The Utilization Pattern of Psychiatric Consultation Services at the University of the Philippines-Philippine General Hospital (UP-PGH) from 1999-2008

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ABSTRACT

Objective. This study describes the utilization pattern of psychiatric consultation services at the UP-PGH from 1999 – 2008 by reviewing the demographic data of patients referred, describing the Axis I (Clinical Disorders and Other Disorders That May Be a Focus of Clinical Attention) and Axis III (General Medical Conditions) diagnoses of referred patients, and by identifying the sources of, and reasons for the different referrals.

Methods. Relevant data from the annual census of the Consultation – Liaison (CL) Psychiatry Section from 1999 – 2008 was reviewed according to age, sex, civil status, reasons for referral, DSM-IV TR Multi-axial diagnoses and sources of referrals.

Results. The percentage of referrals to consultation psychiatry has increased from 1.03% in 1999 to 1.77% in 2008. There is equal distribution between males and females. Majority of the consultation referrals were married and belonged to the 21-40 age group. The top five referring services were general medicine, surgery and trauma, obstetrics-gynecology, otorhinolaryngology and orthopaedic departments. The top three reasons for referring patients were mood problems, agitation and restlessness, and suicide attempts/behaviour. Majority of the axis I diagnoses were adjustment disorder, depressive disorders, and psychological reactions to illness. According to Axis III diagnoses, majority of the referrals were associated with poisoning and injury, neoplasms, and endocrine, nutritional, metabolic and immunity disorders.

Conclusion. The referral rate to the CL-Psychiatry Section at the UP-PGH has increased throughout the period studied. This may be attributed to programs and activities that improve efficiency in the delivery of psychiatric knowledge and skills, and better personnel supervision. The referral rate of 1.03% to 1.82% was consistent with those in other countries.

Key Words: utilization patterns, consultation – liaison psychiatry, CL psychiatry, UP – PGH

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Introduction

Consultation-Liaison (CL) Psychiatry or Psychosomatic medicine is a specialized area of psychiatry whose practitioners have particular expertise in the diagnosis and treatment of psychiatric disorders and behavioral difficulties in complex medically ill patients.

The term "psychosomatics" was introduced by Johann Heinroth and was further elaborated by Felix Deutsch in 1922, coining the term "psychosomatic medicine". The main concern of the specialty then was on the psychoanalytic study of mind and body interactions. Since its inception, psychosomatic units have been established in hospitals such as those in Massachusetts, Duke and Colorado. The Academy of Psychosomatic Medicine was established in 1954 to encourage formal training, which was supported by the National Institute of Health by providing scholarship grants.[1]

In the Philippines, the University of the Philippines-Philippine General Hospital (UP-PGH) Department of Psychiatry and Behavioral Medicine was the first to informally start liaison programs in the 1980's. It was, however, only in 1990 that the section of Consultation-Liaison Psychiatry was formally established in UP-PGH. Initially, the service, supervised and manned by three psychiatric consultants, provided psychiatric consultation services as requested by the referring person or entity (consultee) to facilitate the treatment of the medical or surgical illness. By 2001, the section was composed of seven consultants and a gradually improving organizational structure, as well as a more sophisticated and efficient service, training and research methodology. Through the years, the service has expanded to the establishment of psychiatric liaison programs with the Cancer Institute, Pain Clinic, Center for Memory and Cognition, Renal Dialysis Unit, Renal Transplant Unit, Burn Unit, Otorhinolaryngology Department, Colorectal Unit, Pulmonary Unit (CARE), and the Trauma Unit.

A study done by Perez, et al, at around the same time that consultation services were started at the UP-PGH, reviewed 255 consultation referrals to Consultation-Liaison Psychiatry at a tertiary Canadian Psychiatric Hospital. It was noted that the top referring departments were medical and surgical services.[2] The three most common reasons for

psychiatric consultation referral were parasuicidal behavior, depression and psychological conflict affecting physical illness. The most common diagnoses were affective disorders, organic brain syndromes and transient situational disturbances.

