBBB, Loose stool, Urine: RBC: 10-12 /HPF & Pus cell - Plenty/HPF, Evaluation and management of nutritional status, Blood abnormality, Eosinophilia, Sarcoidosis
Ophthalmology	Dimness of vision, Slit lamp examination, Redness of eye
Oral and Maxillofacial Surgery	Toothache
Orthopedics	Deformity of the hand, Tibia fibula (Left) fracture
Pediatrics	Fever, Diarrhoea
Physical Medicine	Low back pain, Pain at right shoulder
Respiratory Medicine	Carcinoma Lung
Radiotherapy	Carcinoma Lung

^aAs per written on referral form

Discussion

This study attempted to understand the pattern of referral of the patients in the Psychiatry Department of Chittagong Medical College. The mean age (\pm SD) of the patients was found to be 32.77 (\pm 16.82) years of age. Majority of the sample belonged to the age group 21-30 years (132, 31.0%) which is similar to some other research findings from Bangladesh.^{5,6} Sex distribution of the patients found that most of the patients were male, constituting more than half of the respondents (225, 53.0%). The similar and different findings in other studies may indicate the variety of accessibility of the specialist care depending on the demography.⁵⁻¹⁰

Among the departments, Department of Internal Medicine constituted the majority of the referred patients (174, 40.6%). This pattern was also found by other studies in Bangladesh and India.^{4,7,10-11} This may be due to a higher rate of co-morbidity, as well as the stigma associated with mental disorders. These factors motivate people to seek aid from a general physician or internist first, rather than psychiatrists.^{7,10} The second highest referral came from the surgery and allied sciences while combined (78, 18.2%), along with the general surgery forming the most referred (19) among them which is relatively similar to other study findings.^{10,12} Relevant literatures suggest that there is an increased risk of psychological distress, especially anxiety and depression in both preoperative and postoperative cases.^{13,14} But the lower referral rate from surgery might indicate the lack of proper evaluation or consideration for mental health status of the patient's undergoing surgery. Relatively shorter duration of hospital staying of patients due to patient overload, as well as unawareness on part of the surgeon about psychiatric problems, might also contribute to this scenario.¹¹ The next prevalent department was found to be neurology (47, 11.0%), which is similar to other studies.¹⁰ The similarities of symptoms, as well as the bidirectional relationship of diseases between neurology and psychiatry might be the cause.¹⁵ Though the evidence suggests high prevalence of psychiatric co-morbidities among patients with gynecological problems, the referral rate from the Gynecology was relatively low (24, 5.6%).¹⁶⁻¹⁸ Negligence due to gender bias from the caregivers as well as, the

gynecologist's unwillingness to refer the patients to the proper specialist might be the factors behind this.¹⁰ The lower referral rate from Surgery and Gynecology may also be caused by the high patient overload which restricts the physicians from being able to make a proper evaluation.

Most of the patients were referred to psychiatry (305, 67.04%). Regarding the psychiatric diagnosis based on the Diagnostic & Statistical Manual of Mental Disorders (DSM-5) among them, schizophrenia spectrum and other psychotic disorders constituted the majority (134, 29.4%) with the most prevalent disease being Schizophrenia (58, 12.7%). The rate was almost similar to the findings of Fariduzzaman et al., but higher from some other studies in Bangladesh, where the prevalence ranged from 5.0% to 7.6%.^{6,9-10} Bipolar and related disorders were the second most prevalent disorders (116, 25.5%), followed by depressive disorders (55, 12.1%) with major depressive disorder predominance, and somatic symptom and related disorders (50, 11.0%). All the rates are higher than other similar studies.^{6-7,9-10} This might be due to the variation of the population involved along with the difference among the versions of DSM manuals used for diagnosis. Other disorders found with low rate were neurodevelopmental disorders; disruptive, impulse-control and conduct disorders, obsessive-compulsive disorder; trauma and stressor related disorder; substance related and addictive disorder; neurocognitive disorder; personality disorder and paraphilic disorder. This study highlighted an important finding that, some patients are referred to psychiatry department without any psychiatric problems. This enforces the importance of a better referral service for a better diagnosis and outcome.

Patients were referred from psychiatry department for their physical problems mostly to the internal medicine and its allied sciences. The most prevalent group of physical illness were seizure disorder, hypertension, Ischemic Heart Disease (IHD), Diabetes Mellitus (DM) and Systemic Lupus Erythematosus (SLE). Physical symptoms such as fever, pain, Extrapyrimal Side Effects (EPSE) and electrolyte imbalance were also constituted a significant portion of the presentation. This pattern of diseases along with their distribution pattern is similar to findings of

other studies.^{8,19-20} Regarding referral to surgery and its allied sciences, history of fracture and Road Traffic Accident (RTA) were the most common. Experience of the researchers showed that, this pattern is resulting from the physical assault by people ignorant about the patient's psychiatric illness, and due to accidental injury during the patient roaming around the road. Gynecological features had low presentation with Polycystic Ovarian Syndrome (PCOS) being the most prominent one. The variation of presentation supports the idea that psychiatric diseases also have high level of non-psychiatric comorbidities.³ So, the physicians working on both psychiatric and non-psychiatric discipline should remain vigilant for consideration of comorbidities to ensure optimum patient care. Establishment of liaison psychiatric system, as well as, strengthening the interdisciplinary communication might help in this regard.

Limitations

The most limiting features were the inadequate data presented on the recording system. This was due the maintenance the record book by single individual, due to the responsibilities of whole department along with high patient load. There was also a sharp decline in the cases due to the COVID pandemic. Again, the patients could not be referred due to the closure of the indoor Department of Dermatology and Physical Medicine. Some cases remained unspecified due to the inability to make a proper diagnosis cross-sectionally.

Conclusion

Despite limitations, this study highlighted that, by developing proper awareness and by increasing the interest along with connectedness among the physicians of all disciplines, a better referral rate to psychiatry could be achieved. Thus, a better care could be provided to the patients of every disciplines.

Recommendation

Study on larger scale and with longitudinal approach should be done for in-depth insight.

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Contribution of authors

PA-Design, conception, acquisition of data, interpretation of data, data analysis, drafting and final approval.

SBK-Conception, acquisition of data, data analysis, drafting and final approval.

FC-Acquisition of data, data analysis, drafting and final approval.

SS-Acquisition of data, drafting and final approval.

MF-Acquisition of data, drafting and final approval

RH-Interpretation of data, drafting, critical revision and final approval.

SMY-Interpretation of data, critical revision and final approval.

Disclosure

All the authors declared no competing interest.

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