

tory — hypotension with collapse (13%); gastrointestinal — constipation (53%), nausea or vomiting (23%). Most side-effects were mild and transitory but drowsiness tended to be prolonged, probably because of the high dosage used. A serious side-effect however was hypotension with collapse (13%) which occurred at onset of therapy but could be prevented by starting with low dosage and gradual increase. Some reduction of blood pressure — mainly systolic — and tachycardia (hitherto unreported) occurred in the majority of cases and persisted unabated throughout the trial (statistics supplied on request). Tremor was mild but only partially responsive to antiparkinsonic drugs given after the trial. There were no changes in blood picture and liver function.

CONCLUSION

Leponex appeared effective for control of the florid features of schizophrenia, particularly paranoid manifestations. Clinical impression during and after the trial was that onset of sedative action was more rapid, and control of aggressive patients often more effective than with say chlorpromazine, but Leponex caused more drowsiness. Extrapyramidal signs, apart from mild tremor, were virtually absent; hypotension however required caution at start of treatment. Tentatively at this stage the drug may be recommended for use in aggressive and impulsive patients who have not responded to the usual phenothiazines. The drug however needs to be further evaluated as regards its cardiovascular side-effects, and its efficacy in the

long-term and in comparison with the established phenothiazines. The average daily dosage of 422 mg. in this trial was probably on the high side.

SUMMARY

33 Chinese in-patients in Hong Kong, diagnosed schizophrenia with acute symptomatology were involved in a double-blind cross-over trial comparing Leponex (clozapine) with Placebo. Leponex was found to be effective particularly in the control of paranoid manifestations and excited and aggressive behaviour, with rapid onset of action. The drug should however be used with some caution at this stage because of its hypotensive effects, which led to collapse in 13% of cases in the initial stages of treatment. The side-effect could be avoided by starting on low dosage.

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WITHDRAWAL OF MEDICATION AS A CAUSE OF RELAPSED SCHIZOPHRENIA: SOCIO-CULTURAL PERSPECTIVES

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INTRODUCTION

One of the most significant breakthroughs in the management of schizophrenia was the discovery and the introduction of a phenothiazine drug, namely, chlorpromazine, in 1952. However, despite the introduction of numerous other psychoactive agents in the management of schizophrenia, over the last twenty years, treatment

has been essentially on an empirical and symptomatic level. Frequently, patients relapsed when the drug was removed, and re-admission to hospital was necessary. It appears then, that the most effective method of counteracting frequent relapses of schizophrenia, is continuous maintenance on phenothiazines at sufficient therapeutic doses. Few experienced psychiatrists would deny the

pragmatic value of maintenance therapy with phenothiazines, although it has been observed (Rothstein, 1960) that the progress in the treatment of psychiatric patients may be attributed to a complex interplay of drugs and psycho-social factors. Studies (Pritchard, 1967) have indicated that pharmacotherapy definitely results in improved short-term prognosis of hospitalisation and improved general condition of the patient on discharge. In addition, maintenance use of drugs after discharge may possibly lessen re-admission rates. (Good et al., 1958) demonstrated that withdrawal of chlorpromazine for a period of three months or more, results in the reappearance of symptoms in schizophrenic patients; on the other hand, resumption of the same medication after a three-month abstinence produces the same effect as continuous maintenance treatment with drugs.

In a study conducted by Prien (1969), the withdrawal of medications from schizophrenic patients and its replacement by a placebo for a period of twenty-four weeks, resulted in a forty per cent relapse rate; furthermore, patients previously receiving high doses of medication were more liable to relapse than others.

It can then be said with at least ninety per cent certainty (Slater & Roth, 1969) that if a schizophrenic patient on maintenance therapy relapses, the reason for relapse is almost certainly due to default at medication. It is, therefore, worthwhile to enquire into the sociological and cultural causes for default in drug therapy. This insight would have tremendous prophylactic value, from the point of view of prevention of relapse of the illness. It would also be useful to find out the inter-ethnic, social class and educational differences in the causes of drug default. Of particular interest too, would be the average duration between stopping medication and onset of symptoms, and the length of time relatives wait before seeking treatment, once relapse has occurred.