Another study done at a German hospital on the changing pattern of referrals in Consultation - Liaison Psychiatry revealed that of the 1738 referrals, majority were from internal medicine units, followed by rheumatology, obstetrics and gynecology, urology, and the otorhinolaryngology services.[3] The top reasons for psychiatric consultation referral were psychiatric consequences of a physical disorder, coincidental psychiatric disorder, and psychiatric disorder presenting with physical symptoms. Furthermore, they saw a three-fold increase of the referrals in Consultation - Liaison Psychiatry in their 8-year research period which they attributed to better relationships between the primary physicians with the psychiatrists, prompt responses to consultation requests, effective communication with consulting physicians, employment of full time Consultation – Liaison psychiatrists, academic activities, etc.

Sobel and Munitz studied psychiatric consultations at two Israeli general hospitals which revealed similar trends. Most of the referrals came from the emergency wards, followed by the Internal Medicine services and then surgical subspecialties. Most of the referrals were for suicide attempts, intense emotional reactions and severely disturbed behavior.[4]

In 1984, Hengeveld, et al, reviewed referral patterns in consultation and liaison psychiatry at a Dutch University. The study revealed that most of the referrals came from the medical wards followed by surgery wards. The reasons for referral were mostly because of suicide attempts, psychological problems related to a physical disorder, and probable psychogenesis of unexplained physical symptom.[5]

A similar pattern can be seen in another study done by Schofield and Doonan regarding the experience at an Irish Hospital. Psychiatric consultation referrals came mostly from the emergency wards, followed by neurologic wards and then medicine services. A high proportion of these referrals were for parasuicidal behavior and for suspected psychiatric illness.[6]

To date, no local study has been undertaken to document the patterns of psychiatric consultation referrals. A study of such referral patterns will not only document how treatment services are being provided, but also gives an indication as to which clinical departments would benefit from treatment service provision that go beyond the basic psychiatric consultation, such as psychiatric liaison programs and psychoeducational activities. It can also be a starting point in assessing the appropriateness of training provided by the consultation and liaison section, by comparing the referral pattern and the training curriculum of the Department of Psychiatry and Behavioral Medicine of the UP - PGH offered to its fellows and rotating psychiatry residents.

Objectives

General Objective

This study aims to describe the utilization pattern of psychiatric consultation services at the UP-PGH from 1999-2008.

Specific Objectives:

1. To describe the demographic data of the patients referred to consultation and liaison psychiatry from 1999-2008
2. To identify the sources of referred patients to consultation liaison psychiatry from 1999-2008
3. To describe the reasons for referral to consultation and liaison psychiatry from 1999-2008
4. To describe the Axis I (Clinical Disorders and Other Disorders That May Be a Focus of Clinical Attention) and Axis III (General Medical Conditions) diagnoses of patients referred to consultation and liaison psychiatry from 1999-2008

Methods

This is a descriptive study on the utilization of psychiatric consultation services from 1999-2008.

The research was undertaken at the UP-PGH Department of Psychiatry and Behavioral Medicine. The Philippine General Hospital (PGH) is the national tertiary referral center and teaching hospital of the University of the Philippines, Manila. It provides quality health care to Filipino people especially to the underserved.

The Department of Psychiatry and Behavioral Medicine is one of the clinical departments of the UP-PGH which offers a full range of clinical services and programs including the Out-Patient Service, the In-Patient Service and a Day Care Program. These services are delivered in a multi-disciplinary, comprehensive and compassionate manner to enhance the well being of persons with psychiatric illness and their families.

Consultation – Liaison is the section of the UP-PGH Department of Psychiatry and Behavioral Medicine which handles cases from other wards/departments in the hospital referred for various reasons.

