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AN EVALUATION OF THE DEVELOPMENT OF CONSULTATION LIAISON PSYCHIATRY IN THE ISTANBUL FACULTY OF MEDICINE: PSYCHIATRIC CONSULTATIONS IN 14 YEARS

İSTANBUL TIP FAKÜLTESİ' NDE KONSÜLTASYON LİYAZON PSİKİYATRİSİ BİLİM DALI' NIN GELİŞİMİNİN DEĞERLENDİRİLMESİ: 14 YILDA PSİKİYATRİK KONSÜLTASYON

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ABSTRACT

Objective: This is an evaluation of the development of the Department of Consultation Liaison Psychiatry (CLP) in the Istanbul Faculty of Medicine over 14 years. The aim was to get an idea of the effect of composition of the CLP team and the patterns of service delivery on utilization of psychiatric consultation.

Materials and methods: All the consultations requested in 2003 were evaluated with regard to demographic characteristics, the sources of referral, reasons for referral, psychiatric diagnoses, and suggested treatment modalities. The results of the three surveys (1989-1991, 1995-1996, 1997-1998) that were done earlier in our department and this 2003 survey were analyzed to compare changes in the patterns of consultations with the changes in the composition of CLP team and the service given. Four surveys over 14 years were evaluated. These four periods coincided with major changes and developments concerning the characteristics and organization of the CLP service.

Results: The study revealed a gradual and consistent increase in the rate of consultations over these 14 years. Over time, significant changes in the demographic characteristics of patients appeared. During the early days of the department, requests for consultation were mostly derived from cases requiring assistance for differential diagnosis or suicide cases. Over time, cases increasingly involved co-morbidity. Depression has always been the most prevalent psychiatric disorder. Recently, however, adjustment disorder has replaced depression as the most common diagnostic category. The use of psychopharmacology has, in time, become more prevalent.

Conclusion: Holding hospital characteristics constant, expanding the multidisciplinary nature of the CLP service, and training non-psychiatric physicians and liaison work have contributed to the improvement of psychiatric referrals as well as the quality of the service given. Our experience and institutionalization of critical services has become a model for the country. The data suggest how CLP services have developed in time.

Key words: Consultation liaison psychiatry, consultation rate, psychiatric diagnoses, psychiatric referrals, CLP service characteristics

INTRODUCTION

The history of contemporary Turkish psychiatry dates back to mid-1800s, a time marked by reforms designed to westernize the country. Experience in psychiatric practices, however, can be seen as early as the 12th and 14th centuries, when "houses of healing" were prevalent throughout the country (1). What characterized these institutions was the integration of mental and physical care. In other words, the hospitals at that time served both mentally and physically ill people and mental health was not separated from physical health. Early forms of therapy used in the treatment of mental patients included music therapy and water therapy. The mentally ill were accepted in the society and were kindly treated. The mentally ill have generally not been abused or stigmatized. Instead, they have been recognized as members of the community in need of protection and care. Contrasting with the western world, Turkey did not have the separation of hospitals for mental health, the asylums, and somatic hospitals up until 1850's.

Subsequent to the founding of the modern Turkish Republic in 1923, and the university reforms in 1933, Turkish psychiatry began to make enormous progress. Adopting western values and standards, it has made major contributions in biological, dynamic and descriptive psychiatry (33). Presently, there are five state-run psychiatric hospitals. The total number of psychiatric beds in the country is around 6,000, with more than 5,000 of them in mental hospitals (16).

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The first psychiatric department in a general hospital in Turkey was established in 1954 at the Istanbul University, Istanbul Faculty of Medicine. Up until the 1980s, psychiatric consultation in university hospitals was haphazard and mostly limited to emergencies (e.g., attempted suicides and psychotic excitations), as well as to cases where "no organic pathology" was detected. The first Consultation Liaison Psychiatry (CLP) unit was formally established in 1989 at the Istanbul University, Istanbul Faculty of Medicine. CLP was officially recognized and approved as a distinct academic branch in 1997 by the National Board of Higher Education and is currently awaiting recognition as a subspecialty. Today, CLP in Turkey is a rapidly and enthusiastically developing area of practice and research (31). The evolution of CLP department has been over the 14 years as follows:

In 1989-1991, a professor of psychiatry headed the department and consultations were carried out by the on-call resident in psychiatry.

By 1995-1996; one resident was assigned to the department and rotations have been regular. The CLP team has become multidisciplinary (one psychologist, one CLP nurse) consultation model. During this time CLP has been formally recognized as a separate scientific branch.

After 1998, major changes and developments concerning the characteristics and the organization of CLP service were carried out. Two full-time senior faculty psychiatrists joined the team, participation of professionals from different disciplines (two CLP trained psychologists with PhD and two CLP nurses with PhD) had been provided and two residents had started working simultaneously on a rotation basis. Thus, the composition of the team has improved from smaller multidisciplinary medical consultation model to a larger multidisciplinary model.

