of 76% in admissions and 35.3% in out-patient consultations, during the 6 year period 1965 – 71. This has necessitated the use of increasing quantities of psychotropic drugs. Table 2 shows the issue of chlorpromazine and trifluoperazine – the two most commonly used drugs in government hospitals – in the years 1969–72. It will be seen that in these three years, the issue of chlorpromazine has increased by 270% and trifluoperazine by 227%.

This increase in the demand for drugs has not only been limited to psychotropic drugs. The use of drugs in the government hospitals as well as in the private sector has risen steeply in the past few years. In view of this, the Government with the aim of conserving its foreign exchange resources, has established a State Pharmaceutical Corporation, in which is vested the monopoly of the import of all drugs and the raw material for the manufacture of drugs. To achieve its objective of providing drugs at the cheapest cost, it is the avowed policy of the Pharmaceutical Corporation to limit drug identity to generic names.

This has led to a controversy in pharmaceutical and medical circles on the question of reliability of branded products versus non-branded products. The Pharmaceutical Corporation and the Pharmaceutical Manufacturers have taken extreme positions in this controversy. The medical profession, as represented by the Ceylon Medical Association, has taken an intermediate position (Editorial, 1972). It has pointed out that on account of differences in bio-availability, chemical equivalence does not assure clinical equality. It has therefore suggested a compromise solution, whereby in cases of drugs where therapeutic non-equivalence is suspected, products from reputed manufacturers are made available to the medical profession.

Table 1

Number of patients admitted and number of out-patient consultations 1954 – 72

Year	Admissions	O–P Consultations
1954–55	2,692	18,720
1959–60	14,057	35,577
1964–65	11,527	36,126
1971–72	20,336	163,704

Table 2

Issue of Chlorpromazine and Trifluoperazine to State Hospitals during 1969 – 1972

Drug	1969–70	1970–71	1971–72
Chlorpromazine	132.5 kg.	416.7 kg.	491.9 kg.
Trifluoperazine	11.1 kg.	20.2 kg.	36.4 kg.

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TAIWAN

By CHU-CHANG CHEN

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As Dr. Ming-tso Tsuang presented in detail the history of psychotropic medication in Taiwan in the First Regional Seminar on Psychotropic Medication held in Djakarta three years ago, I shall not describe this over again. This present report has been prepared with the cooperation of Dr. Min-min Tsuang who is a younger brother of Dr. Ming-tso Tsuang and is also a participant

in this Seminar.

In this report, I shall concentrate on the problem of how we apply psychotropic drugs in our daily clinical practice. So far as neuroleptics are concerned, we prescribe these drugs as one part of integrated therapeutic planning, and consider their efficacy in the total scheme of psychiatric treatment. If patients show mild psychotic symptoms, there is no doubt that out-patient treatment is advisable as the first treatment of choice. But even if patients show overt psychotic symptoms and have some financial difficulty, we still advise out-patient treatment. Thioridazine (Melleril) can be prescribed, because this drug shows few side effects and a relative absence of extrapyramidal symptoms (EPS)- in comparison with other neuroleptics. If patients experience delusions of persecution or lack of insight and refuse to take medicine, butyrophenone (Haloperidol) is administered in a solution which can be mixed with water, tea, or soup. Our hope is that these patients will accept other more adequate medication as their mental conditions gradually improve. Before a definite improvement takes place, they may suffer from EPS which gives the patient's family a good reason to place the patient on in-patient care for more intensive psychiatric treatment. If patients are cooperative in taking medicine on an out-patient basis, anti-Parkinson's medication can be given. to prevent occurrence of EPS, which is quite intolerable for patients and induces some anxiety in their family. This can be done at the beginning of the out-patient treatment before providing larger doses of neuroleptics. If psychotic symptoms cannot be improved at all in a few weeks of out-patient treatment, in-patient treatment should be recommended in order to increase the dosage of medication, or add other drugs or electric convulsive treatment to intensify somatic therapy. When patients are very disturbed, dibenzothiazepine (Etumine) seems to be more effective in calming them down than chlorpromazine (Wintermin). If patients are inactive and withdrawn, trifluoperazine (Fluzine) is given to motivate them to take part in various kinds of ward activities because its relatively less sedative effect may not interfere with their initiative. When a dosage of medication is established, the frequency of medication can be cut down by increasing the amount of a single dose. Thus this allows a reduction in the amount of time nurses spend on drug distribution which can be utilized in a more extensive psychotherapeutic approach. Drugs with more sedative effect may be given at night, and the ones with less sedative effect may be administered during the day. This arrangement enables patients to participate actively in occupational and recreational therapies during the day-time. Injections of chlorpromazine, dibenzothiazepine, or butyrophenones will promote drug effect quickly to facilitate ward management, especially in an open ward, which can also contribute to development of melieu therapy. It is not necessary to give anti-Parkinson's medication at the initial stage of in-patient treatment before an appearance of actual drug effects can be observed. In order to diminish some troublesome procedure in drug-taking during an aftercare period, fluphenazine (Anatensol) in oil preparation is injected intramuscularly, because this single shot will reveal prolonged effects for about two weeks. Since patients are able to purchase medicines such as psychotropic drugs without a physician's prescription in Taiwan, patients on long-term treatment gradually become familiar with neuroleptics and obtain medicines by themselves without consulting psychiatric out-patient clinics. This practice saves them time and money. Patients who have financial problems, and have to take drugs for a long period of time, try to surmount their troubles by taking the cheapest way out, which does more harm than good. This kind of self-medication cannot be avoided, because a social medical insurance system has not been well-established in Taiwan. Unless a community mental-health programme is organized for psychiatric rehabilitation, this phenomenon cannot be improved in the near future.