The source of the data came from the Consultation and Liaison Psychiatry annual census from 1999-2008 which contains the distribution of referrals according to age, sex, civil status, reasons and sources of referral, and multi-axial diagnoses.

This study is limited to the description of utilization patterns and will include interventions given and treatment outcomes.

Parametric measures such as frequency, and percentages were obtained through the use of Epi Info version 3.5.1.

Results and Discussion

1. Percentage of patients referred for psychiatric consultation from 1999-2008.

For the past ten years, the percentage of referrals to consultation liaison psychiatry has remained relatively consistent. The values ranged from 1-1.82%, which is within the range of 1-2% as reported in studies done by Perez and Sylverman, Bourgeois, Wegelin et al, and Rothenhausler, et al.

As seen in Figure 1 and Table 1, there was an increasing trend for the rates of referral from 1999 to 2003, attributed to a more efficient delivery of consultation services in the form of prompt responses to referrals (requiring that emergency referrals are seen within an hour and routine referrals are seen within the day), better personnel supervision (conducting daily rounds) and enhanced administrative support (holding regular Section meetings and didactics; improving relevant documents and forms) .

The highest rate of referral was in 2004, with 1.82%. This can be attributed to the fact that it was the year when the CL Psychiatry Section implemented an educational program called the "CL Psychiatry Introductory Road Show". This consisted of conferences by consultation and liaison psychiatrists to different clinical departments of UP-PGH. The aim of the activity was to increase the awareness of the clinical departments regarding the services offered by CL Psychiatry section, and to enhance the working relationship between the target department and the CL Psychiatry section.

Table 1. Percentage of patients referred for psychiatric consultation from 1999 to 2008.

YEAR	NO. OF REFERRALS	TOTAL NO. OF ADMISSIONS	% OF CL REFERRALS
1999	280	27, 288	1.03
2000	263	26, 182	1.00
2001	289	26, 199	1.10
2002	324	24, 670	1.31
2003	432	24, 373	1.77
2004	462	25, 336	1.82
2005	420	25, 822	1.63
2006	366	22, 264	1.64
2007	405	22, 961	1.76
2008	458	25, 826	1.77

2. Demographic data of the patients referred to UP-PGH Consultation - Liaison Psychiatry from 1999-2008.

A. Sex

In terms of sex distribution, there is equal distribution of males and females referred throughout the study period. The percentage for the male referrals ranged from 45.7% to 53.2%, while for the females, 46.7-54.3% (Figure 2). There was no sex preponderance seen in this study which was not consistent with literature. Sobel, et al,[4] Rothenhausler, et al,[3] and Schofield, et al[6] showed that despite equal ratio of men to women admissions in their tertiary hospital settings, there were still a preponderance of females in the CL referrals. This phenomenon cannot readily be explained and may be the subject of future research, as it impacts on psychiatric service program development.

B. Age

The majority of the CL referrals came from the early adulthood age group (21-40 years old). This also represents the bulk of the admitted patients in the charity wards of UP-