Although theoretically, long-term drug therapy of schizophrenia is ideal, there are many socio-cultural and psychological factors that do not facilitate long-term maintenance therapy. Frequently, schizophrenic patients do not have the insight or volition to continue medication, which may be unpleasant to take, due to side effects; furthermore the intrinsic family pathology may not serve as a supportive milieu for regular medication and follow-up.

It is a well-known fact that the majority of

schizophrenic breakdowns occur in the lower socio-economic groups (Slater & Roth, 1969). These socio-cultural factors further reduce the chances of long term medication. It has been demonstrated that schizophrenic patients at Woodbridge Hospital, Singapore, relapsed approximately once a year (Yap, 1968). Frequent re-admission to mental hospitals would definitely be more expensive than if patients were kept on an out-patient basis with regular medication.

Thus the importance of identifying the reasons for default at medication of schizophrenic patients, is not only for academic curiosity but for the practical management of a psychiatric in-patient centre.

Aims of Study

The aims of the study were to discover:—

- 1) The percentage of schizophrenic patients who relapsed because of default in medication.
- 2) The socio-cultural and psychological reasons for default at psychotropic medication.
- 3) The socio-cultural characteristics of such patients and their relatives.
- 4) The causes of relapse of schizophrenia besides default at psychotropic medication.

Method of Study

The case material consisted of all cases diagnosed as Relapsed Schizophrenia who were admitted to the psychiatric wards of the University Hospital, Kuala Lumpur, over a period of five months. The cases were selected at random, according to consecutive admissions.

Cases included:—

- 1) Re-admissions of old cases treated previously at University Hospital and
- 2) New first admissions with relapse of schizophrenia.

A total of forty-three cases were studied, averaging 2–3 cases per week. All patients and their relatives who accompanied them, were interviewed on a structured questionnaire by the authors. Relatives were especially questioned on the various reasons for relapse of the illness and the default of medication.

Results of Study

a) *General Demography* — A total of forty-three in-patients who relapsed with schizophrenic illness, was surveyed. Fifteen (35%) were males and twenty-eight (65%) were females. This is consistent with the 1:2 ratio of male/female rates of admission into the psychiatric centre, University

Hospital (Teoh, 1968). Only five (12%) Malays were seen while twenty-three (62%) Chinese and nine (20%) Indians were included in the study. Seventy-seven per cent of all cases seen originated from the lower socio-economic group, of which twenty-three (51%) were unemployed.

b) *Causes of Relapse* — Twenty-five cases (58%) had relapse of schizophrenia due to default in drug therapy, while eighteen (42%) had a relapse while still on medication.

c) *Causes of Default at Medication*— The following were the reasons given by the patients and their relatives for stopping medication on their own:—

(See Slide I)

- i) Eighteen (72%) patients felt well (symptom free) and relatives believed they were completely cured.
- ii) Two (8%) patients refused to co-operate with medication.
- iii) Five (20%) patients claimed that the doctor in charge had stopped the medication.

It was interesting to note that fifteen of the eighteen patients had been advised by their physicians in charge that drug default would cause a relapse of their illness; despite this knowledge, they stopped medication on their own initiative, believing that they were completely cured.

Generally, the aetiology of schizophrenia is still an unknown entity to the minds of many practising psychiatrists, not only do they not understand the causes for relapse, but often they are unsure of the duration of long term medication. When the patient is symptom free, these vague concepts of aetiology and duration of medication are sensed by them and their relatives, thus frequently resulting in their taking the initiative to stopping medication on their own. Within the context of native and indigenous therapy in Malaysia, the concept of long-term therapy does not exist. This observation was made by Kinzie et al., (1971) when he commented that traditional healers do not engage in long term relationships. This cultural influence of relying only on short-term treatment could possibly account for the reluctance in accepting long-term medication as a therapeutic necessity

d) *Reasons for Relapse Despite Continued Medication* — Of a total eighteen patients who relapsed while still on medication, the reasons for relapse were:—

(See Slide II)

- | | |
|---|---------|
| i) Irregular medication | 3 (17%) |
| ii) Sudden psychogenic stress | 5 (28%) |
| iii) Pathological family structure..... | 6 (33%) |
| iv) Socially deprived family circumstances..... | 4 (22%) |

The results are consistent with Rahe's study (1969) that the onset of illness is significantly related to on-going life adjustment and different life crises. This proves that psychotropic medication is only one of many factors in preventing relapse of illness, thus one should not be over-eager to explain patient improvement only in terms of chemotherapy.

e) *Follow-up Treatment and Duration of Medication* — Of the forty-three cases studied, thirty-four (78%) were previously followed up at the University Hospital out-patient's clinic.

