Original Article

The Nature and Activity of Liaison Psychiatry Services in Tertiary Care Hospital in Bangladesh: A Study in MMCH

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Abstract:

Background: Liaison Psychiatry is the study, practice and teaching of the association between medical and psychiatric ailments. Aim of the study: The aim of this study is to find out the referring department, reason for consultation, common psychiatric and medical comorbidities treatment pattern and sociodemographic of the referred patients to psychiatry department from the other departments of MMCH. **Methods:** This cross-sectional study was carried out from January 2011 to December 2020. Patients referred from different in-patient departments every day were taken as study population. Psychiatric diagnoses of the patients were assessed by the specialist psychiatrist as per DSM-5 standards. **Results:** Among the referred patients (n= 714) 56% were female; 60.4% were aged between 21-60 years; More than half of the patients were referred from different branches of Medicine (60.8%). ENT (14.8%), Gynae and Obstetrics (7.4%), surgery 3.6% and Neurology and pediatrics (3%) each. Other major sources of psychiatric referrals were cardiology (n=17, 1%), neurosurgery (n=6, 0.4%) and others (n=99, 6. The most prevalent DSM-5 diagnosis was bipolar disorder (22.1%) followed by Brief Psychotic Disorder (13%), Schizophrenia (8.6 %) Delirium 5.5% MDD 5.2% Panic Disorder 4.7%, GAD 0.4%, OCD 0.5%, SRD 0.6%, Dementia 1.8%, Conversion Disorder 3.6%, Post-partum Psychosis 4.6%, Adjustment Disorder 4.9%, ID 0.3% and others 17.7 %. No psychiatric diagnosis was made in 5.5% of the referred patients. Pharmacological treatment given 87.7% patient, psychological treatment given to 8.8% patient, both treatments needed to 3.5% patient. 81.6% patient given treatment with advice, 15.5% transferred to department of psychiatry 2.9% referred to another department. **Conclusion:** Psychiatric comorbidities in overall medical diseases are very familiar. Liaison Psychiatry provides an opportunity to upgrade health outcomes for in-patients and reduce burdens on the healthcare system.

Key words: Liaison Psychiatry, Psychiatry, Psychiatry referral, DSM-5

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Introduction:

The global burden of mental health conditions is increasing day by day. It is estimated that more than 1 billion people are living with mental, neurological and substance use disorders[1]. According to the recent National Mental Health Survey 2019, around 17% of the adult people suffers from mental disorders. This exhibits a minimal increase compared to 16% prevalence of mental illness reported in the first National Mental Health Survey 2003-2005. The 2019 survey also reported that mental disorders among the adult population are higher among women (18.9%) than men (15%)[2,3]. Psychiatric health services are delivered from primary to tertiary care centers, including medical collages and specialized centers. Medical Collages with Psychiatric In-patient departments receives patients from ER, Out-patient departments and from other departments through a referral system[2]. The department of psychiatry enacts a multi-dimensional job in a general hospital. The department offers outdoor and indoor facilities to the psychiatric patients. Besides, it also attends to the psychiatric disorders of the patients primarily having medical/surgical illness. This service is given through the consultation-liaison psychiatric services[4,5]. Consultation- liaison psychiatry links non-psychiatric and psychiatric wards in general hospitals[6]. It is now established that 1/3rd to 2/3rd of the patients of different medical, surgical and gynecological units has significant psychiatric symptoms which is amenable to treat by psychiatrists[7,8]. This co-morbidity worsens the course and prognosis of medical illness[9] and makes hospital stay longer[10]. The clinical problems containing a medical- psychiatric interface not only offer clinical challenges but also are areas for new knowledge and better intervention[11]. It can be assumed that large number of patients with psychiatric co-morbidity admitted in non-psychiatric ward remain undetected and uncared and this is a major cause of long-standing sufferings of those patients. Liaison Psychiatry provides a huge scope for bridging the gap between medicine and psychiatry. Physical and psychiatric disorders often co-occur which complicates the course and prognosis of each disorder[5]. Psychiatric consultation in general medical setting decreases the treatment expenditure, mortality, morbidity and treatment associated stigma. Before setting up of psychiatric units in general medical hospital, psychiatric services were offered through medicine specialists and referral to psychiatric hospitals. The incorporation of psychiatric unit in general medical hospitals creates the opportunity for easy access to psychiatric services[12,13].

