Received: 6.11.2005 **Accepted: 6.3.2006**

Short communication

Consultation-liaison psychiatry in a general hospital

M. Maroufi, A. Pedram**, A. Malekian***, F. Kianvash****, M. Maroufi*****, Z. Gerivani*****

Abstract

BACKGROUND: At least one half of all patients who admitted to general hospitals, suffer from psychiatric co-morbidities. Management of mental disorders in these patients, significantly, improves the course and outcome of medical diseases. The aim of this survey was to answer the following questions: 1) what is the rate of diagnosable psychiatric symptoms among medical and surgical inpatients? and 2) what proportion of them undergo psychiatric consultation?

METHODS: Three hundred and ninety two patients admitted to medical and surgical wards of Alzahra hospital (Isfahan) from January 2005 until March 2005 were evaluated by the revised form of psychiatric symptoms checklist (SCL-90-R). The total referral records were also maintained and compared with the data of morbidity.

RESULTS: One hundred and fifty six (42.7%) of the evaluated subjects had psychiatric co-morbidities. The most prevalent psychiatric symptoms determined in this group were depression, somatization and anxiety. Only 84 (3%) of these patients had undergone psychiatric consultation.

CONCLUSIONS: This study demonstrates that many of the patients, who are admitted to general hospitals, may have psychiatric co-morbidities but only a very small percentage of them receive appropriate mental cares.

KEY WORDS: Consultation-liaison psychiatry, general hospital, mental disorder.

JRMS 2006; 11(3): 193-197

Consultation-liaison psychiatry bridges nonpsychiatric and psychiatric wards in general hospitals [1]. At least 30-60 % of inpatients in general hospitals seem to be involved in one or more psychiatric disorders simultaneously [2]. This co-morbidity worsens the course and prognosis of medical illnesses [3] and also makes hospitalization period longer [4].

For example, asthmatic patients who were simultaneously involved in depression, experience asthmatic attacks three folds more than those with no depression; mortality rate of cardiac patients in CCU who were depressed, was more than their non-depressed identical cases [5]. Furthermore, the lengths of hospital stay and the rate of recurrence in patients with psychiatric problems were more than those in patients without psychiatric problems [6]. For example, physically-ill patients with depression, stayed in hospital significantly longer than those without [7].

In spite of these facts, the number of patients referred for psychiatric consultation is quite lower than expected rate, even in world well-known hospitals. It seems that only 3-12 % of the patients who are admitted to general hospitals and have psychiatric problems, undergo psychiatric consultation [8].

Extensive research work is done internationally relating to the morbidity of psychiatric

*Associate Professor of Psychiatry, Isfahan University of Medical Sciences, Isfahan, Iran.
**Clinical Psychologist.
***Assistant Professor of Psychiatry, Isfahan University of Medical Sciences, Isfahan, Iran.
****General Practitioner.
*****Academic Member of Nursing and Midwifery Faculty.
Correspondence to: Dr Mohsen Maroufi, Associate Professor of Psychiatry, Isfahan University of Medical Sciences, Isfahan, Iran.
e-mail: maroufi@med.mui.ac.ir

disorders in general medical departments but, no Iranian data have been available so far.

The present study plans to discuss two major issues: 1) to define the prevalence of psychiatric symptoms among patients admitted to non-psychiatric wards of a major academic hospital in Isfahan and 2) to determine the rate of referral for psychiatric consultation on these patients.

Methods

In a descriptive analytic cross-sectional study 392 medical and surgical admitted patients in Alzahra hospital in the first three months of 2005, were randomly selected (10% of the beds of each hospital ward) and were evaluated regarding psychiatric symptoms. The research instrument was the Persian translation of Psychiatric Symptoms Check List-Revised (SCL-90-R) [9].

The first page of the given form included demographic data, some explanations about the study and assuring reminds about patients' privacy as well as a written consent form. To increase the privacy, questionnaires did not include patient's family name. Other pages included SCL-90-R questions which had an approved validity and reliability according to previous study [9]. The questionnaires were given to the patients at their beds and then collected after being completed. Non cooperative patients or those with incomplete answers were dropped out and the rest of the questionnaires were summed up by Likert scales. Data were analyzed using t-test and ANOVA based on the type of hospital ward. Finally, the results were presented in tables and figures.