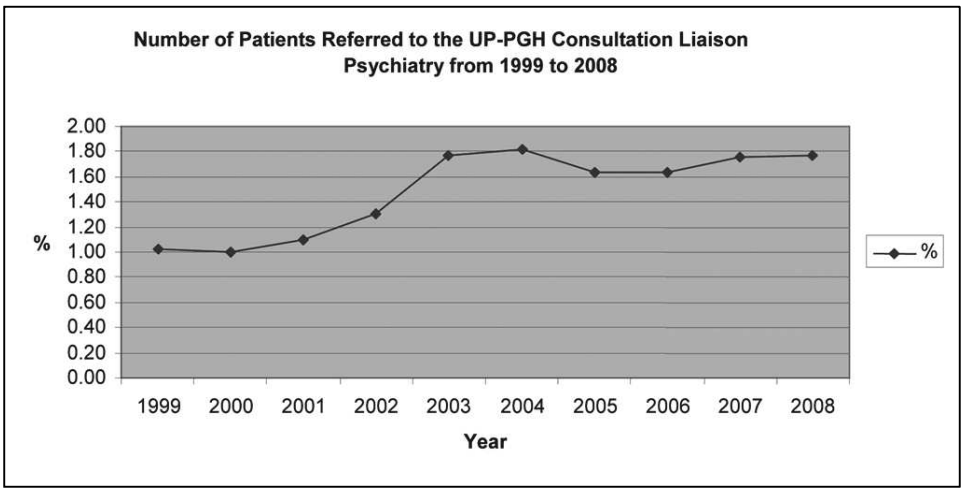

Figure 1. Illustrates the increase in the referrals made to CL Psychiatry section for the past 10 years. The increased awareness of the different clinical departments regarding the services offered by the CL Psychiatry section, through the academic activities of the section (i.e. road show), may have been responsible for this phenomenon.

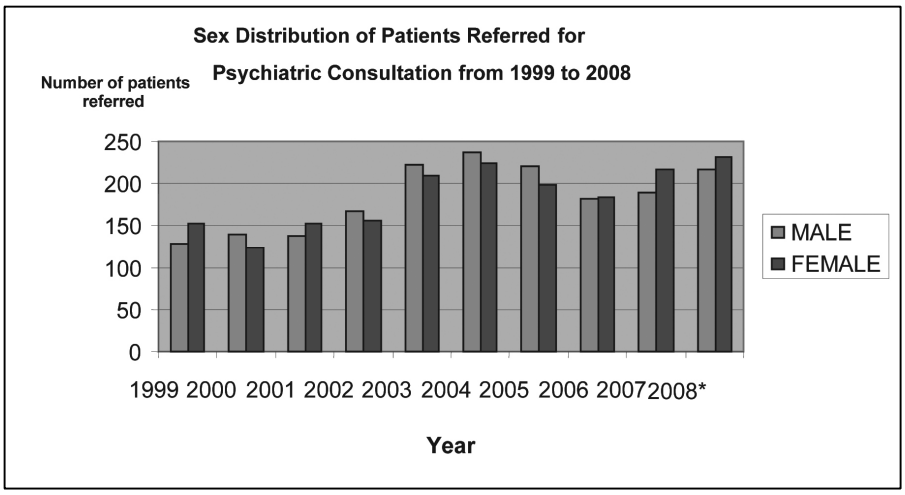

Figure 2. Shows the sex distribution of patients referred from 1999 to 2008. There was no sex preponderance observed.

PGH. This is followed by the late adult group, then the geriatric population. The least number of referrals came from the adolescent group (Figure 3). It should be noted however, that the study population did not include the pediatric age group, which is separately seen by the Section of Child Psychiatry.

C. Civil Status

In terms of civil status, majority of the patients seen by the section during the study period were married. This is followed by the single population, those who were separated, and lastly, the widowed subgroup (Figure 4).

3. Distribution of referrals according to services

Throughout the 10-year study period, the top referring services were the general medicine service, surgery and trauma, obstetrics and gynecology, otorhinolaryngology and orthopaedic departments (Table 2). The increased number of general medicine referrals to the section may also be attributed to the fact that among the clinical departments, the general medicine section admits the most number of patients. This is consistent with the sources of the referrals mentioned by Bourgeois,[7] Rothenhausler[3] and Hengeveld.[5]

Furthermore, the general medicine and surgical wards are where suicide patients are admitted, and by hospital policy, all suicide patients are referred to the psychiatry consultation service.

