

Changes in Consultation-liaison Psychiatry in the First Five Years of Operation of A Newly-opened Hospital

Jian-An Su^{1,3,4}, MD; Shih-Yong Chou^{1,3,4}, MD; Chee-Jen Chang^{2,3}, PhD;
Hsu-Huei Weng^{3,4,5}, MD, MPH

Background: Many studies have addressed changes in psychiatric consultation variables, but data from newly-opened hospitals is scarce. Thus, the aim of this study was to investigate changes in consultation-liaison services in the first five years of operation of a newly-opened hospital and compare this with similar data from established hospitals.

Methods: Psychiatric consultations in the first five years of operation of a new hospital were reviewed and psychiatric variables, including reason for referral, psychiatric diagnosis, physical condition leading to hospitalization, and recommended management, were collected.

Results: There were 1,610 psychiatric consultations in these five years, and the overall consultation rate was 1.30% of all admissions. The rate was relatively low in the first year, especially from the surgery department, but increased and then stabilized. The reasons for most referrals did not change significantly over the 5 years. Depression was the most frequent reason for referral and the major diagnosis during the study period. Although the diagnosis of depression increased significantly over the years, depression as a reason for referral did not increase consistently. A drug prescription was the most frequent recommendation, and medications shifted to more atypical antipsychotics and newer antidepressants over the study period.

Conclusions: Most variables were stable, but there were still some interesting findings. The consultation rate was lower during the first year of the study period than later. Underdetection and underrecognition of depression persisted over the 5 years. Further comprehensive postgraduate education for physicians and arrangement of timely consultations are needed. These results could offer information on psychiatric consultations to other hospitals that are going to open in the future.

(*Chang Gung Med J* 2010;33:292-300)

Key words: consultation-liaison, changes, newly-opened hospital

An epidemic of psychiatric morbidities has been reported among approximately one third of general hospital inpatients.⁽¹⁻⁴⁾ Poor outcome, prolonged hospital stay, higher mortality, and the consumption

From the ¹Department of Psychiatry; ²Department of Radiology, Chang Gung Memorial Hospital at Chiayi, Chang Gung University College of Medicine, Taoyuan, Taiwan; ³Resources Center for Clinical Research, Chang Gung Memorial Hospital, Taiwan; ⁴Graduate Institute of Clinical Medical Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan; ⁵Department of Nursing, Chang Gung Institute of Technology, Taoyuan, Taiwan.

Received: Feb. 16, 2009; Accepted: Jul. 16, 2009

Correspondence to: Dr. Shih-Yong Chou, Department of Psychiatry, Chang Gung Memorial Hospital at Chiayi, 6, W. Sec., Jiapu Rd., Puzih City, Chiayi County 613, Taiwan (R.O.C.) Tel.: 886-5-3621000 ext. 2300; Fax: 886-5-3628175;

E-mail: seanchou@ms23.hinet.net

of more health resources have been identified in medically ill inpatients with psychiatric morbidity compared to those without psychiatric morbidity.⁽⁵⁻⁸⁾ It was also reported that earlier identification and management of psychiatric problems decrease medical costs significantly.⁽⁹⁻¹¹⁾

Many previous studies have described the characteristics of consultation-liaison services over one or more years.^(5,12-16) However, it is very difficult to compare changes in consultation characteristics among those studies because of the different hospital settings, consultants, study periods, sample sizes and classification systems. Some studies overcame those difficulties by focusing on one institution and comparing data from two different periods or over consecutive years.⁽¹²⁻²¹⁾ In those studies, some characteristics showed change, and others did not. However, all of the studies were conducted in established hospitals, so little is known about the changes in consultation in newly-opened hospitals. Thus, to establish whether there are any stable or changing key variables in consultation at newly-opened hospitals, we focused on a hospital that opened at the end of 2001, and collected all psychiatric consultation data from the first to the fifth year.