Results

In the winter 2005, a total of 6720 patients, including 3575 (53.2 %) women and 3145 (46.8 %) men were hospitalized in medical and surgical wards of Alzahra hospital in Isfahan. From 392 randomly selected subjects, 15 non cooperative patients in addition to 12 incompletely answered questionnaires were excluded from the study.

The findings obtained from the rest of 365 questionnaires showed that 156 patients (42.7%) had noticeable psychiatric symptoms. The most prevalent psychiatric symptoms determined in this group were depression, somatization and anxiety. The highest frequency of mental symptoms was found among patients hospitalized in neurosurgery and neurology wards, while the lowest rates belonged to patients of the wards of urology and infectious disease (figure 1). Except for psychotic symptoms which were more common among men (P = 0.59), all other psychiatric symptoms prevailed among women and the higher age groups were more vulnerable.

On the other hand, at the same time, there were only 84 requests for psychiatric consultation received by consultation-liaison psychiatry unit of Alzahra hospital. In other words, in spite of the fact that about 50 % of the patients had been found to have psychiatric morbidity, according to SCL-90-R, psychiatric consultation had been requested for only 2.9 % of the cases (figure 2).

Discussion

Psychiatric symptoms and disorders are serious problems absorbing high health service provision capacities [3]. As emphasized by many other studies, a high ratio of the patients in non-psychiatric wards of general hospitals suffers from psychiatric disorders. For example, Kisely (2002) claims that 30- 60 % of admitted patients in general hospitals suffer from one major psychiatric disorder [10]. Meanwhile, somatoform, mood and anxiety disorders are among the most prevalent diagnosed disorders [5]. The management of co-morbid psychiatric and physical illness is an important issue for health services [11]. It seems that co- morbid psychiatric disorders, negatively affect the course and prognosis of the medical diseases due to changes and irregularities in autonomous nervous, endocrine and immune systems [12].

There have already been numerous studies about the effect of consultation-liaison psychiatry on the quality of life in hospitalized

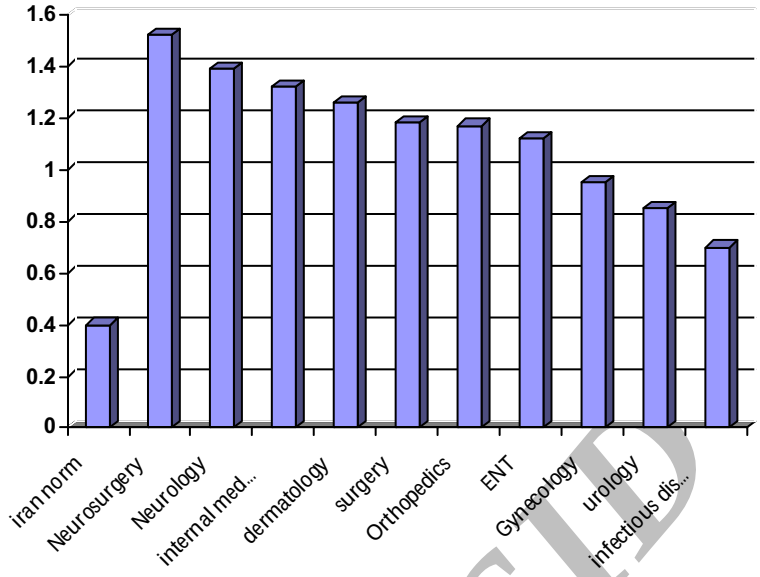

Figure 1. Prevalence of psychiatric symptoms in different wards of Alzahra hospital.