The second major development during the 1997-1998 period was the widening of liaison activities at the hospital settings. Within this setting, joint case discussions, joining ward rounds of the medical, surgical, oncological departments started to be carried out routinely. The third major development between 1998-2003 was the initiation of systematic training and educational programs at major medical specialty clinics; monthly seminars at medical departments, weekly multidisciplinary seminars at the CLP department, publishing and distributing hospital CLP bulletin, educational programs for hospital nurses, organizing National Congress of CLP and Psychosomatics, and post-graduate courses.

With its approximately 3,000 in-patient bed capacity (31), the university hospital where we provide psychiatric service as a CLP department is the largest general hospital in the country. The CLP department is based on the principles and philosophy of contemporary psychiatric-psychosocial medicine and engages in clinical, educational, training, and research activities. Our clinical activities include:

• Providing psychiatric consultation for inpatients (e.g., bedside examination and follow-up at inpatient units of the various departments of our hospital);

• Providing psychiatric services for outpatients (e.g., serving the psychiatric needs of out-patient departments, such as dialysis patients and post-mastectomy patients);

• Maintaining an outpatient CLP unit to provide psychiatric care to those who are referred from outpatient departments of other clinics or to those who apply on their own;

• Maintaining a medical psychiatric liaison day hospital

Our day treatment unit is a significant step forward towards achieving our clinical, educational and research objectives. The kind of advanced and patient-oriented care and treatment available here that is not possible in ordinary medical services because of the functional and/or clinical factors involved. Moreover, it offers services on both outpatient and inpatient basis. The goal of the unit is to have patients come there during the day for short periods of time to relax, to undergo crisis intervention, and to receive psychological or psychobiological (e.g. IV infusion) treatments. The unit is designed to cater to the needs of medical patients. It is also an ideal setting for holding multidisciplinary meetings and providing group therapy. In short, the unit is equipped to provide the kind of advanced services that are not possible at bedside consultations. It enables medical and psychological care to go hand in hand, complementing one another.

• Maintaining liaison relations with particular clinics where joint patient care is provided;

By evaluating the changing patterns of psychiatric referrals over 14 years, taking into account the times when major changes had taken place in four successive periods, we intended to get an idea of the effect of patterns of service delivery, characteristics and composition of the CLP service and educational programs on the rate, nature and context of psychiatric in-patient referrals.

MATERIALS and METHODS

At our department of CLP we have developed a specific psychiatric consultation request form that contains information regarding, in addition to general demographic and clinical data, the main clinical problem areas that the physician has observed requiring consultation. These referral reasons are: the main difficulty in making a diagnosis, anxiety, depression, agitation, confusion, bizarre behavior, automutilative behavior, sleep difficulties, intra-staff problems, adjustment difficulties, continuation of complaint despite treatment, unexplained pain, judgment difficulties, and drug complications. These are items that alert the physician as to the kind of behavior that may require psychiatric assistance.

For each and every consultation, the physician fills in the specific psychiatric consultation form. The CLP service responds with a consultation reply form after having interviewed the patient and discussing the case with the referring physician. The psychiatric diagnosis, any recommendations to be made, the medical-psychiatric formulation, and the necessary follow-up process are written down on this form.

All the consultations requested in 2003 were evaluated with regard to demographic characteristics, the source of referral, reason for referral, psychiatric diagnoses (according to DSM-IV) (3), and suggested treatment modalities. The results of the three surveys (4, 30, 32) that were done earlier in our department and this 2003 survey were analyzed to compare changes

Table 1. General figures and the rate of consultations

	1989-1991	1995-1996	1997-1998	2003
Evaluated period	2 years	2 years	2 years	1 year
Number of beds in the hospital	1500	2940	2940	2940
Number of hospitalized patients	27666	71164	68674	34175
Number of new consultations	498	1482	1837	1609
Consultation rate (%)	1.80	2.08	2.67	4.70

Table 2. Demographic characteristics

Demographic characteristics	1989-1991 N= 498		1995-1996 N=1482		1997-1998 N=1837		2003 N=1609	
Gender	N	%	N	%	N	%	N	%
Female	262	52.6	791	53.4	959	52.2	775	48.2
Male	236	47.3	691	46.6	878	47.8	834	51.8
Mean age (years)	39.94 ± 12.72		45.79 ± 17.84		47.33 ± 18.36		53.08 ± 18.18	
Age range(years)	(26-56)		(11-93)		(17-100)		(17-98)	

in the patterns of consultations with the changes in the composition of the CLP team and the service given.