METHODS

Using chart reviews, we retrospectively examined all psychiatric consultations for inpatients over 18 years old in the first five years of operation of a general hospital which opened on December 16, 2001. The hospital had approximately 700 beds, and there was no significant change in that scale over the five years. The psychiatric services here included outpatient services, daycare care, and consultation. No psychiatric ward for either acute or chronic patients was available. Psychiatric consultations for inpatients in this hospital were evaluated and requested by primary care providers. All of the consultations were conducted by board-certified psychiatrists. The psychiatric diagnoses were based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. In addition to psychiatrists, psychologists and social workers also took part in the consultation service to manage psychosocial problems. Consultation sheets with diagnoses and recommendations were sent to the primary care doctors after consultation. Variables collected from the

consultation sheets in our study included patient data, referring department, major physical problems on admission, reason for referral, major psychiatric diagnosis, and treatment recommendations. The study was approved by the Institution Review Board of Chang Gung Memorial Hospital.

Descriptive statistics were calculated for the consultation rate, patient data, reasons for referral, psychiatric diagnoses and recommendations. Continuous variables were analyzed by ANOVA, while categorical variables were analyzed by the Pearson chi-square test and the chi-square test for trend for comparison. The data were adjusted by Fisher's exact test if the number of cases was less than 5. All statistical analyses were performed with SPSS version 12.0 software, and *p* values less than 0.05 were considered statistically significant.

RESULTS

Patient data, referring department and consultation rate

The patient data, referring department and consultation rate are shown in Table 1. There were 1,610 psychiatric consultations in these five years, and the overall consultation rate was 1.30% of all admissions. The annual consultation rate was relatively low in the first year, and then gradually stabilized. Males were predominant and the department of internal medicine accounted for the majority of consultations. No significant difference was detected in age ($F = 1.43, p = 0.222$) or gender ($\chi^2 = 3.87, df = 4, p = 0.424$) during the five years. The change of referring departments was borderline significant ($\chi^2 = 14.60, df = 8, p = 0.067$), and consultations from the surgery department were lower in the first year.

Reasons for referral

The distribution of reasons for referral is depicted in Table 2. The most frequent reasons for referral overall were depression, confusion, suicide attempts or risks and sleep problems. After further analysis, a significant increase in sleep problems was found ($\chi^2 = 10.43, df = 4, p = 0.033$). Consultations for depression increased gradually (Trend test: $p < 0.05$), but referrals for substance-related problems decreased (Trend test: $p < 0.05$). However, neither was statistically significant ($\chi^2 = 7.58, df = 4, p = 0.101$ and $\chi^2 = 7.72, df = 4, p = 0.103$). The proportions for the

Table 1. General Psychiatric Consultation Information

	Total N = 1610 (%)	2002 N = 206 (%)	2003 N = 343 (%)	2004 N = 373 (%)	2005 N = 373 (%)	2006 N = 315 (%)
Age*	55.9 ± 17.9	55.6 ± 19.2	55.6 ± 18.1	55.1 ± 17.6	55.2 ± 17.8	58.0 ± 17.4
Gender†						
Male	887 (55.1)	106 (51.5)	180 (52.5)	208 (55.8)	208 (55.7)	185 (59.5)
Female	723 (44.9)	100 (48.5)	163 (47.5)	165 (44.2)	165 (44.3)	130 (40.5)
Referring department‡						
Medicine	972 (60.4)	144 (69.9)	213 (62.1)	211 (56.6)	221 (59.2)	183 (58.1)
Surgery	492 (30.6)	49 (23.8)	96 (28.0)	121 (32.4)	118 (31.6)	108 (34.3)
Others	146 (9.1)	13 (6.3)	34 (9.9)	41 (11.0)	34 (9.1)	24 (7.6)
Total admissions	123,806	19,506	24,537	26,915	28,017	24,831
Consultation rate	1.30%	1.06%	1.40%	1.39%	1.33%	1.27%

*: $p = 0.222$ in ANOVA; †: $p = 0.424$ in Pearson chi-square test, $p = 0.059$ in chi-square test for trend; ‡: $p = 0.067$ in Pearson chi-square test.

