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Evaluation of the first Medical Psychiatry Unit in Japan

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Abstract The first Medical Psychiatry Unit (MPU) in Japan was established in 1990. The clinical experience during the first 4 years of this unit is presented, and the characteristics of the Unit between its first 2 years and its latter 2 years are compared. The number of patients, the average length of stay, the primary psychiatric disorders, the combined physical diseases and their outcomes are presented. The data suggest that while the experience of the MPU is limited, it plays an important role in Japan as (i) an appropriate clinical setting for patients with combined medical and psychiatric illnesses, (ii) a strategic model for dealing with psychiatric patients in the general hospital, (iii) an educational setting for psychiatric residents to become more familiar with medicine and surgery, and (iv) an opportunity for non-psychiatric residents to become familiar with psychiatric illnesses and treatments.

Key words Japan, Medical Psychiatry Unit, physical comorbidity, psychiatric care systems.

INTRODUCTION

In Japan, mental health care is most often provided by mental hospitals. In 1992, the number of psychiatric beds per 100 000 population was 291, with private mental hospitals providing 85% of the psychiatric inpatient beds.[1] A health insurance system which covers all diseases for the entire population was available, psychiatric care systems for the mentally disabled have been gradually developed, and the number of psychiatric beds are currently considered sufficient for patients with psychiatric diseases. However, there is lack of a sufficient system of care for patients with combined physical and mental illnesses and while there are a number of non-psychiatric physicians working at mental hospitals, the equipment for making diagnosis and to implement a treatment plan for concurrent physical diseases is insufficient. In cases of serious physical diseases, these patients are likely to be transferred to a general hospital with psychiatric beds, although most of the psychiatric wards were originally developed for patients with mild mental disorders, such as neurotic disorders, depression and psychosomatic diseases.

In this context, a unique system for the treatment of patients with combined medical and psychiatric problems was introduced by the government in 1981. This system is called the Tokyo Metropolitan Project for the Mentally Disabled with Physical Comorbidity. With this system, five institutes in the Tokyo metropolitan area receive funding from the government, and function as designated treatment centers for psychiatric inpatients with concurrent physical illness. In other institutes participating in the project, psychiatric patients with physical diseases are likely to be admitted to psychiatric wards, and it is the psychiatrists who are in charge of psychiatric treatment, while non-psychiatrists handle the non-psychiatric treatment. However, in Tachikawa Hospital while intensive medical observation and care were required, non-psychiatric physicians were frequently not available. Also, there were many cases in which ongoing care for conditions, such as electrolyte imbalance, decubiti, fever and central venous hyperalimentation (CVH), was needed on a daily basis. It was also the opinion that these physical conditions should be treated by psychiatrists under the supervision of a non-psychiatric specialist.

Taking into account all these factors, the Medical Psychiatry Unit (MPU) in Japan was established in the Tachikawa Hospital in 1990. The only principal guidelines used were taken from literature which outlined the MPU experience in the USA[2,3] which was set up to provide 'a system for patients with serious psychiatric and medical problems'.

Although the MPU is a new conceptual model of care for psychiatric patients with physical problems, its applicability as an overall model of general hospital care is still unclear, and committees in the USA are currently developing practical guidelines to establish these units.[2–4] This study aims to contribute data on the applicability of MPU units by detailing the clinical experiences of the MPU in Japan during its 4 year existence and by discussing the importance of such units to Japan.

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METHODS

Tachikawa Hospital is a general hospital which has 15 clinical specialties and 500 inpatient beds. The MPU is a semi-locked ward (i.e. locked only at night) and has 63 beds, of which two are for intensive medical care and four are in secluded rooms.

The staff includes four full-time psychiatrists, 28 nurses, three clinical psychologists and one psychiatric social worker. Among the four psychiatrists, three are psychiatric PGY (postgraduate year), 2–3 medical staff members who are interested in specializing in medical psychiatrists. Night/weekend medical coverage of the entire hospital is provided by one of the MPU psychiatrists. One psychiatrist who lives on the hospital grounds is available on a 24 h/365 days a year basis for emergency medical and/or psychiatric problems. Specialists from each field of psychiatry, both from outside and inside the hospital, are invited to give lectures and there are weekly educational unit rounds.