4. Distribution of referrals according to reasons for the referrals

Available data shows that consistently, the top three reasons for referring patients to CL-Psychiatry are mood problems, agitation and restlessness, and suicide attempts/behaviour (Table 3). Suicide attempts always figure on the top referring reasons because part of the UP-PGH

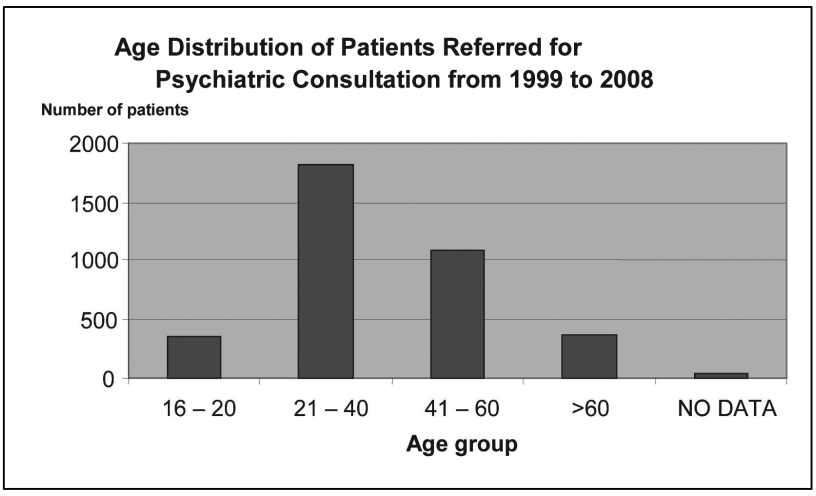

Figure 3. Shows the age distribution of patients referred for psychiatric consult from 1999 to 2008. Majority of the patients referred belonged to the early adulthood age group of 21 to 40 years old.

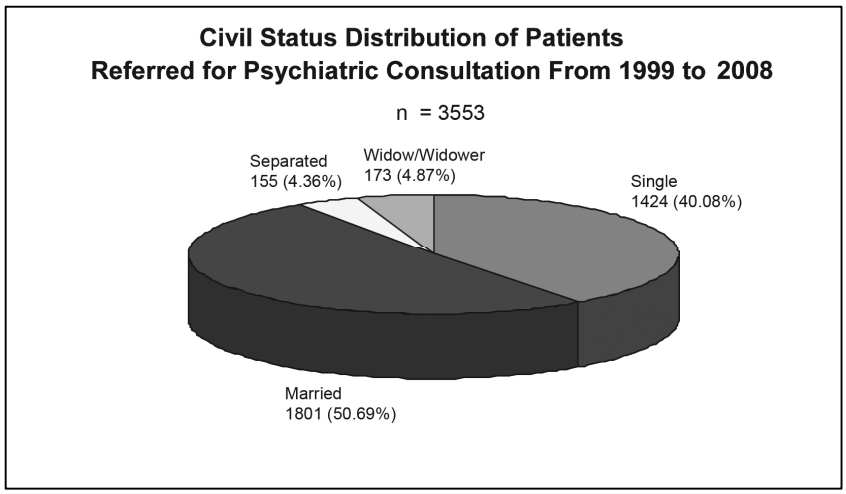

Figure 4. Shows the civil status of patients referred for psychiatric consult from 1999 to 2008. Majority of the patients were married.

referral algorithm in suicide attempt patients is a formal referral to psychiatry.

5. Distribution of Referrals According to Axis I Diagnosis (Clinical Disorders and Other Disorders That May Be a Focus of Clinical Attention)

Complementing the reasons for referral, majority of the Axis I diagnoses include adjustment disorder, depressive disorders, and psychological reactions to illness. (Table 4). Since majority of the patients seen by the service at the in-patient general hospital settings are suicide patients, it follows that most of the Axis I diagnoses were mood disorders (Major Depressive Disorder) and adjustment disorders (Adjustment Disorder With Depressed Mood). This result is consistent with the studies of Bourgeois,[7] Rothenhausler[3] and Sobel.[4]

Table 2. Distribution of referrals according to services of patients referred for psychiatric consultation from 1999 to 2008