Table 2. Reasons for Referral

	Total N = 1610 (%)	2002 N = 206 (%)	2003 N = 343 (%)	2004 N = 373 (%)	2005 N = 373 (%)	2006 N = 315 (%)
Depression†	296 (18.4)	27 (13.1)	55 (16.0)	79 (21.2)	74 (19.8)	61 (19.4)
Confusion	207 (12.9)	28 (13.6)	46 (13.4)	46 (12.3)	45 (12.1)	42 (13.3)
Suicide attempts or risks	205 (12.7)	27 (13.1)	45 (13.1)	40 (10.7)	51 (13.7)	42 (13.3)
Sleep problems*†	187 (11.6)	21 (10.2)	36 (10.5)	34 (9.1)	44 (11.8)	52 (16.5)
Substance-related problems†	155 (9.6)	25 (12.1)	32 (9.3)	45 (12.1)	32 (8.6)	21 (6.7)
Psychogenic or unexplained physical problems	115 (7.1)	21 (10.2)	21 (6.1)	28 (7.5)	29 (7.8)	16 (5.1)
Past psychiatric history	102 (6.3)	19 (9.2)	22 (6.4)	19 (5.1)	26 (7.0)	16 (5.1)
Unstable mood or irritability	83 (5.2)	9 (4.4)	22 (6.4)	16 (4.3)	21 (5.6)	15 (4.8)
Psychotic symptoms	72 (4.5)	11 (5.3)	18 (5.2)	17 (4.6)	13 (3.5)	13 (4.1)
Anxiety	70 (4.3)	5 (2.4)	14 (4.1)	18 (4.8)	21 (5.6)	12 (3.8)
Uncooperative or violent behavior	37 (2.3)	5 (2.4)	9 (2.6)	6 (1.6)	7 (1.9)	10 (3.2)
Request by patient's family	14 (0.9)	2 (1.0)	3 (0.9)	5 (1.3)	1 (0.3)	3 (1.0)
Bizzare behavior	32 (2.0)	5 (2.4)	10 (2.9)	6 (1.6)	7 (1.9)	4 (1.3)
Others (pre-op re-evaluation, disposition, certification, etc.)	32 (2.0)	1 (0.5)	7 (2.0)	14 (3.8)	2 (0.5)	8 (2.5)
Major life event	3 (0.2)	0	3 (0.9)	0	0	0

*: $p < 0.05$ in Pearson chi-square test; †: $p < 0.05$ in Chi-square test of trend.

other reasons for referral were all below ten percent each, and none of them showed a significant change over the years.

Major physical diagnoses

The most frequent physical conditions that contributed to hospitalization were trauma and orthopedic complaints, followed by infection, gastrointestinal problems, and cancer. There were no significant changes in the catalog of physical diagnoses except for cancer ($\chi^2 = 17.32$, $df = 4$, $p = 0.002$), gastrointestinal disease ($\chi^2 = 9.87$, $df = 4$, $p = 0.043$) and renal disease ($\chi^2 = 24.79$, $df = 4$, $p < 0.001$). Consultations for cancer patients steadily increased from 6.3% to 17.1% during the five years (Trend test: $p < 0.001$), but consultations for those with renal and gastrointestinal disease decreased (Trend test: $p < 0.01$).

Major psychiatric diagnoses

Of the final major psychiatric diagnoses, depressive disorders, delirium, substance use disorder and

adjustment disorder were the most common during the five years. Depressive disorders ranked first over the years. Depressive disorders and dementia were the only two diagnoses with statistically significant increases during the study period ($\chi^2 = 17.27$, $df = 4$, $p = 0.002$ and $\chi^2 = 11.76$, $df = 4$, $p = 0.019$). The trend test also showed statistical significance. The other diagnoses showed no significant changes. The distribution of psychiatric diagnoses is depicted in Table 3.

Recommended management and prescription patterns

Treatment strategies are shown in Table 4. Prescription for psychotropic medications was the most frequent recommendation, followed by outpatient department management and psychosocial intervention. There was a significant increase in prescriptions ($\chi^2 = 37.94$, $df = 4$, $p < 0.001$), and use of more atypical antipsychotics ($\chi^2 = 99.94$, $df = 4$, $p < 0.001$) and newer antidepressants ($\chi^2 = 60.41$, $df = 4$, $p < 0.001$) over the 5 years. The trend test also