Four studies[A 1989-1991 study which analyzed 498 inpatient psychiatric consultations (two years), a 1995-1996 study that evaluated 1482 consultations (two years), a 1997-1998 study analyzing 1837 consultations (two years), and a 2003 evaluation of consultation requests 1609 (one year) at which major changes and developments concerning the characteristics and the organization of the CLP service were carried out], have been analyzed with regard to patterns of psychiatric referral, rate of consultation, demographic characteristics, referring departments, reasons for referral as given by the physician making the referral, psychiatric diagnosis based on DSM-III-R (2) and DSM-IV (3), and psychiatric interventions prescribed. Data were obtained from: 1) a standard psychiatric consultation request form filled in by the referring physician, 2) a standard psychiatric consultation reply form filled in by the psychiatric consultant, 3) a medical psychiatric examination form (diagnosis) filled out by CL psychiatrist, and 4) a physical-psychiatric intervention form filled out by CL psychiatrist, all of which have been routinely used at our department since its establishment.

All new inpatient consultations were included in the study; reconsultations, follow-up consultations, outpatient consultations, and patients seen routinely within liaison setting were not included in this study.

The medical record system was kept standard throughout the 14-year evaluation period.

RESULTS

General assessment and consultation rate

The inpatient capacity of the hospital of the Istanbul University, Istanbul Faculty of Medicine is around 2940. The number of beds of the hospital in the 1989-1991 period was around 1500. During this two-year period, 27,666 patients were hospitalized and among them 498 consultations were requested. The number of new consultation requests was 498 during the first two years (32), it increased to 1609 in 2003 (a single year). More specifically, it nearly doubled between 1998-2003, while at the same time the hospital characteristics were maintained. (Table 1).

Demographic characteristics

The demographic profile of the referred patients in terms of gender and age has changed over the years in our study (Table 2). Demographically, two major findings stood out. First, the ratio of males to females has increased, e.g., the number of males referred compared to females has increased, with the number of females relatively declining over the years. Secondly, the mean age of referred patients has steadily increased. For example, the mean age in 1989 was 39.94, whereas in 2003, it was 53.08.

Referring clinics

Between the years 1989 and 1991, the distribution of consultations made by various referring clinics were as follows: Internal Medicine (48.99 %), Surgery (21.21 %), and Neurology (9.43 %). The lowerst number of consultations was requested from Obstetrics & Gynecology (0.2 %). In the years 1995 and 1996, the distribution was: Internal Medicine (41.8 %), Surgery (31.8 %), Physical Therapy and Rehabilitation (7.6 %), with once again the lowest number coming from Obstetrics and Gynecology. In the years 1997 and 1998, the highest number of consultations was requested by Internal Medicine (38.8 %). This was followed by Surgery (24.1 %). The department with the lowest number of referrals was Dermatology (1.2 %). In 2003, the distribution was: Internal Medicine (50.1 %), Surgery (26.6 %), and Physical Therapy and Rehabilitation (10.0 %).

Table 3. The distribution of the reasons for referral (between the years 1989 and 2003)

Reasons of referral	1989-1991 N=498 (2 years)		1995-1996 N=1482 (2 years)		1997-1998 N=1837 (2 years)		2003 N=1609 (1 year)	
	N	%	N	%	N	%	N	%
Difficulty in differential diagnosis	125	25	70	4.7	21	1.1	40	2.5
Anxiety	72	14.4	271	18.3	321	17.5	285	17.7
Depression	70	14	203	13.7	210	11.4	350	21.8
Non-compliance	49	9.8	168	11.3	89	4.8	86	5.3
Past psychiatric history	42	8.4	83	5.6	44	2.4	101	6.3
Neurovegetative changes	30	6.0	336	22.7	176	9.6	169	10.5
Continuation of complaints	15	3.0	152	10.3	52	2.8	22	1.4
Drug complications	7	1.4	-	-	7	0.4	15	0.9
Suicide attempt, ideation	-	-	64	4.3	64	3.5	72	4.5
Confusional agitation	-	-	-	-	190	10.3	188	11.8

Note: Only the most common reasons for referral in all of the study period were listed on Table 3.

Patterns of reasons for referral

The following is a comparative analysis of the reasons for referral as given by the physician making the referral (Table 3). An overall assessment of the patterns of reasons for referral over 14 years revealed that;

• During the first years, consultation requests for differential diagnoses (organic-psychogenic) (25%) were predominant.

• Consultation requests for anxiety (14.4% in 1989-1991; 17.7% in 2003) and depressive state (14% in 1989-1991; 21.8% in 2003) associated with or accompanying physical illness have meaningfully increased in 14 years.

• Confusional state (10.3% in 1997-1998; 11.8% in 2003) has become the third most-occurring reason for consultation in the last 6 years.

• Past psychiatric history has always been regarded as a routine reason for psychiatric consultation.

