

## REASONS FOR ADMISSION TO THE SINGAPORE MENTAL HOSPITAL

By L. P. KOK

Senior Registrar, Woodbridge Hospital, Singapore.

A preliminary survey of the first 100 new cases admitted to Woodbridge Hospital in the months of January and early February was made, and the reasons of admission were elicited. Woodbridge Hospital is the only mental hospital in Singapore and caters for all mental patients requiring in-patient treatment. An out-patient service is provided and new cases, which are not acute enough to require admission are seen by psychiatrists in 2 out-patient clinics.

The number of new patients admitted in 1972 are: 1111

**Method**

A standard interview was given to each new patient. If relatives accompanied him, then a history was obtained from them. The patient was given a detailed examination and the reasons which caused him to seek admission were noted. The symptoms causing social and interpersonal stress were obtained from the relatives or referring to doctor's reports.

**Results**

100 new cases were seen.

Of these 61% were diagnosed by the consultant psychiatrists to be of schizophrenic origin. The rest were grouped as non-schizophrenic patients.

*Table 1*

Sex Ratio: The males outnumbered the female roughly on a 2 : 1 basis.

		M	F
Schizophrenic	61	43	18
Non-schizophrenic	39	27	12

The Singapore male to female proportion is roughly 1 : 1

The number of Schizophrenic patients reached a peak in the 20 - 29 age group. Not surprisingly, there were none in the 60 - 69 group. The number of patients in the non-schizophrenic group were roughly equal up to the age range of 40 - 49, when they tailed down.

*Table 2*  
*Age Distribution*

Age	Psychotic	Non-Psychotic
10 - 19	14	8
20 - 29	23	9
30 - 39	12	8
40 - 49	6	7
50 - 59	1	4
60 - 69	0	2
Total	56 + 5 UK = 61	38 + 1 UK = 39

UK = Unknown

Total No. of patients = 100

*Table III: Ethnic Group and Diagnosis*

	Schiz.	Non-Schiz.	Total	Racial dist. of Singa- pore in Mid 1972
Chinese	48	24	72	76.1%
Malay	4	5	9	15.1%
Indian	7	8	15	6.9%
Other Asians	1	)	4	1.9%
Caucasians	1	2 )		

There were a predominance of Chinese which reflected the racial distribution. However the number of Malays were less than expected, and the number of Indians admitted were more than the expected number.

*Table IV: Educational Attainment and Diagnosis*

	Schiz.		Non-Schiz.		Total
	M	F	M	F	
Illiterate	15	3	4	4	26
Primary	15	19	15	4	44
Secondary	13	5	8	4	30

About 74% of patients had some form of education, while 26% were illiterate.

## Reasons for admission

### I Social and Interpersonal Stress

Table V: Type of Behaviour and Diagnosis

	Schiz.		Non-Schiz.		Total
	M	F	M	F	
Abnormal behaviour	22	5	11	7	45
Irrational	17	6	4	2	29
Violent/Agg.	14	4	9	4	31
Disturbed	13	8	6	2	29
Withdrawn	4	2			6
Wandering	7	2			9

The above symptoms rarely occurred alone, but were usually continued with other symptoms. They were classified into symptoms of social and interpersonal stress and subjective stress. The presenting symptoms occurring in each individual patient were recorded. From the above table, 60% of patients were violent and aggressive or disturbed, 45% of patients showed abnormal behaviour, 29% of patients were irrational, 6% were withdrawn and 9% were found wandering. The latter 2 symptoms were complained of only in the schizophrenic group.

### II Subjective Distress

The number of symptoms of subjective distress were less than those in the above group. Patients with strong suicidal ideas were usually admitted, unless they or the relatives refused admission. Delusions and hallucinations were associated with symptoms of the first group.

Table VI: Type of Symptoms and Diagnosis

	Schiz		Non-Schiz.		Total
	M	F	M	F	
Insomnia	10	1	1	1	13
Depressed	4	4	6	3	17
Suicidal	3	3	5	3	14
Delusions	9	8	3	3	23
Hallucinations	7	4	1		12

### Diagnosis of non-schizophrenic group

- 6 – Behaviour disorder in dull or mentally subnormal
- 6 – Alcoholism
- 4 – Paranoid state
- 4 – Confusional state
- 4 – Depressive illness
- 3 – Personality disorder

2 – Attempted suicide

2 – Mania

1 – Hysterical fugue state

1 – Situational reaction

1 – Delirium tremen

1 – Epileptic psychosis

1 – Drug psychosis

2 – remand cases charged with (1) rape  
(2) theft were found to be normal.

## DISCUSSION

The results of the study showed that 61% of the patients admitted were schizophrenic. The non-schizophrenic group consisted of a wide spectrum of psychiatric illness. The predominance could be because of the nature of the schizophrenic illness.