Table 3. Psychiatric Diagnoses

	Total N = 1610 (%)	2002 N = 206 (%)	2003 N = 343 (%)	2004 N = 373 (%)	2005 N = 373 (%)	2006 N = 315 (%)
Depressive disorder ^{†§}	456 (28.3)	45 (21.8)	86 (25.1)	94 (25.2)	127 (34.0)	104 (33.0)
Delirium	224 (13.9)	30 (14.6)	58 (16.9)	56 (15.0)	37 (9.9)	43 (13.7)
Substance use disorder	188 (11.7)	29 (14.1)	34 (9.9)	53 (14.2)	42 (11.3)	30 (9.5)
Adjustment disorder	165 (10.2)	17 (8.3)	31 (9.0)	41 (11.0)	41 (11.0)	35 (11.1)
Other organic mental disorder	157 (9.8)	25 (12.1)	39 (11.4)	37 (9.9)	28 (7.5)	28 (8.9)
Schizophrenia	72 (4.5)	14 (6.8)	14 (4.1)	19 (5.1)	17 (4.6)	8 (2.5)
Anxiety disorder	67 (4.2)	12 (5.8)	17 (5.0)	11 (2.9)	16 (4.3)	11 (3.5)
Dementia ^{*‡}	119 (7.4)	11 (5.3)	19 (5.5)	21 (5.6)	40 (10.7)	28 (8.9)
Sleep disorder	41 (2.5)	7 (3.4)	8 (2.3)	12 (3.2)	4 (1.1)	10 (3.2)
Personality disorder	11 (0.7)	3 (1.5)	5 (1.5)	1 (0.3)	1 (0.3)	1 (0.3)
Mental retardation	11 (0.7)	2 (1.0)	1 (0.3)	0 (0)	4 (1.1)	4 (1.3)
Somatoform disorder	13 (0.8)	2 (1.0)	3 (0.9)	3 (0.8)	2 (0.5)	3 (1.0)
Delusional disorder	3 (0.2)	1 (0.5)	0	1 (0.3)	1 (0.3)	0
Eating disorder	2 (0.1)	1 (0.5)	0	0	1 (0.3)	0
Bipolar disorder	21 (1.3)	0	6 (1.7)	3 (0.8)	5 (1.3)	7 (2.2)
Others	32 (2.0)	3 (1.5)	13 (3.8)	10 (2.7)	4 (1.1)	2 (0.6)
No diagnosis	28 (1.7)	4 (1.9)	9 (2.6)	11 (2.9)	3 (0.8)	1 (0.3)

*: $p < 0.05$ in Pearson chi-square test; †: $p < 0.01$ in Pearson chi-square test; ‡: $p < 0.01$ in Chi-square test of trend; §: $p < 0.001$ in Chi-square test of trend.

Table 4. Recommendations from the Consultation

	Total N = 1610 (%)	2002 N = 206 (%)	2003 N = 343 (%)	2004 N = 373 (%)	2005 N = 373 (%)	2006 N = 315 (%)
Medication ^{†§}	1432 (88.9)	163 (79.1)	292 (85.1)	342 (91.7)	350 (93.8)	285 (90.5)
Psychosocial ^{**‡}	524 (32.5)	54 (26.2)	93 (27.1)	123 (33.0)	150 (40.2)	104 (33.0)
Physical survey	185 (11.5)	29 (14.1)	43 (12.5)	33 (8.8)	38 (10.2)	42 (13.3)

*: $p < 0.05$ in Pearson chi-square test; †: $p < 0.001$ in Pearson chi-square test; ‡: $p < 0.01$ in Chi-square test of trend; §: $p < 0.001$ in Chi-square test of trend.

showed statistical significance ($p < 0.001$). On the other hand, the use of typical antipsychotics and traditional antidepressants decreased over the years. The prescription pattern of antidepressants and antipsychotics is shown in Table 5.

DISCUSSION

Consultation rate

Some studies have indicated consultation rates increased over the years,^(18,22) but others show decreased rates.⁽²⁰⁾ Diefenbacher and Strain report one study that covered ten consecutive years, and revealed consultation rates fluctuated between 0.9 and 1.7%.⁽¹⁷⁾ In our study, consultation rates were relatively low in the first year, and then seemed to stabilize at around 1.40%, which was still within the

range of other reported consultation rates, which varied from 0.5% to 9.6%.⁽²²⁾ Although our consultation rate was comparable to others, it was still far from the reported prevalence of psychiatric morbidities of approximately 26.8% to 38%⁽¹⁻⁴⁾ among inpatients. This discrepancy might be due to our study method, in which psychiatrists were consulted passively rather than screening all inpatients actively. Steinberg et al. also indicated some reasons why physicians resist psychiatric consultations,⁽²³⁾ and in order to resolve this problem, more communication and education is needed.