Diagnostic characteristics

The most common psychiatric diagnoses for consultation patients are presented in Figure 1. In all four studies, the distribution of psychiatric diagnoses seemed to follow a similar trend with depressive disorder, adjustment disorder, and delirium comprising the first three psychiatric states, though in differing degrees of frequency. Adjustment disorder has become the most prevalent psychiatric diagnosis in recent years. In our study, problems related to alcohol and especially substance abuse is extremely rare as the extent of this problem is still rather minimal in Turkey due to cultural familial and partly religious factors. The very low percentage of substance abuse in our referrals was a reflection of the general situation in the country. The frequency of personality and bipolar disorders did not change over time. Therefore, they were not shown.

Psychiatric intervention

The main recommended interventions were as the following: further laboratory examination; biological treatments (medication), mostly constituting anti-psychotics, antidepressants, anxiolytics, and mood-stabilizing agents; psychosocial support; psychotherapy (mainly crisis-intervention and cognitive-oriented psychotherapy); suggestions concerning the milieu; outpatient psychiatric follow-up; and inpatient psychiatric admission.

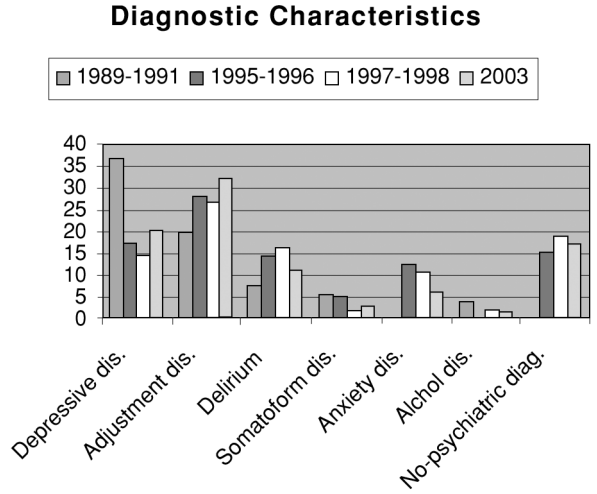

Figure 1. The distribution of principal most frequent diagnostic characteristics of patients over time.

Psychotropic treatment and psychosocial support were the most common bedside treatment modalities that have been used over the past 14 years. The most frequently administered drugs have always been, in descending order of use, antidepressants, anxiolytics, and low-dosage anti-psychotics. Medications were only used in combination with bedside psychological support. The most-used antidepressive agents in recent years have been Selective Serotonin Reuptake Inhibitors (SSRIs). Atypical neuroleptics has been the most commonly used drugs among the antipsychotics. Haloperidol was mainly used for quick tranquilization and in cases of delirium. No CNS stimulants were administered.

DISCUSSION

Recent studies indicate that the range of the rate of psychiatric consultation falls between 0.5 and 9.1% (9,18,19). Worldwide reports concerning rates of consultations indicate a range between 0.74 % and 5.8 % (5, 17, 18, 19, 20, 26, 27, 39, 41, 42) depending on research population, hospital, and the country. The European average of annual rate of consultations is reported to be 1.4 % (21, 36). Rigatelli and Ferrari reported (2004) (36) an average consultation rate of 3 % (from 1.48 in 1989 to 3.6 in 2002).

Various studies reported that consultation rates generally follow a static trend over time (5, 26, 38). However, Creed et al. (1993) (7) have reported a 36 % increase in consultation rate. In a 10-year longitudinal observational study, Diefenbacher and Strain (2002) (10) reported a static rate (1.2 %) over time. Our main finding was the gradual and consistent increase in the rate of consultations over 14 years. There are few studies evaluating the change in the rate of consultations over ten years. To our knowledge, this study provided the longest period (14 years) of evaluation of psychiatric referrals reported in the literature. Various factors had been studied in relation to their effect upon the rate of consultations. These include, for example, communication with non-psychiatric physicians, the attitude of society and physicians towards psychiatry, the organizational level of the CLP service, prompt response to consultation requests, the presence of a full-time CL psychiatrist, academic activities and the presence of liaison psychiatrist in the world (8, 11, 23, 24, 38).

Reports generally indicate that the demographic profile of patients does not change meaningfully over the years. Generally, it was reported that more female patients are referred for psychiatric care in general and in a acute care general hospital setting as well (14, 15, 18, 35, 38, 39, 41). The findings of our study contradict this general tendency. We believe it is because over the last one to two decades in Turkey, psychiatry has gradually lost the stigma attached to it, reflecting a general transformation in the value system of the society. This has resulted in men being less reluctant to seek psychological help. Thus, in examining this phenomenon, the changes in the value system of the society need to be taken into consideration.

The consistent increase in mean age over the years is a reflection of demographic and sociological change in the country. The proportion of children and youth is decreasing while that of the adult population is increasing. Today, 59.7 % of the population is between the ages of 15 and 64. There has also been an increase in the number of consultations stemming from conditions of old age. The percentage of the population above 65 years old is increasing (currently representing some 4.1 % of the population (12).