SERVICES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	TOTAL
GEN MED	72	97	106	118	100	139	205	172	175	187	1371
SURGERY / TRAUMA	54	48	67	85	65	76	113	67	93	114	782
OB-GYN	30	26	27	31	18	21	27	34	29	32	275
ORTHOPEDICS	32	19	22	19	20	21	13	20	25	21	212
INTENSIVE CARE UNITS	32	33	31	21	10	13	34	18	0	15	207
ORL	26	12	10	13	12	10	12	25	42	31	193
BURN UNIT	6	3	0	3	40	81	0	7	0	28	168
NEUROSCIENCES	9	10	5	10	10	14	9	8	23	11	109
CANCER INSTITUTE	14	4	5	5	2	1	0	3	0	7	41
OPHTHALMOLOGY	3	3	1	5	3	3	4	4	11	3	40
REHAB MEDICINE	0	0	5	3	4	0	3	1	0	2	18

Table 3. Distribution of referrals according to reasons for the referrals of patients referred for psychiatric consultation from 1999 to 2008.

REASONS FOR REFERRAL	1999*	2000	2001	2002	2003	2004	2005	2006*	2007*	2008	TOTAL
Mood problems		76	77	88	128	85	74			91	619 (23.4%)
Agitation & restlessness		63	59	93	69	91	91			115	581 (21.9%)
Suicide		56	87	82	51	89	162			76	527 (19.9%)
Operative counselling	-	-	-	-	-	-	36			48	84 (3.2%)
Presence of psychotic symptoms		35	23	68	45	53	60			76	360 (13.6%)
History of psych illness		18	20	47	25	39	35			21	205 (7.7%)
Substance related problems		-	-	-	-	-	59			14	73 (2.8%)
Competency evaluation		-	-	7	8	29	4			10	58 (2.2%)
Death & dying issues		7	4	18	15	8	10			6	68 (2.6%)
Decline in function		-	-	-	-	-	38			11	49 (1.9%)
Others		54	60	50	194	28	28			-	414 (15.6%)

** no available data*

6. Distribution of Referrals According to Axis III (General Medical Conditions) Diagnosis

Non-accidental poisoning and self-inflicted injury were the top Axis III diagnoses (Table 5). Neoplasms and endocrine, nutritional, metabolic and immunity disorders were of next rank. This is congruent with the top Axis I diagnoses of Mood Disorders and Adjustment Disorders.

Conclusion and Recommendations

In conclusion, this study showed that the referral rate of CL-Psychiatry at the UP-PGH ranged from 1 to 1.82% with the pattern of utilization similar with those in other countries. Review of data shows a definite increase in the utilization of psychiatric services from a low of 1.0 in 1999 to 1.77% ten years later. From the literature review, we can see however, that the referral rates can go up as high as 6%.[2] This review shows that utilization rates can be improved through activities like the CL Psychiatry Introductory Road Show, and other programs that improve efficiency in the delivery of service as well as providing better supervision of personnel.

During the study period, patients seen were either male or female (no sex preponderance), in their early adulthood, married, and have just recently attempted suicide, with a diagnosis of mood or adjustment disorder, and admitted at the general medical services or the surgery and trauma wards. This data underscores the need of UP-PGH CL Psychiatry to collaborate with these services, and to study this population and increase research and training activities relevant to the phenomenon of self-harm. It should aggressively implement activities that would improve collaboration with the relevant departments, particularly but

Table 4. Distribution of referrals according to Axis I diagnoses (Clinical disorders and other conditions that may be the focus of clinical attention) of patients referred for psychiatric consultation from 1999 to 2008.