Referring department

In accordance with other studies, the department of internal medicine accounted for the majority of consultations, followed by the surgery department,⁽¹²⁻

Table 5. Prescription Pattern and Category of Antidepressants and Antipsychotics

	2002	2003	2004	2005	2006
Antidepressants^{*†}					
Traditional antidepressants (TCA, SSRI, Trazodone)	70 (93.3%)	123 (82%)	122 (63.9%)	108 (54.5%)	89 (56.7%)
Newer antidepressants (SNRI, NaSSA, NDRI)	5 (6.7%)	27 (18.0%)	69 (36.1%)	90 (45.5%)	68 (43.3%)
Total number	75 (100%)	150 (100%)	191 (100%)	198 (100%)	157 (100%)
Antipsychotics^{*†}					
Typical	54 (78.3%)	59 (58.4%)	35 (31.0%)	29 (24.8%)	10 (11.9%)
Atypical	15 (21.7%)	42 (41.6%)	78 (69.0%)	88 (75.2%)	74 (88.1%)
Total number	69 (100%)	101 (100%)	113 (100%)	117 (100%)	84 (100%)

Abbreviations: TCA: tricyclic antidepressants; SSRIs: selective serotonin reuptake inhibitors; SNRI: serotonin norepinephrine reuptake inhibitor; NaSSA: noradrenergic and specific serotonergic antidepressants; NDRI: norepinephrine dopamine reuptake inhibitor; *: $p < 0.001$ in Pearson chi-square test; †: $p < 0.001$ in chi-square test for trend.

^{14,16,17,20,22,24} One reason was that more inpatients were in a medical than a surgical setting. Some papers have indicated that physicians in internal medicine have higher sensitivity and accuracy rates than surgeons in recognizing psychiatric problems.^(25,26) In our setting, the scale of the surgical ward did not change over these 5 years. Surgeons seem to underrecognize psychiatric morbidities, especially in the first year of operation in a newly-opened hospital. Thus, further education in detecting psychiatric problems, especially for surgeons, and the timely requesting of consultations are needed.

Patient data

In our study, the age and gender distribution did not change over the years. Other similar studies also showed consistency in age and gender.^(17,18,20) Male referrals outnumbered female referrals in our study, but other studies showed female referrals were predominant or reported no gender difference.^(5,13,14,16,17,19,22-24) The gender difference might result from the fact that the second and third most frequent diagnoses, delirium and substance use disorder, were all male predominant. On the other hand, a high proportion (37.4%) of our subjects was over 65 years old, and there might be relatively fewer gender differences in geriatrics than in younger age groups.

Reasons for referral and psychiatric diagnoses

Depressive disorders were the most frequent diagnoses in our study, and increased significantly over the 5 years. However, depression as a reason for referral did not increase consistently. Many studies have indicated that depression is easily misdiagnosed or underrecognized by primary care doctors,⁽²⁷⁻²⁹⁾ but most of these were cross-sectional surveys. Our study collected data from a five-year period, and indicated that the low rate of accurate detection of depression showed no improvement over this time, even though the diagnosis of depression showed a significant increase. This might be the most important and interesting finding in our study. In some studies, depressive disorders were not the most frequent diagnosis.^(14,19) In the first year, no one was diagnosed with bipolar disorder, but some bipolar cases were identified in the following years. The increase in this diagnosis may have occurred because the concept of bipolar spectrum disorder has become well-known in recent years.⁽³⁰⁾

Physical condition

Patients with trauma or orthopedic complaints accounted for the majority of those seeking consultation. It is understandable that patients with trauma are prone to mental problems.⁽³¹⁾ Cancer patients are also prone to suffer from adjustment disorder or depressive disorder, and face different psychological problems in different cancer stages.^(32,33) The increase in consultations for cancer patients might be one reason why the number of depressive diagnoses rose as well. In contrast to the increased consultations for cancer patients, there was a low referral rate for obstetric and gynecologic patients over the 5 years, as in other consultation-liaison studies.^(5,24) Even though a high prevalence of psychiatric disorders have been reported in obstetrics-gynecology clinics, underdetection and underrecognition of psychiatric morbidity are still very common.⁽³⁴⁻³⁶⁾ Postgraduate education for gynecologists and obstetricians is definitely necessary.