In most of the studies (25, 32, 34, 42), the highest proportion of referrals was from the department of internal medicine. In a review study (18), a percentage of 47.7 % - 90 % was reported. The range of percentages falled between 10 % - 90 % (18, 19). The proportion of referrals from the department of surgery generally ranks second in general hospital consultations. In a review carried out in the 1980s, Hengeveld et al. (1984) (18) reported a range of 7 % - 34.7 %. A more recent study reported a percentage of 25.5 (13). Grant et al (2001) (15) reported that the Intensive Care Unit provided for the second greatest number of requests for consultations. Rothenhausler et al. (2001) (38) reported that internal medicine accounted for one-half of all referrals, followed by Neurology. Grant et al. (2001) (15) reported the Intensive Care Unit as making the second greatest number of requests.

Generally, referral source has remained consistent over the years (25). Studies that report changes in referral source attribute such changes to such various factors as liaison activities, physicians' approach, specialty areas and the specific health system variables (5, 38).

Over the 14-year period, the highest proportion of referrals has always been from the department of internal medicine. However, over the years, more and more consultations have been requested from the Intensive Care Unit, Neurosurgery, Urology, and Obstetrics-Gynecology. The change in the sources of referrals over the years reflects the development of our service and the reciprocal effect liaison connections have had on this development.

Our experience, observation and assessment of the data in 14 years revealed that during the early years, "differential diagnoses," "major behavioral problems" and conventional "psychosomatic disorders" were the main reasons for requests for psychiatric consultation. Prior to the formal establishment of the CLP Department, where consultations were carried out by the on-call resident in psychiatry, the annual psychiatric consultation rate was 0.3 % (in 1987) and these were mainly for cases of differential diagnosis and suicide attempts.

One of the main objectives and consequences of the CLP service is that psychiatry in medicine is not limited to "functional cases or suicide attempts" and psychiatric disorders of various kinds occur in medical patients (comorbidity). As the CLP service developed, not only was there an increase in the number of requests for psychiatric consultation, reasons for psychiatric consultations also grew in kind such that psychiatric cooperation was indicated for all kinds of psycho-situational conditions (e.g., organic mental, psychosocial, behavioral, adaptive disturbance) associated with or accompanying physical disorders. The fact that the presence of a confusional state has become the third most prevalent reason for consultation requests implies that physicians have become able to recognize cases of delirium better.

Altogether, the data of 14 years imply that the understanding that physical and psychiatric disorders can co-exist has improved. This has resulted in not only a greater number of consultations but also a more rational utilization of psychiatric services. Studies evaluating changes in reasons for referral as defined by the referring physician are rare. Diefenbacher and Strain (2002) [10] reported that the primary reasons for referral remained constant, with "depression and behavioral management/agitation" being the most frequent.

Grant et al. (2001) (15) reported that in a study covering a ten-year period, depression and chemical dependency assessment appeared to be the main reasons for referral. A study from Italy indicated the distribution of reasons for psychiatric consultation as defined by the referring physician as: psychologi-

cal symptoms (63.9 %), unexplained physical symptoms (9.3 %), suicide attempts (5.9 %), history of psychiatric illness (3.1 %) (14).

Psychiatric disorders are reported to occur in nearly two-thirds of hospitalized patients. The majority of hospital psychiatry studies indicated that depression of various kinds and subtypes constitute the most prevalent psychiatric diagnosis in inpatient psychiatric referrals (23, 24). Prevalence of depression in the medically ill ranges between 10.8 and 27 % (with the median being 22 %), depending on the populations included (15, 28, 37).

The distribution of the most frequent diagnostic characteristics of patients in Europe and American studies indicated depressive disorder, adjustment disorder, delirium, somatoform disorder, anxiety disorder and alcohol and substance disorder, in differing ranks (13, 15, 22, 38).

Studies comparing the distribution of main psychiatric diagnosis over time reported different findings. While earlier studies reported a stable trend in psychiatric diagnosis over time (34), more recent ones reported changes in the use of diagnostic categories.

Rothenhausler et al. (2001) (38) reported significant changes in diagnostic characteristics in their study of comparison of two 1-year surveys done 8 years apart. This study reported an increase in the category of delirium and a decrease in the category of "no psychiatric diagnosis."

Brown and Waterhouse (5) reported a significant decrease in the frequency of personality disorders and an increase in organic states.

A study of changes in psychiatric consultation over a ten-year period reported meaningful changes over time. For instance, mood disorders, anxiety disorders and delirium were replaced by mood disorders, alcohol problems, and other substance use disorders (15).

In a more recent study covering a 10-year period, Diefenbacher and Strain (2002) (10) reported that organic mental disorders (e.g., delirium, dementia and substance-induced organic mental disorders) accounted for the majority of cases, followed by depressive disorders (including adjustment disorders), and thirdly by substance use disorders.