Surveys were taken from 1990 to 1993, and the cases were divided into two groups: those treated during the first 2 years and those during the latter. The first 2 years (1990–1991) of the administration of the MPU lacked experience, and there was no appropriate guideline for its establishment. In contrast, the latter 2 years (1992–93) were much more organized. The number of admissions, average length of hospital stay, primary psychiatric diagnoses and concomitant physical disorders were compared between the two periods. Furthermore, outcomes of the disorders were demonstrated during the latter 2 years.

RESULTS

In the latter 2 years, the number of admissions increased by 38% over the initial 2 year period (Table 1). The average length of hospital stay shortened from 158 days to 122 days, although the difference was not significant. The number of admissions through the Tokyo Project was the most common, but the number of admissions from other general hospitals without psychiatric units increased two-fold, from 25 cases to 59 cases.

Table 1. Admission data

	1990–91	1992–93
No. admissions	264	363
Mean age ± s.d.	49 ± 19	54 ± 16
Average length to stay (days)	158	122
Concomitant physical illness	204	294
Without concomitant physical illness	60	69
Route of admission		
Tokyo Project	121	172
From general hospital	25	59
From outpatient clinic	61	97
Other	57	35

The psychiatric diagnoses for the two periods are shown in Table 2. In both periods, it was seen that almost half the patients had schizophrenia. The most frequent diagnosis was cancer (Table 3). A large number of concomitant medical diagnoses were categorized as 'other', indicating that the MPU experienced psychiatric patients with a wide variety of physical disorders. Approximately 20% of inpatients had no physical disease. This is because the MPU is available to psychiatric patients with no physical illness, although patients with combined physical and psychiatric illness are given priority for admission. All inpatients were followed at the outpatient psychiatric department of Tachikawa Hospital.

The outcome for patients admitted to the MPU during the latter 2 years is shown in Table 4. A total of 73% of physical illnesses were cured or improved on discharge, while 65% of psychiatric disorders remained unchanged. Of 363 inpatients, only 18 died as a result of their physical disease.

DISCUSSION

The findings indicate that in the latter 2 years the functions and roles of the MPU were better established. Psychiatric symptoms worsened in only one case. This suggests that the MPU plays an important role in offering a clinical setting where mentally ill patients with physical diseases can receive optimal psychiatric care. Although this MPU was originally developed according to the guidelines of the Tokyo Project, the number of inpatients transferred from general hospitals increased up to 2.4 times in the latter period.

An increasing number of patients with relatively minor physical disorders (e.g. hemorrhoids and cataracts), in addition to relatively serious disorders (e.g. cancer and ileus) were admitted. This indicates that the establishment of the MPU stimulated referring psychiatrists working at mental hospitals to remember that minor physical problems in the mentally ill also need to be treated appropriately.

The average length of stay at the MPU decreased over the 4 years. This reflects that the efficiency of the MPU improved and that patients with even minor physical dis-

Table 2. Psychiatric diagnoses of patients admitted to the Medical Psychiatry Unit

Psychiatric diagnoses	1990–91	1992–93
Schizophrenia	141 (106)	209 (179)
Affective disorder	21 (11)	35 (19)
Senile dementia	21 (15)	20 (19)
Mental retardation	18 (18)	27 (27)
Organic mental disorder	12 (12)	17 (17)
Neurosis/personality disorder	12 (6)	25 (7)
Alcoholism	12 (12)	15 (12)
Other	27 (24)	15 (14)

Parentheses indicate those with concomitant physical illness.