Recommended management

As in other similar studies, prescription of medication was the most frequent management.^(13,14,22,37) and it increased significantly over the 5 years. The use of antidepressants significantly increased year by year, and was consistent with the increase in depressive diagnoses. The prescription pattern in antidepressants also shifted to newer antidepressants. On the other hand, there was no significant increase in the prescription of antipsychotics, although the prescription pattern changed and more atypical antipsychotics were used in later years. Other studies have also indicated this trend in prescription patterns.^(13,17) Patients who needed further management after discharge were advised to follow up in the psychiatric outpatient department.

Psychiatric education during this five-year period

Routine postgraduate education in psychiatry for junior residents was implemented at the end of 2004 in our hospital. In addition, psychiatrists sometimes commented at the clinical pathological conferences and participated in combined case conferences with other specialists. No other formal educational programs were delivered to primary care physicians in the hospital. Therefore, in order to improve the low referral rate and the low level of correct recogni-

tion of psychiatric disorders, more regular and comprehensive psychiatric educational programs for all physicians are necessary.

Limitations

There were some limitations in our study. First, only the major psychiatric diagnosis for each patient was recorded. Other psychiatric comorbidities were not taken into consideration. Second, personal preferences in management and the difference between consultants and consultees over the study period were not considered. Third, the study was conducted in a single hospital only, so the results cannot be generalized to others. However, this study is still valuable, because information from a newly-opened hospital is scarce. Our results could offer information on psychiatric consultations to other hospitals that are going to open in the future.

Conclusions

Our study demonstrated changes in consultation-liaison psychiatry in the first five years of operation at a newly-opened hospital. Most consultation variables were stable, but there were some differences from studies conducted in established hospitals. The number of consultations was lower in the first year than in subsequent years, especially in the surgical department. Reasons for referral did not seem to change, but the diagnoses of depression and dementia significantly increased over the 5 years. As there were no comprehensive educational programs, psychiatric comorbidities, especially depression, were still underdetected in clinical practice over the 5 years. In order to avoid delays in psychiatric referral and the resulting increased use of medical resources, postgraduate education in detecting psychiatric morbidity correctly and in a timely manner is necessary and important. Education in a newly-opened hospital should focus on the most common psychiatric diagnoses, and on primary care providers, especially in the surgical and obstetrics-gynecological departments.

Acknowledgements

We would like to thank Dr. Hin-Yeung Tsang, Dr. Chi-Fa Hong, Dr. Chien-Chih Chen, Dr. Chiung-Yi Wang, Dr. Chun-Yang Lai and Dr. Rwei-Fong Tsai who were members of our team, and the Chang Gung Medical Research Program for the grants for

this study (CMRPG 660342, CMRPG660302).