One of the distinctive findings in our study was the appearance after the initial years of a group characterized as having "no psychiatric diagnosis." The label "no psychiatric diagnosis" was applied to a patient who has been referred for consultation, for whom no diagnosis has been established. This is a reflection of the understanding that cooperation with psychiatry is not limited to "functional" or "severe" psychiatric disorders and that there are various emotional, behavioral, situational or crisis areas that can not be classified within classical nosology but will benefit from psychiatric consultation. Restricting ourselves to assisting in the diagnosis of classical psychiatric disorders will only go to limit our development as a discipline.

The liaison connections we have established between varying disciplines within medicine and psychiatry and the educational programs that we have developed in order to improve the mutual awareness have gone a long way to enhance the understanding that psychiatric assistance and psychosocial care is not a situation but rather an integral part of general treatment and care.

Studies in psychiatric intervention at bedside consultations reported that the most commonly recommended intervention in in-patient psychiatric consultation is medication. Up until the 1980s, various methods of bedside psychotherapy were more widely practiced (24), with less dependence on medication.

Grant et al (2001) (15) reported advances in psychopharmacology in general and the safe use of the newer antidepressant drugs in particular in medically ill people has made medication the primary modality in psychiatric medicine. Recent studies demonstrated the greater use of psychotropic drugs compared to studies prior to 1990-1991 (25, 38).

Findings of most studies concerning psychiatric intervention patterns over time on the whole revealed more administration of psychotropic and less utilization of psychotherapy (15, 38).

Patient follow-up patterns have remained more or less consistent. Roughly 70-80 % of cases were followed up at bedside, with 15-21 % being followed up after discharge at the outpatient CLP department.

While referrals to inpatient psychiatry has been between 0.04-1.4 %, there has been an increase in both the number and the percentage of inpatient psychiatric admission. The literature reports a higher percentage of psychiatric hospitalizations (between 8 % (27)-12.6 % (18)). The reason for this relatively lower rate has to do with the relatively minimal number of cases of substance abuse and suicide, which otherwise may need emergency hospitalization. However, in daily practice, the actual number of patients that needed psychiatric hospitalization was noted to be somewhat higher. There are many patients who cannot or should not be hospitalized in medical clinics due to situational or structural factors. There are also difficulties that inpatient psychiatry departments have in receiving certain kinds of patients, including, for example, pregnant patients with psychosis, cancer patients with melancholic and suicidal features, and MI patients with severe panic attacks.

Psychiatric inpatient services at our department are not suitable for most patients. The fact that we have established highly well organized liaison connections and our medical-psychiatric day hospital unit, where the medical patients are kept during the day, has made it possible for us to follow-up these patients daily on an outpatient basis.

In conclusion, the important findings of this study were: first of all, during the 14-year period studied, there was a consistent and gradual increase in the rate of consultations, which doubled between 1998 and 2003. Secondly, during the first years, consultation requests were mostly for differential diagnosis (organic versus psychogenic), emergent psychotic cases, or for those where "no organic pathology" was detected. By time, anxiety and depression accompanying physical illness has increased (the understanding of comorbidity).

During this period, hospital characteristics being the same, the main changes and developments were: the establishment of CLP as a separate unit, its becoming transformed from smaller more homogenous group to the one based on a larger multidisciplinary model, the development of training programs

for non-psychiatric physicians (and nurses) of the hospital in the recognition of psychiatric problems in the medical setting and to a large extent the establishment of liaison connections within the hospital setting. All these have contributed to the recognition of psychological disorders in the medically ill, willingness for collaboration increase in request for consultation and rational and more qualitative utilization of psychiatric services.

Specifically, the composition of the CLP team has changed over the 14 years so that there was greater participation of different disciplines. Another major development has been the widening of liaison activities within the general hospital setting. Accordingly, joint case discussions and ward rounds of the medical, surgical, oncology departments have begun to be carried out routinely. Liaison connections were focused basically on departments of hemodialysis, breast surgery, the intensive care unit, and high-risk pregnancies, depending on the requests of the physicians, needs of the clinics, and the availability of our team.

Providing simultaneous and ongoing psychiatric service within the medical-surgical-oncology departments has been a very functional and rewarding platform through which communication and collaboration between physicians has been possible. This has also enabled the stigma associated with psychiatric disorders in the minds of physicians, patients and the families to be altered, lessened, thus allowing for the integration of psychiatry with medicine.

In our experience, limiting general hospital psychiatry to requested consultations are insufficient to reach the people who are in need of our service. CLP liaison connections have played a major role in the training of non-psychiatric physicians and in the recognition of psychiatric problems in the medical setting. In time this has increased both the quantity and quality of psychiatric consultations and has made possible early recognition of psychopathology, which has thus led to early collaboration. The liaison model advances the concept of coexistence of psychiatric morbidity in medical settings.

