The Profile of Consultation-Liaison Psychiatry Practice in Bahrain

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Little if any has been written about consultation liaison psychiatry in the region. In an attempt to compensate for this lack this study was designed to analyse retrospectively C-L population referred to psychiatric hospital in Bahrain during a period of one year (January-December 1999) by studying the patients case notes. The study subjects included 323 patients and the Data analysed included socio-demographic variables, state of referral and Diagnostic categories (medical and psychiatric). The relationship between those variables have been discussed. Females constituted 64.4% of the studied sample, those under the age of fifty years 75.9%, Bahrainis 77.7% and new referrals 73.1%. Most of the referrals (46.7%) have no axis I diagnosis. The most common psychiatric diagnosis according to ICD 10 was depression 12.7%, followed by adjustment disorder 5.8%, delirium 5%, and dementia 4%. The most frequent medical diagnosis was intoxication 34.1% followed by multiple medical conditions 17.0%, surgical conditions 9.0% somatizer 7.7%, the less common diagnosis was HIV 0.9%. The study discussed the different findings in the literature in comparison to the study findings and possible factors that might be attributed to that difference.

(Egypt.J.Psychiat., 2001, 24: 107 - 115).

INTRODUCTION

Consultation-liaison psychiatry is a relatively young subspecialty, having been present for only about 40 years. It has evolved from the long tradition of psychosomatic medicine, where specialists in psychological medicine used to work alongside physicians in teaching hospitals (Mayo, 1977).

Psychosomatic medicine came to focus under the influence of early investigators led by Franz Alexander who was Pioneer in this field, other investigators followed expanded the concept to study the role of stress, emotions and other psychosocial influences in all diseases, this led to the current challenge to medicine to deal with every illness as biopsychosocial event (Enge, 1980).

Consultation-liaison psychiatry can be considered the practical or action-oriented branch of psychosomatic medicine. It is a specialized field of psychiatry focusing on evaluation and treatment of the whole person in a hospital setting. It is involved with bringing psychiatric principles of evaluation, diagnosis and treatment to non psychiatric health care system.

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Many studies have shown the scope of the problem in C-L psychiatry, around one-quarter of those with major physical disorders suffer psyhiatric disorders or other psychologically determined complications, moreover medically unexplained symptoms are extremely common in primary care and hospital settings. C-L psychiatrists are confronted with a wide range of behavioural problems including self harm, substance misuse, sexual and eating disorders (Working Party of the Royal College, 1995 & Rundell and Wise, 1996).

A large body of data has suggested that C-L interventions improve patient care, enhance patient satisfaction with treatment and reduce polypharmacy, adverse drug reaction and subsequent hospitalization. Reduction in cost of hospitalization realized by C-L interventions are also described (Hall and Frankel, 1996).

Although C-L service has been practiced for the past 10 years in Bahrain, it was not recognised as an independent clinical field until 4 years ago and still in the developing phase. In Bahrain, most of the C-L services continue to be provided by general psychiatrist and two styles have been assumed for psychiatric interventions.

Out patient style: physicians refer patients to outpatient psychiatric clinics when psychiatric intervention appears to be required.

Sick-call style: The psychiatric pay a sick call to a patient in response to physicians request for consultation.

In both styles non psychiatric physicians have been designed as gate keeper.

The Barriers retarded the development of C-L psychiatry in Bahrain need to be recognised and tackled, C -L continue to restrict itself to obvious acute psychiatric conditions (Benjamins et al, 1994).. Most current C-L services offer no more than minimal emergency care for inpatients and emergency department attenders (Working Party of the Royal College, 1995 & Rundell and Wise, 1996).

Psychiatric consultation frequently provided by general psychiatrists, often unsupervised juniors. Needless to say that not every psychiatrist is qualified or suited to the practice of C-L psychiatry (Kurosawa, 1993).

In the view of no clinical research in C-L psychiatry the absence, this study was conducted to shed some light profile of C-L practice in Bahrain which may be of particular concern to both clinicians and health policy maker.

SUBJECTS AND METHODS

The study was designed to describe the profile of consultation liaison psychiatric practice in Bahrain.

A total of 323 consecutive referrals to C-L service in Psychiatric hospital - Bahrain over a period of one year from January 1, 1999 to December 31, 1999 were retrospectively studied. The referrals due to substance related disorders and patients below the age of twelve were not included because they were seen by subspeciality teams. Case notes of in-patients in psychiatric hospital as well as in SMC* were eligible for the study. Data collected included sociodemographic variables (Age, sex, Nationality) state of referral and diagnosis. Both psychiatric and medical diagnosis were included, psychiatric diagnoses were made according to international classification of mental and behaviour disorders (ICDI0) (World Health Organization, 1994), as have been documented in discharge notes. Patients labeled. No major psychiatric disorderwere de-

fined as those who had no Axis I diagnosis, more often with problems of coping. Medical diagnostic categories included intoxication, HIV, cancers, head injuries, neurological diseases, multiple medical conditions, surgical conditions and others. Patients labeled No medical Diagnosis was defined as those who somatize but the symptoms cannot be fully explained by known general medical condition after appropriate investigations.