Department of Psychiatry Mymensingh Medical College Hospital (MMCH) has been serving as one of the leading tertiary centers for people around the country since 1978. Since establishment, the department has been providing indoor, outdoor and referral services. There are extensive studies in this field in western literature, but research conducted in Bangladesh are very scanty. The country has psychiatric units in nearly all teaching medical hospitals but the type of psychiatric referrals from other departments, most frequently referring departments, common psychiatric co- morbidities in the referred population and their socio demographic is essentially unexplored. There are very few studies with large sample size and duration like 10 years. This study can improve our psychiatric services and how we approach patient with co morbid medical illness in COVID-19 pandemic era. In the face of scanty studies in this regard, this study aims at exploring the sociodemographic, referring department, common presenting problems, co-morbid medical conditions and common psychiatric comorbidities and their treatment patterns of the referred patients to psychiatry department from the other departments of MMCH in larger picture.

Methods:

This study was conducted in Department of Psychiatry, MMCH from January 2011 to December 2020. Sample was taken from the referred patients from other clinical departments. This was a cross-sectional study. The sociodemographic variables, psychiatric history, and mental state examination of the patient were created utilizing a semi-structured questionnaire. The complete assessment was done by medical graduate under the guidance of the consultant. Psychiatric diagnoses of the patients were assigned by the consultant psychiatrist as per Diagnostic and Statistical Manual- 5th edition (DSM-5) criteria.

Results:

A total of 1626 patients were referred for psychiatric consultation from various departments during the study period, out of which 714 (43.1%) were males and 912 (56.1%) were females. Highest number of the patients belonged to the age group of 11-22 years (n=587, 36.1%). The number of patients in the age groups of

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below 18 years and above 60 years were 621 (38%) and 87 (5.4%) respectively.

Table-I: Distribution of age of the referred patients (n=1662)

Age Group (Years)	Frequency	Percent (%)
≤ 10	34	2.1
11-20	587	36.1
21-30	465	28.6
31-40	199	12.2
41-50	146	9.0
51-60	108	6.6
61-70	52	3.2
>70	35	2.2
Total	1626	100.0

Sources of Referral

Table-II shows the details of department wise sources of psychiatric referrals. Highest number of the referrals were made from the faculty of Internal medicine (n=988, 60.8%). The second highest referrals were made from ENT department (14.8%), followed by Gynae and Obs (7.4%), surgery 3.6% and Neurology and pediatrics (3%) each. Other major sources of psychiatric referrals were cardiology (n=17; 1%), neurosurgery (n=6; 0.4%) and others (n=99; 6.1%).

Table-II: Sources of psychiatric referral from different in-patient departments

Referred from (Department)	Frequency	Percent (%)
Internal medicine	988	60.8
Surgery	59	3.6
Gynae and Obs	121	7.4
Cardiology	17	1.0
Neurology	48	3.0
Neurosurgery	6	0.4
ENT	240	14.8
Pediatrics	48	3.0
Others	99	6.1
Total	1626	100.0

Reasons for Referral

Consultations were sought for various complaints including psychiatric complaints, medical complaints, surgical complaints gynecological complaints of referred cases, management of behavioral disturbance, etc. About 15.3 percent of consultations were made for multiple complaints. The bar chart shows the percent of different complaints of referral.

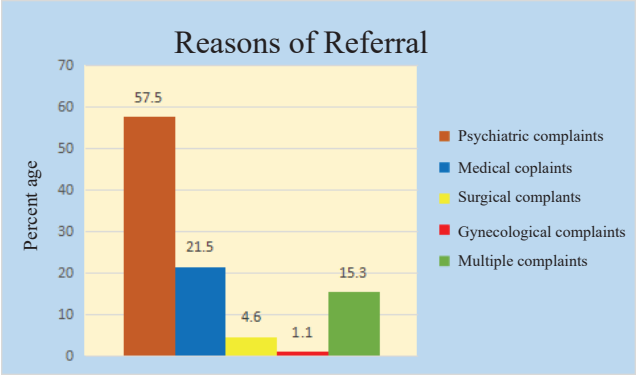

Figure I: Complaints of referral (%)

Comorbid Medical Diagnosis

Many of the patients had different comorbid medical diagnoses, including Hypertension, Diabetes mellitus, chronic kidney disease, etc. Out of 1626 patients 672 (41.3 %) patient had different medical comorbidities.

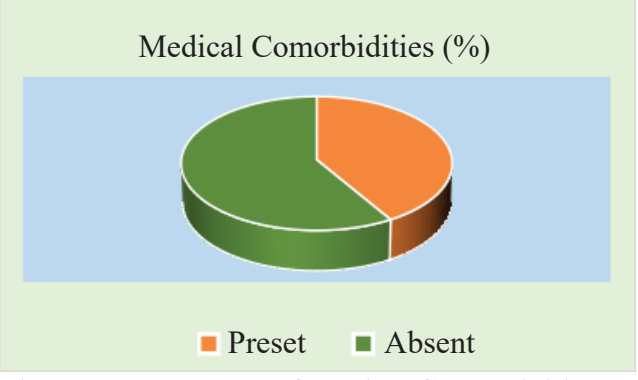

Figure II: Percentage of Medical Comorbidities

Psychiatric Diagnoses

Table-III: Frequency of psychiatric diagnoses of the participants.