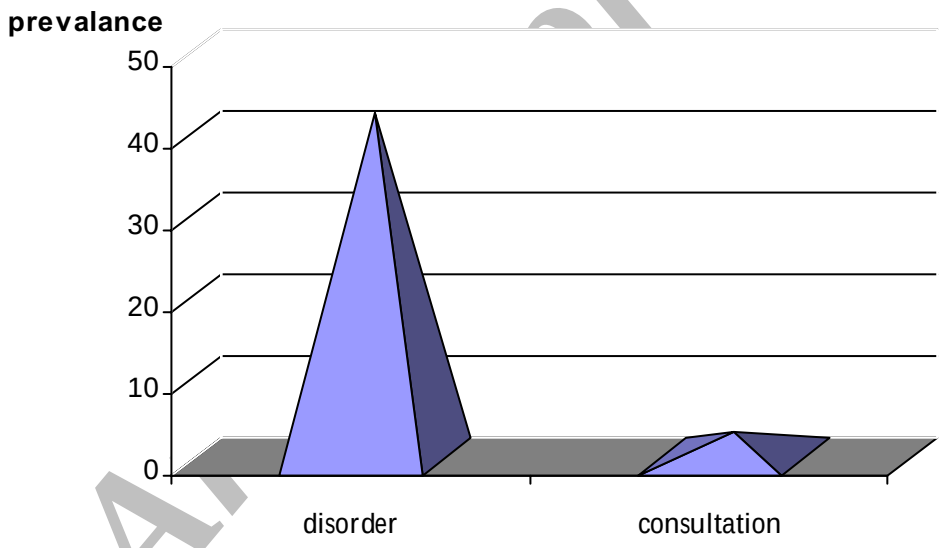

Figure 2. Comparison of psychiatric morbidity and requested psychiatric consultation in Alzahra hospital.

patients, indicating a noticeable association between the diagnosis and treatment of psychiatric disorders in physical patients and their faster cure, shorter hospitalization period, less recurrence of disease and lower costs of treatment [13]. For example, Chadda (2001) showed that spending just two million dollars on consultation-liaison psychiatry can save sixteen million dollars in return [14]. On the other hand, non-psychiatric medical professionals seem to be reluctant towards clinical diagnosis of psychiatric disorders and have a significantly high threshold in this regard. This is so that only 5 % of the patients who need psychiatric consultation undergo such a consultation [3]. Although specially planned psychiatric consultation-liaison services have been well established in North America for more than 30 years [15], the

development of consultation-liaison psychiatry in Iran has been promoted only in a few last years.

In the present study, only 84 patients out of 2869, who were estimated to need psychiatric care (less than 3 %), underwent consultation (mostly at the end of hospitalization period with no follow up). In many studies, the ratio of consultation-liaison frequency per total admissions has been calculated as the consultation rate. If we do so, there was a 1.2 % rate for psychiatric consultation in Alzahra hospital. Although it was similar to the consultation rates found in previously published studies in many countries such as Turkey (1.1 %) [16], China (0.7 %) [17], India (1.5 %) [18], Ireland (1.6 %) [19], Canada (2 %) [20], the Netherlands (2.1 %) [21] and the United Kingdom (1.0 %) [22], but it was lower than the average overall referral rates of the United States (5.8 %) [23]. This comparison demonstrates the need for improvement of present condition.

Considering the high prevalence of psychiatric disorders and their negative effects on physical condition, turning the faces of other medical professionals towards detecting psychiatric co-morbidities can result in the promotion of patients' health and quality of life. For this purpose, establishing communal scientific meetings and paying more attention to consultation-liaison psychiatry in different levels of medical education seem essential.