Of the anti-depressants, imipramine (Tofranil) seems to be more effective for retarded depression and amitriptyline (Laroxyl, Tryptanol) for agitated depressions. Both drugs are generally more expensive than other psychotropic drugs. These medications become effective only after being administered continuously for more than two weeks. Moreover, they aggravate dryness of mouth and constipation. Therefore, we have to build up some sort of doctor-patient relationship and explain the treatment course of anti-depressants before we can start to give them these drugs. We do this in order to avoid any chance for discontinuation of treatment with depressive patients.

Chlordiazepoxide (Librium) and Diazepam (Valium) are the most widely used anxiolytics in Taiwan, while prochlorperazine (Novamin), one of the neuroleptics, is applied for relieving neurotic somatic complaints. A general trend of believing in the effects of herbs, especially for the treatment

of so-called "neurasthenia," still prevails in Taiwan. When anxiolytics are given to lower-class patients, we may tell them that these are effective drugs for stabilizing a nervous activity. This explanation is not psychologically oriented but tries to meet with the needs of the general public in that they want to get medication rather than to receive psychotherapy. Most patients feel that neurotic symptoms cannot be cured only by talking with a psychiatrist. Mental health education may modify the public concept of the mechanism of neurotic disorders and should be promoted by the team work of mental health personnel. However, these educational programmes will need our long-term consistent efforts.

Recently, we have been testing an effect of thiothixine (Navane) as an antipsychotic drug, and also doxepine hydrochloride (Sinequan) for the treatment of anxiety and depression.

We have not carried out any systematic psychopharmacological research during the recent years because of a shortage of staff members in our hospitals. However, we are planning to investigate effects of lithium carbonate in treatment of recurrent manic disorder or bipolar effective psychoses.

As one of the participants, in this seminar, I propose that we get together to design a workable research programme to compare the efficacy of different drugs in varied socio-cultural backgrounds. Since the sponsor of this Seminar is the Roche Far East Research Foundation, we could use one of their new drugs as a starting point to carry out this very needed international collaboration in the field of psychopharmacology. I hope that the Roche Foundation will consider this possibility and undertake this very meaningful study as a side product of this Seminar. It is my hope that this cooperative work will be carried out and reported in the next Seminar on Psychotropic Medication.

THAILAND

By PRASOP RATANAKORN

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Psychotropic drugs have gradually been brought to treat psychiatric patients in Thailand soon after the introduction of the phenothiazine chlorpromazine in 1952 and have increasingly been accepted as a method of psychiatric treatment among Thai psychiatrists. Since 1967, Thai psychiatry, introduced by the Division of Mental Health Services, has been moved to a new era, of Community Psychiatry, in order to cope with the rapidly increasing need for psychiatric services; psychotropic drugs have become a far more important method in treating psychiatric patients. They are used not only by most psychiatrists, but a fairly large number of physicians in other fields of medicine also administer them in conjunction with other medications.

The method of drug administration may vary among psychiatrists in different types of services and hospitals. One of the most preferable methods used in psychiatric hospitals is to combine an anxiolytic drug and an anti-depressant or a neuroleptic drug and an anti-depressant or even between two kinds of neuroleptic drugs which have different effects. This is for the purposes of reducing dosage and toxicities of each drug and obtaining a better therapeutic effect.

Almost all kinds of psychotropic medication are available inThailand. Most of them are from Western Europe and the United States. The use of long-acting phenothiazines such as fluphenazine enanthate or even fluphenazine decanoate has currently become more popular and it tends to play a more important role in the future because its long action can cut down the patients' boring routine of taking medication.

Anxiolytic drugs and anti-depressants are widely used by general practitioners and physicians in other specialities. But the outcome of the drug