There was a significantly higher number of male patients admitted. This could be due to the greater intolerance of mental illness in males who comprised the major working group.

The racial distribution showed that more Indians and less Malays were admitted than expected. Possibly Malays sought traditional healers more frequently than Indians, or else their tolerance to social and interpersonal stress or subjective stress caused by mental illness was higher.

The symptom which was most frequently complained of was abnormal behaviour, and this was seen in 45% of patients. This varied from patient to patient, but talking, laughing and crying to himself was frequently reported. Stripping and walking around naked was also reported. One patient was admitted because he locked himself in a room and appeared abnormal to his relatives.

Violent and aggressive behaviour understandably, was an important reason why relatives, friends or police sought admission for the patients. 31 patients exhibited this – 18 schizophrenics and 13 non-schiz. 29 patients showed disturbed behaviour – they were noisy, shouting, restless or excited. Another 29 were irrational.

These 4 major reasons for admission, namely abnormal, violent, aggressive or disturbed behaviour and being irrational are recognized by the lay public as being associated with mental abnormality, and caused so much distress that the in-patient treatment was requested. They were also the major criteria by which admitting doctors assessed whether a patient required admission or not.

In the group of symptoms causing subjective distress and necessitating admission, insomnia, being suicidal and depressed ranked high. Patients with suicidal intentions had often to be persuaded

to be admitted as the stigma against mental hospitalization still presents high. Delusions and hallucinations were usually associated with symptoms of the first group, and there was no patient who was admitted for these two symptoms alone.

#### SUMMARY

A series of the first 100 new cases admitted to Woodbridge Hospital were studied and the reasons for admission elicited. The majority were admitted because of abnormal behaviour, being aggressive and violent or disturbed or talking

irrationally. Subjective symptoms which required admission were those of insomnia, depression, suicidal feelings, delusions and hallucinations.

#### BIBLIOGRAPHY

1. TEOH, J. J.; KINZIE, J. D. and TAN, E. S.; "Why Patients Attended a Psychiatric Clinic, Breaking the Barrier." *Paper read at the Sixth Singapore-Malaysia Congress of Medicine Singapore*. 1971.
2. TAN, E.S.; "Characteristics of Patients and Illnesses seen at Tampoi Mental Hospital." *Med. J. Malaya*, 19: 3-7, 1964.

## CARDIOVASCULAR HAZARDS FROM INTERACTIONS BETWEEN IMIPRAMINE AND CATECHOLAMINES

By P. C. TEOH

*Lecturer, Department of Medicine, University of Singapore.*

#### SUMMARY

Though hypertensive crisis and sometimes death resulting from interactions between monoamine oxidase inhibitor (MAOI) antidepressants and catecholamines are well known, similar cardiovascular hazards are seldom reported with tricyclic antidepressants. Therefore interaction experiments were carried out in human volunteers between imipramine, a tricyclic antidepressant, and sympathomimetic amines in this study. It was found that imipramine potentiated the pressor effect of phenylephrine by two- to three-fold, that of noradrenaline by four- to eight-fold and that of adrenaline by two- to four-fold. There was no significant change in the response to isoprenaline. Dysrhythmias were recorded during adrenaline infusion after pretreatment with imipramine. It is recommended that patients taking imipramine or other tricyclic antidepressants must avoid using local dental anaesthetic containing noradrenaline, phenylephrine as nasal decongestant and subcutaneous adrenaline for the treatment of bronchial asthma as the resultant interactions may precipitate hypertensive crisis and serious arrhythmias.

The pressor effect of some sympathomimetic amines has been shown by Elis et al (1967) to be potentiated in subjects receiving monoamine oxi-

dase inhibitor (MAOI) antidepressant. Hypertensive crisis and sometimes sudden death resulting from the above interactions are quite well known. However, similar cardiovascular hazards with tricyclic antidepressants are rarely reported in pharmacotherapeutic textbooks and medical literature. Therefore the use of tricyclic antidepressants in the treatment of depression predominates in the clinical practice as they are regarded to be less dangerous and toxic than MAOI antidepressants. The ability of tricyclic antidepressants to potentiate the cardiovascular effect of noradrenaline was first suspected by Sigg in 1959 and was later confirmed in animal experiments by Kaumann et al in 1965. Recently Svedmyr (1968) showed that in human volunteers a tricyclic antidepressant, protriptyline, potentiated the pressor effect of noradrenaline and adrenaline. As sudden deaths have been reported recently to have occurred in patients taking tricyclic antidepressants (Coull et al, 1970; Moir et al, 1972), the safety of using tricyclic antidepressants is now questioned by many physicians. The mechanism underlying this sudden death is still not certain but it can either be due to direct cardiotoxic action of tricyclic agents on the heart or due to interactions with concomitantly administered drugs (Moir, 1972). In