The third major development between 1998-2003 was the start of systematic training and educational programs at major medical specialty clinics. We have organized monthly seminars, mainly on the recognition of psychiatric morbidity (delirium, depression, anxiety), in medical departments. In addition to these, weekly multidisciplinary seminars with various medical disciplines have been initiated and have begun to be routinely held in our CLP department. Publishing and distributing a hospital CLP bulletin twice a year has become another activity of our department. Educational programs for hospital nurses have been conducted since 1999. Presentations at medical conventions are also routine activities of our department. Another major activity of our Department of CLP has been the organization of the National Congress of CLP and Psychosomatics, and post-graduate courses since 1990.

Our experience also suggests that larger muldisciplinary CLP service and liaison work will contribute to the increase in the number of psychiatric referrals, enable more patients with a wider variety of clinical problems to receive consultative services, increase the quality of service given, and increase the quality of psychiatric requests by enabling physicians to detect psychiatric morbidity in their patients early, thus paving the way for more effective collaboration.

The larger multidisciplinary CLP service, the training of non-psychiatric physicians, and liaison work will contribute to the improvement of psychiatric referrals and increase the quality of service given.

REFERENCES

1. Afetinan A. Kayseri Gevher Nesibe Şifaiyesi. Hacettepe Üniversitesi Gevher Nesibe Tıp Fakültesi Temel Tıp Bilimleri Enstitüsünün temel atma töreni münasebetiyle (20 nisan 1969). Hacettepe Üniversitesi Yayınları no:8 Ankara 1969.
2. American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, 3 rd (ed). Revised Washington, DC, 1987.
3. American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, 4 th edition. Washington, DC, 1994.
4. Baral Kulaksızoğlu I, Kaçmaz N, Akkaş S, Özkan S. İTF Psikiyatri AD Konsültayson Liyezon psikiyatrisi Bilim Dalı'nca 1997-1998 Yıllarında Verilen Konsültayson Hizmetlerinin Değerlendirilmesi: 1837 olgu. Konsültasyon Liyezon Psikiyatrisi Kongre Kitabı 1997-1998. İstanbul, 2000.
5. Brown TM, Waterhouse J. A psychiatric liaison service in a general hospital - eighteen years on. Health Bulletin 1987; 45: 190-196.
6. Cimili C, Köse AS, Biber B, Kaygısız A. Dokuzeylül Tıp Fakültesi'nde Psikiyatri Konsültasyonlarının Değerlendirilmesi. 1994-1995. Pfizer İlaçları A.Ş. İstanbul, 1995; 191-194.
7. Creed F, Guthrie E, Black D, Tranmer M. Psychiatric referrals within the general hospital: comparison with referrals to general practitioners. Br J Psychiatry 1993; 162: 204-211.
8. Cohen-Cole SA, Pincus HA, Stoudemire A, Fiester S, Houpt JL. Recent research developments in consultation-liaison psychiatry. Gen Hosp Psychiatry 1986; 8: 316-329.
9. Diefenbacher A. Consultation and Liaison Psychiatry; In "Henn FA, Sartorius N, Helmchen H, Lauter H (eds)": Contemporary Psychiatry. Vol 1, Part 2: General Psychiatry. Berlin, Springer, 2000: 253-267.
10. Diefenbacher A, Strain JJ. Consultation liaison psychiatry: stability and change over a 10-year-period. General Hosp Psychiatry 2002; 24: 249-256.
11. Dimsdale JE. Challenges, problems, and opportunities in consıltation-liaison psychiatry research. Psychiatr Med 1991; 9: 641-648.
12. DİE http://cografya.dostweb.com/nufus.htm.
13. Fiebiger D, Ficker F, Winiecki P, Stein B, Herzog T, ECLW. Der psychiatrische konsiliardienst der Klinik für Psychiatrie an der Stadtisches Klinikum Görlitz. Psychiatr Prax 1997; 24: 129-133.
14. Gala C, Rigatelli M, Bertolini CD, Rupolo G, Gabrielli F, Grassi L. A multidicenter investigation of consultation-liaison psychiatry in Italy. Gen Hosp Psychiatry 1999; 21: 310-317.
15. Grant JE, Meller W, Urevig B. Changes in psychiatric consultations over ten years. Gen Hosp Psychiatry 2001; 23:261-265.
16. Göğüs AK. Türkiye'de psikiyatrik hizmetler. Ruh Sağlığı Bülteni, Yaz, 1988.
17. Hales Re, Polly S, Bridenbaugh H, Orman D. Psychiatric con-