To classify appropriate diagnoses, chart reviews were done by two members of the research team to verify the most recent diagnoses with computerized records. Salmaniya Medical Complex Data were stored in the dBase software package and the Epi-info programme (WHO/CDC, 1995) was used to analyse the data. Chi-square was computed to test the statistical association between socio-demographic variables and diagnostic categories. The association was considered significant when the P-value was less tha 0.05%.

RESULTS

A total of 323 cases were referred to C-L service in psychiatric hospital BAHRAIN, during the last year, 1999 (January. 1 to December. 31. 1999) and analysed as follow.

The study revealed predominance of females as women accounted for 64.4% of the studied population, while male accounted for 35.6%, ratio 1.8:1. Middle aged people under the age of fifty made up 31.3% of the sample while young adults under the age of 25 constituted 26.0%, adolescents and those over 50 constituted 18.6% and 24.1% respectively. There were significant differences in distribution of both diagnostic categories (Psychiatric, medical) by age and sex (P-value < .001)

The largest number of referrals by far (77.7%) are Bahraini while only (22.3%) constituted other nationalities, making the?

The above parasuicide percentage (26.3 %) is part of the total parasuicide (34.1%). The remaining cases are not simply due to coping problems but are associated with psychiatric disorders (7.7%). These include adjustment disorder (3.7%), depression (2.2%), schizophrenia (0.9%), alcohol dependance (0.6%) and bipolar affective disorder - depressive episode (0.3%). The most frequent medical diagnosis was intoxication (34.1%) followed by multiple medical conditions (17.0%) , surgical conditions (9.0%), no medical diagnosis (somatizer) (7.7%), neurological conditions (3.1%), cancer (2.8%), epilepsy (2.2%), head injuries (1.2%). The less common was HIV (0.9%) (Table 2) shows frequencies of psychiatric and medical diagnostic categories of the studied sample.

DISCUSSION

The coccurrence of psychiatric and physical disorders commonly occurs. Many studies have demonstrated the association between physical and psychiatric disorders. In general hospital settings over 25% of in patients have psychiatric disorders (Feldman et al, 1988).

The age and sex of patients as well as the specialty of the ward may contribute to the frequency and the nature of psychiatric illness. Data from the present study have shown that the most frequent psychiatric referral in C-L population (26%) was found among adults and patients over 50 years of age (24%) with a preponderance of female (64.4 %), there

Table 1
Socio-demographic Data and State of Referral

Item		(N)	%
Age	12 - 19	60	18.6%
	20 - 25	84	26.0%
	26-39	58	18.0%
	40-49	43	13.3%
	≥50	78	24.1%
Sex			
	Male	115	35.6%
	Female	208	64.4%
Nationality			
Bahraini		251	77.7%
Non-Bahraini		72	22.3%
State of referral			
New		236	73.1%
Follow-up		87	26.9%

Table 2
Psychiatric and Medical Diagnostic Categories

Item	(N)	%
NMPD	151	46.7%
Dementia	13	4.0%
Depression	41	12.7%
Adjustment	19	5.8%
Delirium	16	5.0%
Others	83	25.7%
Total	323	100%
Somatizing	25	7.7%
Intoxicaion	110	34.1%
epilepsy	7	2.2%
HIV	3	0.9%
Cancer	9	2.8%
Head injury	4	1.2%
Neurological diseases	10	3.1%
Multile med.	55	17.0%
cond	29	9.0%
Surgical cond.	71	22.0%
Other		
Total	323	100%

Both diagnostic categories were significantly associated with the sociodemographic variables (p-value<.001).

Table 3
Characteristics of Psychiatric Categories

Item	NMPD	Dementia	Dementia	Adjustment	Delirium	Other	Total	+ P. Value
No.	151 (46.7%)	13 (4.0%)	41 (12.7%)	19 (5.8%)	16 (5.0%)	102 (31.6%)	323 (100%)	
Age								
12-19	76.6%	0.0%	1.7%	8.3%	1.7%	11.7%	18.6%	
20-25	66.7%	0.0%	3.6%	4.8%	3.6%	21.2%	26%	
26-49	57.1%	1.7%	42.8%	13.8%	8.1%	76.45	31.3%	
>50	24.4%	15.4%	20.5%	3.8%	10.3%	25.7%	24.1%	
Sex								<.000
Male	36.3%	3.5%	8.8%	4.5%	10.6%	36.2%	35.6%	
Female	52.4%	4.3%	14.8%	6.6%	1.9 %	20.1%	64.4%	
Nationality								<.000
Bah.	46%	4.4%	14.5%	4.8%	4.4%	25.8%	77.7%	
Non-Bath.	49.3%	2.7%	6.7%	9.3%	6.7%	25.4%	22.3%	
State of referral								
New	61.5%	4.7%	7.2%	6.8%	6.4%	13.5%	73.1%	
Follow up	6.9%	2.3%	27.6%	3.5%	1.1%	58.6%	26.9%	
								<.000