Psychiatric diagnosis	Frequency	Percent (%)
MDD	84	5.2
Bipolar Disorder	360	22.1
Schizophrenia	140	8.6
Acute psychosis (Brief Psychotic Disorder)	211	13.0
OCD	8	0.5
GAD	6	0.4
Panic disorder	76	4.7
Substance related disorder	9	0.6
Dementia	30	1.8
Sexual dysfunction	1	0.1
Delirium	89	5.5
Conversion disorder	58	3.6
Others	288	17.7

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Somatoform disorder	20	1.2
Post-partum psychosis	75	4.6
Adjustment disorder	79	4.9
Intellectual disorder	3	0.2
NAD	89	5.5
Total	1626	100.0

The most prevalent DSM-5 diagnosis was Bipolar Disorder (22.1%) followed by Acute Psychosis (13%), Schizophrenia (8.6 %), Delirium (5.5%), MDD (5.2%), Adjustment Disorder (4.9%), Panic Disorder (4.7%), Post-partum Psychosis (4.6%), Conversion Disorder (3.6%) etc. Other minor diagnoses were GAD (0.4%), OCD (0.5%), SRD (0.6%), Dementia (1.8%) and ID (0.3%). Out of them 17.7% had other diagnoses and 5.5% had nor psychiatric diagnoses. [Table III]

Treatment Pattern on referred patient

Pharmacological was treatment given 87.7% patient, psychological treatment was given to 8.8% patient, and both type of treatments were needed to 3.5% of patients.

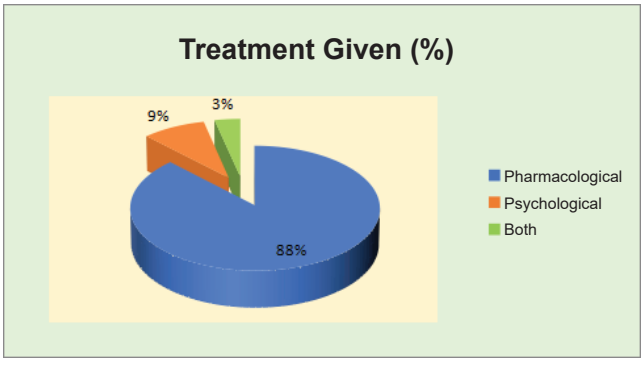

Figure III: Types of treatments were given to referred patients.

Mode of treatment

81.6% patients were treated with advice, 15.5% were transferred to department of psychiatry, and the rest 2.9% of patients were referred to other departments.

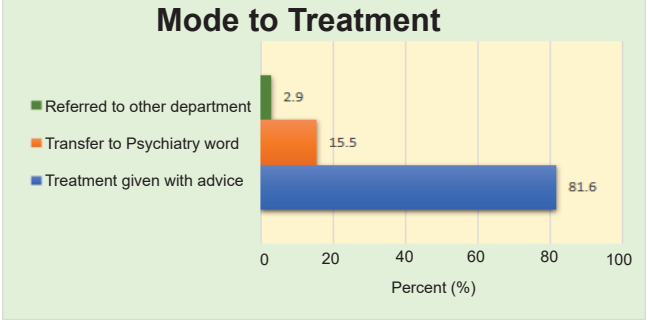

Figure-IV: Mode of treatments of the referred patients.

Discussion:

In the current study, the referred populations were mostly female which is like findings from other studies conducted in Bangladesh recently. The age distribution shows most referred cases are between 21-60 years (60.4%). Similar finding has been reported by Lipowski and Wolson,1981 where 70% of 2000 psychiatric referral were from 20-59 years of age. This study shows 56.1% of the study population are females and female to male ration is 1.3:1, which is nearly ideal according to Lipowski and Wolson,1981. The sociodemographic characteristics of the population indicate that the most likely patients to be referred are young and middle-aged female housewives. This pattern may be the reflection of the socio- cultural suppression and somatization of the mental problems of the unemployed females[7].