sultations in a military general hospital. Gen Hosp Psychiatry 1986; 8: 173-182.
18. Hengeveld MW, Rooymans HGM, Vecht-Van Den Bergh R. Psychiatric consultations in a Dutch university hospital: A report on 1814 referrals, compared with a literature review. Gen Hosp Psychiatry 1984; 6:271-279.
19. Herzog G, Wieselmann G, Marguc K, Zapotoczky HG. Psychiatrische Konsiliartatigkeit an einem allgemeinen österreichischen Krankenhaus und Universitatsklinikum (LKH-Graz). Psycho 1993; 19: 181-194.
20. Huyse FJ, Herzog T, Lobo A, Malt UF, Opmeer BC, Stein B, Gardoso G, Creed F, Crespo MD, Guimaraes-Lopes R, Mayou R, Moffaert Van M, Rigatelli M, Sakkas P, Tienari P. European Consultation Liaison Services, and their user populations: the European Consultation Liaison Workgroup Collaborative study. Psychosomatics 2000; 41:330-338.
21. Huyse FJ, Herzog T, Lobo A, Malt U, Opmeer B, Stein B, De Jonge P, Van Dijck R, Creed F, Crespo MD, Gardoso G, Guimaraes-Lopes R, Mayou R, Van Moffaert M, Rigatelli M, Sakkas P, Tienari P. Consultation Liaison psychiatry service delivery; results from a European study. Gen Hosp Psychiatry 2001; 23:124-132.
22. Kligerman MJ, McKegney FP. Patterns of psychiatric consultation in two general hospitals. Psychiatr Med 1971; 2:126-132.
23. Lipowski ZJ. Consultation-liaison psychiatry: an overview. Am J Psychiatry 1974; 131: 623-630.
24. Lipowski ZJ. Consultation-liaison psychiatry: the first half century. Gen Hosp Psychiatry 1986; 8: 305-315.
25. Lipowski ZJ, Wolston EJ. Liaison psychiatry: referral patterns, and their stability over time. Am J Psychiatry 1981; 138: 1608-1611.
26. Loewenstein RJ, Sharfstein SS. Psychiatric consultations at the NIH. Gen Hosp Psychiatry 1983; 5: 83-87.
27. Malhotra S, Malhotra A. Liaison psychiatry in an Indian general hospital. Gen Hosp Psychiatry 1984; 6: 266-270.
28. Mayou R, Hauton K. Psychiatric Disorders in the General Hospital. Br J Psychiatry 1986; 149: 172-190.
29. Mc Kegney FP, Beckhardt RM. Evaluative Research in Consultation-Liaison Psychiatry: Review of Literature 1970-1981. Gen Hosp Psychiatry 1982; 4: 197-218.
30. Ozkan M, Özkan S, Kaçmaz N, Akkaş S. KLP Bilim Dalı'ndan 1995-1996 yıllarında istenen konsültasyonların değerlendirilmesi. Nöropsikiyatri Arşivi 1998; 35: 77-88.
31. Özkan S. Psikiyatrik Tıp: Konsültasyon Liyezon Psikiyatrisi Tanımı, Kavramları, Hizmet Alanı, Eğitim ve Araştırma Objektifleri İle Dünyada gelişimi ve Bir Bilim Dalı ve Uzmanlık Alanı Olarak Kurumsallaşması. Konsültasyon Liyezon Psikiyatrisi Kongre Kitabı 1994-1995. İstanbul, 1996.
32. Ozkan S, Yücel B, Turgay M, Gürel Y. The development of psychiatric medicine at Istanbul Faculty of Medicine and Evaluatıon of 889 psychiatric referrals. Gen Hosp Psychiatry 1995; 17: 216-223.
33. Öztürk O. Ruh sağlığı ve hastalıkları. Ankara: Hacettepe, 1987.
34. Perez EL, Silverman M. Utilization pattern of a Canadian psychiatric consultation service. Gen Hosp Psychiatry 1983; 5: 185-190.
35. Ries RK, Bokan JA, Kleinman A, Schuckit MA. Psychiatric consultation-liaison service: patients, requests, and functions. Gen Hosp Psychiatry 1980; 3: 204-212.
36. Rigatelli M, Ferrari S. The Modena consultation liaison psychiatry service, Italy. Br J Psychiatry 2004; 184: 268-269.
37. Rodin G, Craven J, Littlefield C. Depression in the medicall Ill-An integrated approach. New York: Brunner/Mazel, 1991.
38. Rothenhausler HB, Ehrentraut S, Kapfhammer HP. Changes in patterns of psychiatric referral in a German general hospital: results of a comparison of two 1-year surveys 8 years apart. Gen Hosp Psychiatry 2001; 23:205-214.
39. Schofield A, Doonan H, Daly RJ. Liaison psychiatry in an Irish hospital: a survey of a year's experience. Gen Hosp Psychiatry 1986; 8: 119-122.
40. Torem M, Saravay SM, Steinberg H. Psychiatirc liaison: benefits of an "active" approach. Psychosomatics 1979; 20: 598-611.
41. Wallen J, Pincus HA, Goldman HH, Marcus SE. Psychiatric consultations in short-term general hospitals. Arch Gen Psychiatry 1987; 44: 163-168.
42. Zuo C, Yang L, Chu CC. Patterns of psychiatric consultations in a Chinese general hospital. Am J Psychiatry 1985; 42: 1092-1094.