Table 3. Medical diagnoses and number of patients admitted to the Medical Psychiatry Unit

Medical diagnosis	1990–91	1992–93
Malignant tumor	41	54
Fracture	27	27
Hemorrhoids	5	17
Cataract	3	17
Liver disease	7	11
Ileus	4	10
Respiratory infection	16	9
Other	101	149

Table 4. Outcome of patients admitted to the Medical Psychiatry Unit from 1992 to 1993

Outcome	Psychiatric disorders (%)	Physical disorders (%)
Recovered	11 (0.3)	106 (36.1)
Improved	98 (27.0)	108 (36.7)
Unchanged	235 (64.7)	54 (18.4)
Worsened	1 (0.3)	1 (2.7)
Died	18 (5.0)	18 (6.1)

eases were more likely to be admitted. However, the length of stay remains longer compared with the MPU in the USA.[5,6]

Appropriate nursing training and motivation to work on such a unit is of great importance.[4,7] In this context, there is limited liability for nurses. Tachikawa Hospital, like most hospitals in Japan, does not provide a speciality system for nurses. In other words, nurses often rotate through various departments and are more likely to become 'generalists' than 'specialists' across the board. Therefore, the majority of nurses in MPU previously had worked in other departments, such as surgery wards or operating rooms. Nurses initially expressed a reluctance to work with psychiatric patients as patients often do not show their appreciation for receiving care and results in decreased morale. In order to cope with these problems, psychiatric staff had to stimulate interest in psychiatric problems and their treatment through lectures and meetings. In addition, as a family-like relationship with nurses and other medical staff is important, this was promoted through regular outings and dinners. These activities are essential for successful staff relationships in Japan by making the work environment reminiscent of a 'family'.[8]

The MPU has also helped to solve some of the problems inherent with a consultation/liaison service (i.e. the consultee not following the consultant's recommendations, nurses not knowing how to implement behavioral programs on a medical ward, etc.).[9] Psychiatric patients with serious violent or suicidal behavior[10] cannot be treated on medical wards. This is due to a lack of secluded rooms, no social rehabilitation system (such as occupational therapy, recreation room, etc.) and no rooms for psychotherapy. The MPU has these advantages.

The MPU also offers non-psychiatric physicians the opportunity to see patients other than those in their respective specialties. In particular, this provides the opportunity to see psychiatric patients, which can help to decrease the 'stigma' attached to psychiatric illnesses and increase their knowledge of psychiatric disorders and treatment. Also, psychiatrists' attention to physical illness contributes to the 're-medicalization' of psychiatry, which helps to improve its image with the other specialties and promotes teamwork.

Additionally, the MPU gives psychiatric residents a chance for additional medical/surgical training. One problem with the current postgraduate education for psychiatric residents in Japan is that the students are rarely given an opportunity to treat medical or surgical patients. The MPU is an excellent clinical setting in which psychiatric residents can learn about other medical specialties,[9] as well as training in psychosomatic medicine, holistic medicine, etc.

In agreement with studies from the USA, this study emphasizes the educational and administrative roles together with its clinical usefulness provided by the MPU. The distribution of psychiatric diagnoses and concurrent physical illness seen in this MPU, however, is different from the data from the USA. This may be due to the different types of patients seen in the different institutions. Also, the average length of stay is different, and this probably reflects differences in the health insurance system.

In conclusion, the data suggest that while experience of the MPU is limited, it has important roles in Japan as:

(i) an appropriate clinical setting for patients with combined medical and psychiatric illnesses;

(ii) a strategic model for dealing with psychiatric patients in the general hospital;

(iii) an educational setting for psychiatric residents to become more familiar with medicine and surgery; and

(iv) an educational opportunity for non-psychiatric residents to become familiar with psychiatric illnesses and treatments.

At present, most patients in the MPU have serious mental symptoms (i.e. serious suicidal attempts, violent behavior, aggressive refusal of medical treatments, agitation, wandering or escaping medical wards) which preclude them from being treated in medical wards. Psychiatric wards are not the ideal setting either, because of the need for medical treatment. However, we are interested in including in future studies, less severe diseases, such as depression with minor physical symptoms and psychosomatic disorders.

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