Table 4
Characteristics of Different Medical Categories

Item	No Medical Diagnosis	Intoxication	Epilepsy	HIV	Cancer	Nourological diseas	Multiple Medical cond	Surg. cond.	Others	Total	P - Value
No.	25 (7.7%)	110 (34.1%)	7 (2.2%)	3 (0.9%)	9 (2.8%)	10 (3.1%)	55 (17.0%)	29 (9.0%)	71 (22.0%)	323 (100%)	
Age											
12-19	3.3	66.7	3.3	0.0	0.0	5.0	10.0	1.7	10.0	18.6%	
20-25	6.0	54.8	3.6	1.2	0.0	2.4	6.0	6.0	20.0	26%	
26-49	20.8	38.1	4.0	2.3	10.4	5.7	35.8	25.5	53.8	31.3%	
≥50	9.0	5.1	0.0	1.3	5.1	2.6	33.3	14.1	26.9	24.1%	
											<.001
Sex											
	10.6	28.3	0.9	2.7	4.4	2.7	17.7	14.2	15.9	35.6%	
Male	6.2	37.1	2.9	0.0	1.9	3.3	16.7	6.2	25.2	64.4%	
Female											
Nationality											<.005
Bah.	8.1	32.3	2.4	0.8	2.4	2.8	21.0	9.3	19.8	77.7 %	
Non-Bath.	6.7	40.0	1.3	1.3	4.0	4.0	4.0	8.0	29.3	22.3%	
State of Referral											
New	7.6	41.1	0.8	1.3	2.5	2.5	14.0	7.6	21.2	73.1%	
Follow up	8.0	14.9	5.7	0.0	3.4	4.6	25.3	12.6	24.1	26.9%	
											<.002

is an obvious over representation of Bahrainis (77 .7 %) compared to non Bahrainis (22.3 %), also new referrals (73.1%) predominated follow ups (26.9%). (Table 1).

The higher representation of young people and elderly may reflect the vulnerability of both groups of patients to psychological problems and psychiatric comorbidity. Affective and adjustment disorders are more common in elderly and drinking problems in young people (Chick, 1994). Also organic mental disorders are frequent in geriatric wards (Mayo, 1986).

Sandberg and associate 1999 reported that 43.9% of patient over 75 years of age had delirium and 42.9% of delirious patient had dementia, woman accounted for 66.4% of the studied population (Sandbergo et al, 1999). Furthermore population structure of Bahraini where 95% of population are below the age of 50 may contributes to higher representation of young adults in the present study (CSO, 1988). Bahraini represent 60.4% of the total population of Bahrain, while non-Bahraini represent 39.6% (Bahrain Health Abstract, 1988). The less representation of non-Bahraini (23.2%) in this study can be attributed to transitory migration and frequent repatriated style of this group as those who fall sick most probably go back homes early or lose their jobs (Bahraini Health Abstract, 1988). Trominance of new referrals may reflect the way the C-L psychiatry was practiced as most of the C-L services continued to be provided by non psychiatric physicians, also sick call style as well as out - patient style are mainly utilized, psychiatrists as gate keepers are usually lacking and no C-L team assigned to make rounds at in patients departments on a regular basis.

Strain J, 1993, found that the majority of referrals (28.5%) were for ...problem of coping and more often had no axis I diagnosis or were described as adjustment disorders16. The present study showed that parasuicide with coping problems (26.3 %), other coping manifestations (5.6%) and adjustment disorder (5.8%) represent the highest number of referrals (38.4). Those patient required similar amount of clinical time and resident follow up. It is an important and time consuming diagnostic category in C-L psychiatry practice. (Strain, 1998).

Newson, (1979), stated that many of the patients who deliberately harm themselves have some affective symptoms, but few have full psychiatric disorder. (New son-Smith 1979 a).

This study showed that 22.7% of the total parasuicide referrals were associated with psychiatric disorders, mostly with adjustment disorder (11%), and depression (6.4%).

Females represent 73.6% of the total parasuicide cases and males represent 26.4%. This female to male ratio of almost three to one is much higher than that found in the United Kindom (1.4:1) (Platt et al 1988), and just below that of the United State (4:1) (Kaplan and Sadock 1998).

