The Role of Consulting Psychiatrists for Obstetric and Gynecologic Inpatients

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Background: The purpose of this study was to investigate the consultation psychiatry service to the Obstetrics and Gynecology Department in a general hospital, focusing on referral patterns and consultation recommendations.

Method: A retrospective review of the medical charts and consultation records of obstetric and gynecological patients referred for psychiatric consultation from Dec. 2003 to Nov. 2009 was performed.

Results: One hundred and eleven patients were referred during the 6-year period, a psychiatric referral rate of 0.11% among 99,098 obstetric and gynecologic admissions. Obstetric and gynecologic consultations comprised 0.64% of all psychiatric consultations. The most common reasons for referral were depression (52.25%), past psychiatric history (31.53%), insomnia (29.73%) and confusion (24.32%). The most common DSM-IV psychiatric diagnoses were depressive disorder (37.84%), schizophrenia and other psychoses (20.72%), delirium (17.12%) and adjustment disorder (10.81%). The most frequent physical diagnoses of referred patients were neoplasms (72.97%), infectious diseases (42.34%) and complications of pregnancy and puerperium (17.12%). Recommendations included pharmacological intervention (89.19%) and psychological management (72.07%).

Conclusion: The psychiatric referral rate of obstetric and gynecological inpatients was relatively low compared with that of other departments. More collaboration and liaison between gynecologists and consultation psychiatrists may provide better care for obstetric and gynecological inpatients.

(Chang Gung Med J 2011;34:57-64)

Key words: consultation psychiatry, Obstetrics and Gynecology Department

Patients admitted to a general hospital with comorbid psychiatric illness may not only suffer from functional impairment but also a poor quality of life. Psychiatric comorbidities may complicate diagnosis and treatment, and can influence the outcome and length of stay in a general hospital.¹² Few studies have focused on consultation/liaison psychiatric activities in obstetrics and gynecology units or reported on the clinical characteristics of referral patients.³⁵ Most consultation models are more doctor-centered than patient-centered; intervention is requested

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Received: Apr. 14, 2010; Accepted: Jun. 30, 2010

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on behalf of the consultee who initiates the process of consultation. The service provided in consultation models is related to conditions that interfere with the hospital care process rather than psychiatric comorbidity,\(^ {6-8} \) and underrecognition and undertreatment of psychiatric comorbidity is an important issue in the field of mental health. Twenty-six to thirty-eight percent of patients admitted to general hospitals have diagnosable psychiatric comorbidities, of whom 40-54% are diagnosed by their treating physicians, and only 11.7-3.1% are referred for psychiatric consultation.\(^ {9-11} \)

Few studies have focused on the psychiatric comorbidities of obstetric and gynecological inpatients and their referral for psychiatric consultation.\(^ {12-15} \) Most are from western countries. Culture and health policy differences (e.g., health insurance system) limit the generalization of those findings. The aim of this study was to investigate the clinical characteristics of obstetric and gynecologic inpatients referred for psychiatric consultation in a medical center in northern Taiwan. The reasons for referral by the consultee, psychiatric diagnoses, medical diagnoses, and treatment model were also studied.

**METHODS**

**Setting**

The study was conducted in a 3,000-bed university-affiliated teaching medical center in northern Taiwan. The obstetrics and gynecology inpatients service comprises 154 beds, and the department has around 15,000 inpatient admissions per year. The hospital’s consultation-liaison psychiatric team provides about 2,500 consultations per year, all of which are discussed and reviewed in a weekly consultation psychiatric service conference led by a professor and a senior attending psychiatrist. The diagnosis and treatment recommendations in each case are reevaluated and confirmed in this meeting.

**Subjects**

The subjects included in this study were obstetric and gynecological inpatients referred to the consultation-liaison psychiatric service from Dec. 2003 to Nov. 2009, and consisted of a total of 111 patients.

**Data collection**

A retrospective review of clinical charts and consultation records was performed, and the data collected included baseline data (age and marital status), physical diagnosis, psychiatric diagnosis, reasons for referral, and intervention recommended. Psychiatric diagnoses were based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Medical diagnoses were made by the in-charge gynecologists using the International Classification of Diseases (ICD) of the World Health Organization, ninth revision. The rate of psychiatric consultation in obstetric and gynecological inpatients during this 6-year period was also calculated.

**Statisc methods**

Simple descriptive analysis were used. The baseline data, physical diagnosis, psychiatric diagnosis, reasons for referral, and intervention recommended were analyzed using the Statistical Package for Social Science (SPSS) for Windows, Version 10.0.

**RESULTS**

**Utilization of the service**

One hundred and eleven patients or 0.11% (95% confidence interval [CI], 0.09% to 0.13%) of the 99098 gynecological and obstetric inpatients were referred for psychiatric consultation during the study period, which is a relatively low referral rate in comparison with the rates for the other major departments of the hospital such as the internal medical department (1.59%, 95% CI 1.55% to 1.63%), surgical department (1.33%, 95% CI 1.29% to 1.37%) and total inpatients, 1.45%. The gynecological-obstetric group represented 0.64% (95% CI 0.52% to 0.75%) of all consultation-liaison psychiatric referrals during the study period. The number of psychiatric referrals and referral rate for each department are shown in Table 1.