REFERENCES

1. Martucci M, Balestrieri M, Bisoffi G, Bonizzato P, Covre MG, Cunico L, De Francesco M, Marinoni MG, Mosciaro C, Piccinelli M, Vaccari L, Tansella M. Evaluating psychiatric morbidity in a general hospital: a two-phase epidemiological survey. *Psychol Med* 1999;29:823-32.
2. Silverstone PH. Prevalence of psychiatric disorders in medical inpatients. *J Nerv Ment Dis* 1996;184:43-51.
3. Hansen MS, Fink P, Frydenberg M, Oxhoj M, Sondergaard L, Munk-Jorgensen P. Mental disorders among internal medical inpatients: prevalence, detection, and treatment status. *J Psychosom Res* 2001;50:199-204.
4. Seltzer A. Prevalence, detection and referral of psychiatric morbidity in general medical patients. *J R Soc Med* 1989;82:410-2.
5. Wallen J, Pincus HA, Goldman HH, Marcus SE. Psychiatric consultations in short-term general hospitals. *Arch Gen Psychiatry* 1987;44:163-8.
6. Saravay SM, Lavin M. Psychiatric comorbidity and length of stay in the general hospital. A critical review of outcome studies. *Psychosomatics* 1994;35:233-52.
7. Stevens LE, de Moore GM, Simpson JM. Delirium in hospital: does it increase length of stay? *Aust N Z J Psychiatry* 1998;32:805-8.
8. Lesperance F, Frasura-Smith N, Juneau M, Theroux P. Depression and 1-year prognosis in unstable angina. *Arch Intern Med* 2000;160:1354-60.
9. Levitan SJ, Kornfeld DS. Clinical and cost benefits of liaison psychiatry. *Am J Psychiatry* 1981;138:790-3.
10. Strain JJ, Lyons JS, Hammer JS, Fahs M, Lebovits A, Paddison PL, Snyder S, Strauss E, Burton R, Nuber G. Cost offset from a psychiatric consultation-liaison intervention with elderly hip fracture patients. *Am J Psychiatry* 1991;148:1044-9.
11. Kishi Y, Meller WH, Kathol RG, Swigart SE. Factors affecting the relationship between the timing of psychiatric consultation and general hospital length of stay. *Psychosomatics* 2004;45:470-6.
12. 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;17:216-23.
13. Grant JE, Meller W, Urevig B. Changes in psychiatric consultations over ten years. *Gen Hosp Psychiatry* 2001;23:261-5.
14. 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;23:205-14.
15. Brown TM, Waterhouse J. A psychiatric liaison service in

- a general hospital--eighteen years on. *Health Bull* 1987;45:190-6.
16. Lipowski ZJ, Wolston EJ. Liaison psychiatry: referral patterns and their stability over time. *Am J Psychiatry* 1981;138:1608-11.
 17. Diefenbacher A, Strain JJ. Consultation-liaison psychiatry: stability and change over a 10-year-period. *Gen Hosp Psychiatry* 2002;24:249-56.
 18. Anderson DN, Philpott RM. The changing pattern of referrals for psychogeriatric consultation in the general hospital: An eight-year study. *Int J Geriatr Psychiatry* 1991;6:801-7.
 19. Paddison PL, Strain JP, Strain JJ, Strain JJ. Psychiatric consults on medical and surgical wards: a six year study. *Int J Psychiatry Med* 1989;19:347-61.
 20. Carson AJ, Dawson H, Marshall D, Slatford K. Twenty-eight years of liaison psychiatry at a general hospital. *Psychiatr Bull* 1998;22:754-8.
 21. Lucas B, Doyle H. Thirty years of in-patient consultation-liaison at Guy's. *Psychiatr Bull* 1995;19:631-4.
 22. 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;6:271-9.
 23. Steinberg H, Torem M, Saravay SM. An analysis of physician resistance to psychiatric consultations. *Arch Gen Psychiatry* 1980;37:1007-12.
 24. Sobel SN, Munitz H, Karp L. Psychiatric consultations in two Israeli general hospitals. *Gen Hosp Psychiatry* 1988;10:298-304.
 25. Wancata J, Windhaber J, Bach M, Meise U. Recognition of psychiatric disorders in nonpsychiatric hospital wards. *J Psychosom Res* 2000;48:149-55.
 26. Balestrieri M, Bisoffi G, Tansella M, Martucci M, Goldberg DP. Identification of depression by medical and surgical general hospital physicians. *Gen Hosp Psychiatry* 2002;24:4-11.
 27. Liu CY, Chen CY, Cheng AT. Mental illness in a general hospital's family medicine clinic in Taiwan. *Psychiatry Clin Neurosci* 2004;58:544-50.
 28. Liu SI, Mann A, Cheng A, Tjung JJ, Hwang LC. Identification of common mental disorders by general medical doctors in Taiwan. *Gen Hosp Psychiatry* 2004;26:282-8.
 29. Dilts SL Jr, Mann N, Dilts JG. Accuracy of referring psychiatric diagnosis on a consultation-liaison service. *Psychosomatics* 2003;44:407-11.
 30. Akiskal HS, Akiskal KK, Lancrenon S, Hantouche EG, Fraud JP, Gury C, Allilaire JF. Validating the bipolar spectrum in the French National EPIDEP Study: overview of the phenomenology and relative prevalence of its clinical prototypes. *J Affect Disord* 2006;96:197-205.
 31. Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis GC, Andreski P. Trauma and posttraumatic stress disorder in the community: the 1996 Detroit Area Survey of Trauma. *Arch Gen Psychiatry* 1998;55:626-32.
 32. Derogatis LR, Morrow GR, Fetting J, Penman D, Piasetsky S, Schmale AM, Henrichs M, Carnicke CL Jr. The prevalence of psychiatric disorders among cancer patients. *JAMA* 1983;249:751-7.
 33. Aapro M, Cull A. Depression in breast cancer patients: the need for treatment. *Ann Oncol* 1999;10:627-36.
 34. Buekens P, van Heeringen K, Boutsen M, Smekens P, Mattellaer P. Depressive symptoms are often unrecognized in gynaecological practice. *Eur J Obstet Gynecol Reprod Biol* 1998;81:43-5.
 35. Bixo M, Sundstrom-Poromaa I, Bjorn I, Astrom M. Patients with psychiatric disorders in gynecologic practice. *Am J Obstet Gynecol* 2001;185:396-402.
 36. Smith MV, Rosenheck RA, Cavaleri MA, Howell HB, Poschman K, Yonkers KA. Screening for and detection of depression, panic disorder, and PTSD in public-sector obstetric clinics. *Psychiatr Serv* 2004;55:407-14.
 37. Huyse FJ, Herzog T, Lobo A, Malt UF, Opmeer BC, Stein B, de Jonge P, van Dijck R, Creed F, Crespo MD, Cardoso G, Guimaraes-Lopes R, Mayou R, van Moffaert M, Rigatelli M, Sakkas P, Tienari P. Consultation-Liaison psychiatric service delivery: results from a European study. *Gen Hosp Psychiatry* 2001;23:124-32.