References

1. de Cruppe W, Hennch C, Buchholz C, Muller A, Eich W, Herzog W. **Communication between psychosomatic C-L consultants and general practitioners in a German health care system**. *Gen Hosp Psychiatry* 2005; 27(1):63-72.
2. Bourgeois JA, Wegelin JA, Servis ME, Hales RE. **Psychiatric diagnoses of 901 inpatients seen by consultation-liaison psychiatrists at an academic medical center in a managed care environment**. *Psychosomatics* 2005; 46(1):47-57.
3. Vincze G, Tury F, Muranyi I, Kovacs J. **[Psychiatric symptoms in general medical hospital units--assessment of the need for psychiatric consultation-liaison in Hungary]**. *Neuropsychopharmacol Hung* 2004; 6(3):127-132.
4. Wilhelm K, Kotze B, Waterhouse M, Hadzi-Pavlovic D, Parker G. **Screening for Depression in the Medically Ill: a comparison of self-report measures, clinician judgment, and DSM-IV diagnoses**. *Psychosomatics* 2004; 45(6):461-469.
5. Lipsitt DR. **What do consultation-liaison (C-L) psychiatry and psychosomatic medicine (PM) have in common?** *Seishin Shinkeigaku Zasshi* 2003; 105(3):332-338.
6. Abidi MA, Gadit AA. **Liaison psychiatry and referral rates among hospitalized patients**. *J Coll Physicians Surg Pak* 2003; 13(5):274-276.
7. Aoki T, Sato T, Hosaka T. **Length of stay for medically ill patients with depression**. *Seishin Shinkeigaku Zasshi* 2003; 105(3):346-349.
8. Diefenbacher A. **Consultation-liaison psychiatry and psychosomatics in Germany: futile dispute or lesson to be learned? Introductory comment**. *Adv Psychosom Med* 2004; 26:177-180.
9. Ford I ,Whiffin M. **The role of the psychiatric ICU**. *Nurs Times* 1991; 87(51):47-49.
10. Kisely S, Horton-Hausknecht J, Miller K, Mascall C, Tait A, Wong P et al. **Increased collaboration between primary care and psychiatric services. A survey of general practitioners' views and referrals**. *Aust Fam Physician* 2002; 31(6):587-589.
11. Holmes J, Bentley K, Cameron I. **A UK survey of psychiatric services for older people in general hospitals**. *Int J Geriatr Psychiatry* 2003; 18(8):716-721.
12. Sternhell PS, Corr MJ .**Psychiatric morbidity and adherence to antiretroviral medication in patients with HIV/AIDS**. *Aust N Z J Psychiatry* 2002; 36(4):528-533.
13. Ozaki N. **[Present status of consultation-liaison psychiatry]**. *Seishin Shinkeigaku Zasshi* 2003; 105(12):1431-1436.
14. Chadda RK. **Psychiatry in non-psychiatric setting--a comparative study of physicians and surgeons**. *J Indian Med Assoc* 2001; 99(1):24, 26-27, 62.
15. 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(4):205-214.
16. Ozkan S, Yucel B, Turgay M, Gurel Y. **The development of psychiatric medicine at Istanbul Faculty of Medicine and evaluation of 889 psychiatric referrals**. *Gen Hosp Psychiatry* 1995; 17(3):216-223.

17. Zuo C, Yang L, Chu CC. **Patterns of psychiatric consultation in a Chinese general hospital**. *Am J Psychiatry* 1985; 142(9):1092-1094.
18. Malhotra S, Malhotra A. **Liaison psychiatry in an Indian general hospital**. *Gen Hosp Psychiatry* 1984; 6(4):266-270.
19. Schofield A, Doonan H, Daly RJ. **Liaison psychiatry in an Irish hospital: a survey of a year's experience**. *Gen Hosp Psychiatry* 1986; 8(2):119-122.
20. Perez EL, Silverman M. **Utilization pattern of a Canadian psychiatric consultation service**. *Gen Hosp Psychiatry* 1983; 5(3):185-190.
21. Hengeveld MW, Rooymans HG, 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(4):271-279.
22. Fiebiger D, Ficker F, Winiecki P, Stein B, Herzog T. **[Psychiatric consultation service at the Psychiatric Clinic of the Gorlitz Municipal Clinic GmbH, ECLW]**. *Psychiatr Prax* 1997; 2.۱۳۳-۱۲۹:(۳)٤
23. Hales RE, Polly S, Bridenbaugh H, Orman D. **Psychiatric consultations in a military general hospital. A report on 1065 cases**. *Gen Hosp Psychiatry* 1986; 8(3):173-182.