**Reasons for referral**

Up to three reasons for referral as stated by the consultee were recorded, and a mean of 2.41 reasons per patient were given. The most frequent reasons for referral were depression (52.25%, 95% CI 42.96% to 61.54%), past psychiatric history (31.53%, 95% CI 22.89% to 40.17%), insomnia (29.73%, 95% CI 21.23% to 38.23%), and confusion (24.32%, 95% CI 16.34% to 32.30%) (Table 2).
A maximum of three medical diagnoses were recorded for each patient. The most common ICD-9 medical diagnoses for the patients included in our study were neoplasms (72.97%, 95% CI 64.71% to 81.23%), infectious diseases (42.34%, 95% CI 31.15% to 51.53%), complications of pregnancy and puerperium (17.12%, 95% CI 10.11% to 24.13%), and diseases of the genitourinary system (4.50%, 95% CI 0.64% to 8.36%) (Table 3).

**Psychiatric diagnoses**

Up to three DSM-IV Axis I and II diagnoses were recorded at the termination of each consultation, with a mean of 1.09 diagnoses given for each patient. Most patients (97.30%, 95% CI 94.28% to 100.00%) received a psychiatric diagnosis according to the DSM-IV, with the most prevalent diagnoses being depressive disorder (37.84%, 95% CI 28.82% to 40.86%), schizophrenia and other psychoses (20.72%, 95% CI 13.18% to 28.26%), delirium (17.12%, 95% CI 10.11% to 24.13%), and adjustment disorder (10.81%, 95% CI 5.03% to 16.59%) (Table 4).

**Interventions**

The most frequent non-drug recommendation was psychological support (72.07%, 95% CI 63.73% to 80.42%); other non-drug recommendations were
psychotherapy (27.03%, 95% CI 18.77% to 35.29%), and behavior management (25.23%, 95% CI 17.15% to 33.30%). Psychiatric aftercare was recommended in 55 cases (49.55%, 95% CI 40.25% to 58.85%). Psychological management generally consisted of short-term supportive psychotherapy. Most psychiatric aftercare was administered through outpatient referral, and only one patient (0.9%, 95% CI 0.00% to 2.66%) was transferred to the inpatient service. The consultant suggested psychopharmacological intervention in 99 (89.19%) patients. The drug most frequently recommended was benzodiazepine; this was recommended and taken in 42.34%, (95% CI 33.15% to 51.53%) of patients, and not taken in 4.50%, (95% CI 0.65% to 8.36%), continued in 20.72%, (95% CI 31.15% to 51.53%) and discontinued in 6.31% (Table 5). A relatively high proportion of patients (20.72%, 95% CI 13.72% to 28.26%) had already been taking benzodiazepine. Interestingly, it was the medication the psychiatrist service most frequently suggested be discontinued (6.31%, 95% CI 1.78% to 10.83%). When antipsychotics and anticonvulsants were recommended, the consultee and all patients followed the recommendations, but when antidepressants or benzodiazepine were suggested, the drug was not taken in 14.71% and 9.61% of cases, respectively.

**DISCUSSION**

This is the first Taiwanese study to investigate the characteristics of psychiatric consultation referral in obstetric and gynecological inpatients. A previous study performed at Veterans General Hospital in Taipei some ten years ago only included obstetric inpatients.\(^{(14)}\)

The referral rate was found to be relatively low compared with the rates in other departments such as internal medicine and surgery. Low referral rates in obstetrics and gynecology departments have also been noted in Western studies;\(^{(12,15,16)}\) and Tsai and colleagues reported a 0.3% referral rate for obstetric inpatients.\(^{(14)}\) Although our data included gynecologic patients, the referral rate in our study was still much lower than that of other departments. We hypothesize that the reason for this low referral rate is that psychiatric comorbidity is underrecognized in this group of patients. Spitzer et al., utilizing the Primary Care Evaluation of Mental Disorders,\(^{(17)}\) found that psychiatric disorder was present in 20% of gynecologic and obstetric outpatients, and was not detected by the physician in 77% of cases.\(^{(18)}\) Using the same diagnostic tool, psychiatric disorders were recognized in 30.5% of gynecologic outpatients, but only 21.4% received some form of treatment.\(^{(19)}\)
Wancata et al. reported that 20.7% of gynecologic inpatients had a psychiatric disorder with a DSM-III diagnosis. The physicians’ sensitivity to psychiatric comorbidity was only 16%. Factors related to the underrecognition of psychiatric comorbidity and the low referral rate for psychiatric consultation have been discussed in the literature previously, and are hypothesized to include time pressure in daily practice, and even the action-oriented personality of the specialists.

To improve the psychiatric referral rate, joint gynecological-psychiatric education programs or continuous medical educational programs for obstetricians and gynecologists are highly recommended. Gynecology-psychiatry combined case conferences might also be a good way to enhance gynecologists’ alertness toward mental illness in their patient populations.