In the present study, almost two- thirds of the patients have been referred from medicine and allied branches (60.8%) finding comparable to other studies done in Bangladesh14 and India[15-17]. The reason behind this may be the peoples' stigma about psychiatric disorder which lead them to seek help to general physicians and internists. Unawareness and lack of evidence about availability of psychiatric services may also play role. The referral from department of ENT was second highest because of suicidal attempt by hanging and cut-throat injury. The third common source of referral was from department of gynae & obs (7.4%) can be explained by post-partum onset of depression and psychosis. A recent study conducted in 376 urban slum sample shows the prevalence of post-partum depression to be 39.4%[11]. Neurological referral 3% may explain the fact that psychiatric disorders like conversion disorder, somatic symptom disorder; body dysmorphic disorder has a strong resemblance with neurological disorder. Again, many neurological diseases may primarily be suspected as psychiatric one like multiple scleroses, stroke, peripheral neuropathy, Parkinson's disease etc. From this viewpoint neurological referrals were predictable to be greater. Most likely, neurologists tend to treat the psychiatric cases at first instance which leads to a smaller number of referrals. Furthermore, neurologists tend to treat the neurological emergencies and send them to OPD follow up for the psychiatric illness. The referrals from surgery and allied branches were 18.4%, which is consistent with finding of study done by Avasthi et al (1998). The short stay of surgical patients in hospital and reduced concerns of the surgeons about psychological complaints may be the reason behind this pattern[14]. Referral from department of Pediatrics

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is 3% which does not match with the nationwide prevalence of psychiatric disorder in child population is 13.6%18. Given this large prevalence, it can be expected that the referral from the particular department is very less. It may reflect the lack of Awareness of the pediatrician to refer the patients.

Regarding reasons mentioned for requesting consultation, 42.5% patients were referred for psychiatric evaluation to manage medical and surgical complaints. This figure is comparable to other studies[8,10]. The reasons behind such example may be the poor inadequate knowledge about modern psychiatric diagnostic and management trends among the physicians and surgeons. This also suggests negligence towards Psychiatry as a full discipline in undergraduate curriculum.

The most common psychiatric diagnosis found in this study was bipolar disorder is 22%. Bipolar is a major cause of health burden worldwide affecting approximately 46 million people. The second most common diagnosis is Brief Psychotic Disorder (13%), followed by schizophrenia (8.6%) may be due to violent behaviors with those diagnosis. In this study, OCD was 0.5%. Two recent studies done in Bangladesh shows the prevalence of OCD 9.06%14 and 5.66%[7]. The OCD patients don't accept it as disorder and not like to share their symptoms until it is severe and hampering his/her daily life that's why OCD's admission rate is relatively low. Many studies did not show the OCD prevalence as a separate entity. The reason behind this may be that the OCD was under the heading of anxiety disorders in DSM-IV and the researchers used DSM-IV for psychiatric diagnosis. In current study, we made the diagnoses as per DSM-5 and we cautiously interviewed the obsessive-compulsive symptoms. The next common frequency was "No psychiatric diagnosis" (5.5%). Some studies show similar result[13,15,19,20]. The reason for not getting any psychiatric diagnosis is that those patients had few psychiatric symptoms which were insufficient to form any single psychiatric diagnosis. Delirium was diagnosed in 5.5% cases. The delirious patients often show behavioral conflicts which often raise suspicion about psychiatric diagnosis. In this study, around 88% patient were treated pharmacologically, 8.8% treated only psychologically, and 3.5% patient needed both psychological and pharmacological treatment though there is lack of manpower. In the current study, 81.6% patients were given treatment with advice; some were admissible or transferable. This is comparable with[15] where pharmacological treatment was given to 71% of the patients. Though there is lack of manpower, 15.5% transferred to department of psychiatry 2.9% referred to another department.

Limitation of the study:

There are few limitations of the current study. The outdoor referrals cannot be registered. Standardized structured interview and rating scales were not used in the study, rather, diagnosis was made by a consultant psychiatrist on the basis of DSM 5. If structured interview techniques, more sociodemographic data and standardized rating scales can be used, the reliability and validity of the result were expected to be better.

Conclusion:

Psychiatric comorbidities in general medical disorders are very familiar. Many physicians focus only on physical disorders rather than the holistic approach. Lack of consciousness about psychiatric services and panic of stigma often inhibits people to seek help from psychiatrists directly. Furthermore, primary physicians often do not contemplate referring the patients to psychiatry department and treat them with psychotropics on their own. This lengthens and, in some cases, may worsen the course of psychiatric illness and deleteriously impacts the physical illness too. A general medical doctor can play a pivotal role in addressing such issues. Being a postgraduate and undergraduate training college, MMCH runs many courses including residency program. The placement of Student, Intern Doctors, residents from other departments will help the general medical doctors to know about the current trends of psychiatric diagnosis and management. Prompt identification of psychiatric morbidity and prompt initiation of treatment may help to reduce patients' sufferings. Thus, Liaison Psychiatry provides an opportunity to improve health outcomes for inpatients and reduce burden on the healthcare system.

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