一家新成立之綜合醫院其前五年照會精神醫學的變化

蘇建安^{1,3,4} 周士雍^{1,3,4} 張啓仁^{2,3} 翁旭惠^{3,4,5}

背景： 很多研究已經做過綜合醫院的精神科照會資料分析，但是卻沒有研究是針對一家新成立的綜合醫院。因此本研究的目的是要去分析一家新成立的綜合醫院其前五年照會精神醫學的變化。

方法： 回顧並收集前五年的他科住院病患照會精神科的會診資料，收集的資料包含會診原因、精神科的診斷、主要住院原因以及建議處置。

結果： 在前五年總共有 1,610 個會診紀錄，整體的會診率是 1.30%。照會率在第一年最低，但是之後有慢慢增加。憂鬱是最常見的會診原因跟診斷。雖然憂鬱症的診斷在這五年來有顯著增加，但是因憂鬱而會診的個案卻沒有同步增加。藥物的給予是最常見的處理方式，且藥物的種類漸漸轉成以新的抗憂鬱劑跟非典型抗精神病用藥為主。

結論： 大部分的照會資料在這五年來沒有太大的改變。整體照會率還是偏低。憂鬱症容易被忽略的情況並沒有隨時間而改善。後續的再教育應該加強非精神科醫師對精神疾病了解以及適時的提出會診。本研究的結果可以提供新成立之綜合醫院有關照會精神醫學方面的資訊。

(長庚醫誌 2010;33:292-300)

關鍵詞： 照會精神醫學，改變，新成立綜合醫院

長庚醫療財團法人嘉義長庚紀念醫院¹精神科，²放射診斷科；長庚大學³醫學院；⁴長庚紀念醫院臨床研究統計中心；⁵長庚大學臨床醫學研究所；⁶長庚技術學院護理系

受文日期：民國98年2月16日；接受刊載：民國98年7月16日

通訊作者：周士雍醫師，長庚醫療財團法人嘉義長庚紀念醫院精神科。嘉義縣613朴子市嘉朴路西段6號。

Tel.: (05)3621000轉2300; Fax: (05)3628175; E-mail: seanchou@ms23.hinet.net