More than half of the reasons for referral given by consultees were depression, although the number of patients given a final diagnosis of depressive disorder was lower. Consultees might not further assess other mental conditions such as psychos, delirium, or anxiety, and therefore use the term “depression” loosely. Similar findings were reported by Dunsis et al. in a study of general medical patients referred for psychiatric consultation. In a previous study focusing on geropsychiatric consultation in all specialties within our hospital, the most frequent reasons for referral were found to be suicide risk or attempted suicide (28%), substance-related problems (13%), confusion (11%) and depression (10%) in the non-geriatric group, and confusion (32%), depression (17%), disturbing behaviors (14%), psychosis (14%) and sleep disturbance (8%) in the geriatric group. These results reveal quite different referral reasons among inpatients in different medical specialties.

The diagnoses in our sample demonstrated a high prevalence of depressive disorder, similar to that observed in previous studies. Sundstrom et al. reported mood disorders to be the most common diagnosis in gynecological outpatients: major depression was present in 10.1% and minor depression in 12.4%. Tsai et al. also found that depression and dysthymia were the most common diagnoses in obstetric inpatients referred for psychiatric consultation.

The second most frequent diagnosis was schizophrenia and other psychoses, which is similar to the results from Tsai and colleagues. These results differed from those of studies in Western countries. Psychoses are more likely to be included in a routine psychiatric consultation in Taiwan. Also, delirium leading to disturbing behavior was easily recognized by physicians and led to routine referral for psychiatric consultation in our hospital.

The most frequent medical diagnosis was neoplasms. Thompson and Shear reviewed the literature regarding gynecological oncology, and reported a high prevalence of depression, anxiety and adjustment disorder in this group of patients. In our sample, the most frequent psychiatric diagnoses in this group of patients were depressive disorder, adjustment disorder and delirium, results consistent with those of other studies.

In psychiatric consultations in a general hospital, psychotropic medication is preferred over psychological intervention. Psychological intervention might be difficult to deliver during patients’ general medical hospitalization, and short-term supportive psychotherapy was the most frequent non-psychopharmacologic intervention identified in our
study. At the time of admission, the most frequently used psychotropic medication was benzodiazepine, which was also the most frequently recommended medication by the consultant. A multicenter study of consultation-liaison psychiatric referral in Italy reported similar findings regarding prescribing patterns. Antidepressants were the psychotropic medication most often recommended but not taken, with not only patients but also physicians concerned about antidepressant treatment in comparison with benzodiazepines. The main reason for fewer antidepressant prescriptions might be the consultee’s clinical judgment (for example, consideration of drug-drug interactions). But the real reason could not be identified in the present study, and should be investigated in the future studies.

There were some limitations of our study. First, the results of a single hospital survey might not be readily generalized. Second, the study was a retrospective review of clinical charts and consultation records, from which the differences in consultation behavior between specialties were difficult to identify. Third, a low psychiatric referral rate and small referral case number could not reflect the real condition of the mental health needs of obstetric and gynecological inpatients. Further prospective, multicenter studies, including large sample surveillances, are therefore warranted.

In conclusion, the results of our study were compatible with those of previous studies, and demonstrated a low referral rate for psychiatric consultation in obstetric and gynecologic patients. Depression and past psychiatric history attracted physicians’ attention most commonly, but other symptoms may be neglected. Psycho-oncology was the basis for the majority of psychiatric consultations in the obstetrics and gynecologic patients included in our study, a finding which indicates the need for more collaborative clinical work and research.

REFERENCES

婦產科住院病人的精神科照會

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背 景：本篇研究的目的在於瞭解婦產科住院病人的精神科照會現況，以一醫學中心為樣本。探討照會原因、診斷分佈、症狀特徵及精神科之建議。

方 法：搜集自2003年12月至2009年11月期間，林口長庚醫院婦產科住院病人中接受精神科照會之病患為研究對象，採病歷回顧方式進行分析。

結 果：於七年內共有111位病患接受精神科照會，照會率估99,098位住院病患中的0.11%。婦產科的照會佔所有精神科照會的0.64%。最常被照會的原因是憂鬱(52.25%)，過去有精神疾病史(31.53%)，失眠(29.73%)，意識障礙(24.32%)。最多的精神科診斷依照DSM-IV為憂鬱疾患(37.84%)，精神分裂症及其他精神疾病(20.72%)，妄想(17.12%)及適應障礙(10.81%)。最常被照會的婦產科診斷是腫瘤(72.97%)，感染(42.34%)及懷孕或妊娠相關併發症(17.12%)。建議使用精神科藥物(89.19%)，高於於建議心理治療(72.07%)。

結 論：相較於其他科別，婦產科的精神科照會是低的。這並不表示婦產科住院病人共病精神科疾病的機會較低。增加跨科際的合作或者是研究，將對婦產科的住院病人提供更好的照顧。

(長庚醫誌2011;34:57-64)

關鍵詞：精神科照會，婦產科

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受文日期：民國99年4月14日；接受刊載：民國99年6月30日

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