Deliberate self-poising represented 95.5% of the total Parasuicide in our study which is higher than the 90% found in the United Kingdom (Saravay, 1991). Platt et al found parasuicide common among the age group 15-30y Platt et al (1988). Similar findings is present in this study where this age group represents 79.1% of the total parascuicde referrals. Depression as psychiatric comorbidity represented 12.7% of C-L population, it was found most among middle age population (42.8%) and those over 50 (20.5%) with preponderance of females (14.5%). Similar

findings have been demonstrated by Saravoy and coworkers (1991) (Saravay, 1991). Chick 1994 reported that affective and adjustment disorders are more common in elderly (Chick 1994). In contrast, studies utilized explicit criteria have diagnosed depression as many as 2233 % (Katon and Sullivan, 1990). The low rate in the present study can be explained by the difficulty in diagnosing depression in hospital settings, because of the symptoms of medical illness present, moreover the use of standard criteria for the diagnosis of psychiatric disorder in the physically ill will add to this difficulty (Cooper 1995 and Parker 1999).

Furthermore consultations were usually referred by non.psychiatric physicians who often overlook early symptoms of mental disorders especially when they do not interfere with medical treatment .

Cognitive impairment represented 9.0% of the sample (5% delirium, 4% Dementia) it was found to be more frequent among patients over 50 with more males (10.6%) were found to have delirium and more females (4.3%) with dementia.

Von Hemort and associated (1993) reported that organic mental disorders are frequent in geriatric wards (Von Hemert et al 1993). The incidence of delirium is highest in 70 year old subjects suffered from 15 medical disease and there was a gender effect in all the subjects 27 In contrast Francis and colleges (1990) screened 229 patients over 70 of age admitted to general medical service. They found delirium in 22% of patients (Francis et al 1990). The low rate of delirium in the present study possibly explained by the difference of age sample between the two studies as well as delirium may be difficult to diagnose as it have very different clinical profile (Sandbergo et al 1999). In addition, physicians are traditionally reluctant to make psychiatric consultation for delirious patients unless they were confronted by behavioral problems or psychotic manifestations such patients might presented with, moreover most psychiatrists performing consultations in general medical hospitals are not C-L subspecialists who may lack clinical skills necessary to render the basic standards for the diagnostic evaluation in such special settings.

The most frequent medical diagnosis in the present study was intoxication (34.1 %), it was diagnosed most among adolescents (66.7 %), also females constitute (37.1 %) compared to males (28.3 %) Table 4. This group of patients comprises those with deliberate (105 cases, 95.5%) and accidental (5 cases, 4.5%) self poisoning.

Patient presented with multiple medical conditions constitute 17% of C-L population studied, higher rate of this category was found among middle age patients (35.8%) and those above 50 (33.2%).Bahainis (21%) are over represented compared to non Bahrainis (4%) This group are probably very fragile at base - line and need special care and attention on management.

Patient presented with physical complaints with no medical diagnosis has been found to constitute 7.7% of C-L population, it was found that middle age patients and male are more frequently represented (10.6%) compared to females (6.4%).

Clinical studies estimated that 20 84% of patient in general medical setting present with somatic complaints for which no organic cause can be found (Kellner, 1985). Somatizer report considerably more physical, social and role function impairment (Katon et al 1991) in addition those patient use extensive

and questionably effective medical service.

Difficulty in diagnosis as well as heterogenecity of this group may explain the low rate of somatizers in the present study.

Conclusion

This study contribute to the Literature by describing consultation liasion population in Bahrain, subsequent studies are needed to assess the various aspects of C-L service, for instance, the influence of C-L service on mean length of stay and cost effectiveness of C-L service. If sufficient cumulative information are available it might contribute to more effective utilization of medical and psychiatric resources.

Conclusions drawn from this study must be tempered according to the limitations of our strategy. It is a hospital - based study with an inherent selection bias. Moreover the consultations referred by medical staff with insufficient psychiatric training, also most of the service provided by traditional psychiatrists who may lack specialized skills needed in such settings.

Highlighting of importance of C-L training and development of well staffed C-L team might not only improve the accuracy of studies results but also enhance the value of expanded role of C-L service.

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ملامح الطب النفسى الوصلى فى البحرين

تمت دراسة أوراق علاج ٣٢٣ مريضاً تم طلب مشوره الطب النفسى الوصلى لهم فى البحرين خلال عام ١٩٩٩ (من يناير إلى ديسمبر)، وكان أكثر التشخيصات تواتراً التسمم ١ , ٣٤٪، الأضطرابات الطبية المتعدده ١٧٪، الحالات الجراحية ٩٪ . وتناقش الدراسة دلالات هذه النتائج وتقدم التوصيات.