AXIS I DIAGNOSIS	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	TOTAL
Adjustment disorder	46	40	69	53	42	82	96	55	42	61	586 (15.8%)
Depressive disorders	59	53	49	35	85	51	75	31	31	43	522 (14.1%)
Psychological reactions to illness	3	3	7	3	101	71	48	54	112	89	491 (13.3%)
Delirium	21	16	6	35	26	57	36	66	47	99	409 (11.1%)
Affective d/o sec to GMC	9	15	3	-	-	3	4	-	-	2	36 (9.7%)
Substance related disorders	15	21	39	22	16	58	49	36	29	28	313 (8.5%)
No psychopathology	35	33	26	76	49	44	18	25	0	2	308 (8.3%)
Schizophrenia	26	14	28	31	16	27	36	33	42	33	286 (7.7%)
Psychotic disorders sec to GMC	25	33	38	21	15	19	24	13	23	20	231(6.2%)
Other psychotic disorders	17	16	10	31	8	19	22	24	17	20	184 (5%)
No data	-	-	-	6	43	15	7	10	-	-	81(2.2%)
Anxiety d/o	7	5	3	8	15	5	7	8	-	5	63 (1.7%)
Bipolar d/o	6	2	4	1	2	9	4	4	7	6	45 (1.2%)
V Codes	-	-	-	-	-	-	-	-	19	16	35 (0.9%)
Dementia	1	-	3	3	8	4	2	2	1	3	27 (0.7%)
Physical abuse / Sexual abuse	2	2	-	4	5	-	-	-	-	3	16 (0.4%)
Bereavement	6	3	-	1	-	2	-	1	0	2	15 (0.4%)
Post traumatic stress disorder	5	-	-	-	-	-	-	-	7	-	12 (0.3%)
Somatoform disorders	-	2	-	-	1	2	1	-	-	2	8 (0.2%)
Personality change sec to GMC	-	-	-	-	-	-	-	-	-	5	5 (0.1%)
Behavioral changes sec to GMC	-	-	-	-	-	-	-	-	5	-	5 (0.1%)

Table 5. Distribution of referrals according to Axis III diagnoses (General medical conditions) of patients referred for psychiatric consultation from 1999-2008.

AXIS III DIAGNOSIS	1999	2000	2001	2002	2003	2004	2005	2006	2007*	2008	TOTAL
Poisoning & injury	70	94	119	120	112	219	190	126		136	1186 (36%)
Neoplasms	66	33	28	45	64	67	36	41		100	480 (14.6%)
Endrocrine, nutritional, metabolic & immunity d/o	38	18	31	46	51	43	49	50		35	361(11%)
Circulatory system	24	31	13	36	40	14	36	21		18	233 (7.1%)
Nervous system & sense organs	29	12	22	18	28	41	44	16		20	230 (7%)
Infectious & parasitic dses	43	19	20	16	12	21	16	11		28	186 (5.6%)
Musculoskeletal system & connective tissues	18	14	29	5	32	21	25	26		11	181(5.5%)
Genitourinary system	11	18	28	19	44	10	18	5		15	168 (5.1%)
Digestive system	13	10	33	18	20	12	14	17		13	150 (4.6%)
Respiratory system	5	15	9	14	56	12	20	12		5	148 (4.5%)
Obstetrical diagnosis	-	-	-	1	12	23	21	33		12	102 (3.1%)
Skin & subcutaneous tissue	8	5	7	3	-	2	12	8		17	62 (1.9%)
Blood & blood forming organs	3	6	2	5	3	4	10	5		11	49 (1.5%)
Congenital diseases	19	12	4	11	-	-	1	-	-	2	49 (1.5%)
Diseases of the eye	-	-	-	1	2	4	1	3	-	3	14 (0.4%)

** no available data*

not exclusively with Toxicology, Surgery, and Emergency Services to improve mental health service provision for persons who exhibit self-harm. Perhaps the establishment of a psychiatry-initiated liaison program with one or all of these departments would impact on improved quality and efficiency in CL service utilization.

As this study is an initial sortie into examining psychiatric consultation utilization, it is recommended that other areas of utilization be studied focusing particularly on patient characteristics (demographic variance), assessment and treatment, outcomes of treatment for referred patients, compliance to follow-up of discharged patients, and updated accurate medical recording.

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