(See Slide III)

The majority of patients, twenty-three (51%) took medication regularly for a period of up to one year.

(See Slide IV)

f) *Period of Drug Default Leading to Relapse* — The critical period for discontinuation of medication prior to relapse fell between 4–5 months. Ten out of twenty-five cases were re-admitted after this period of drug discontinuation. These studies (Judah et al., 1961 & Good et al., 1959) where withdrawal of chlorpromazine for periods of 3–5 months resulted in a reappearance of symptoms.

g) *Duration Between Onset of Symptoms and Consultation* — It was interesting that twenty-six (60%) patients sought consultation within one week of relapse of symptoms. Furthermore thirty-four (78%) of all cases were previously treated at the University Hospital out-patient clinic. Only five (12%) ever sought the advice of native healers, and only 3 (7%) resorted again to traditional methods of treatment prior to present consultation. Practically all those seeking traditional methods of treatment belonged to the Malay ethnic group. These results contrast significantly with an earlier study (Teoh et al., 1971) done in the same unit, where 31% of patients seen admitted to having consulted native healers prior to psychiatric consultation. It would appear that, subsequent contact with modern psychiatric treatment diminished the patient's confidence in traditional methods of treatment.

Reasons for Default of Medication	No.	%
Patients felt well prior to relapse)	18	72
Relatives believed patients were cured)		
Patients refused to co-operate with medication	2	8
Doctor i/c stopped patients' medication	5	20
Total No. of Patients	25	100

Table I: Reasons for Default/Stoppage of Medication

Other Causes for Relapse	No.	%
Irregular medication	3	17
Sudden psychogenic stress	5	28
Pathological family structure	6	33
Socially deprived family circumstances	4	22
Total no. of Patients	18	100

Table II: Reasons for Relapse Despite Continued Medication

Type of Follow-up	No.	%
University Hospital Psy. Clinic	34	78
Government Psy. Clinics	2	5
General Practitioner	3	8
Total default at follow up	4	9
Total No. of patients	43	100

Table III: Type of Follow-up Treatment prior to Relapse

Duration on Last Medication	No.	%
1 year	23	53
2 years	11	26
3 – 4 years	4	9
5 years and above	5	12
Total No. of Patients	43	100

Table IV: Duration on Last Medication Prior to Relapse

CONCLUSION

A total of forty-three patients with relapsed schizophrenia were surveyed at a University Hospital Psychiatric centre. Fifty-eight per cent of cases relapsed because of default of medication, while 42% relapsed despite continuous medication. The main reason for default at medication was due to the fact that patients felt well and their relatives believed that they were completely cured. This was despite the fact that 35% of the relatives

had been advised that default would cause a relapse.

Other reasons for relapse were discussed.

The critical period for discontinuation of medication prior to relapse occurring, was shown to be between 4 – 5 months. It was interesting that twenty-six sought early psychiatric treatment – within one week of onset of symptoms.

The results indicated too, that subsequent contact with modern psychiatric treatment dimi-

nished the patient's confidence in traditional methods of treatment.

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VESTIBULAR REACTIVITY IN SCHIZOPHRENIA AND ITS CORRELATION WITH THE EFFECTS OF NEUROLEPTICS

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By an accidental finding when the author practiced caloric test and found some of the chronic schizophrenic patients whose reactivity was completely absent while the non chronic schizophrenic patients were normally reactive. Reviewing the literature and finding that the results of caloric stimulation on schizophrenia were so fragmentary and in some respects contradictory, it seemed advisable to obtain first hand information on the possible changes of caloric reactivity in the schizophrenic group. It was decided to conduct the present study which was designed to test whether or not

- 1) Chronic and non-chronic schizophrenia might differ in caloric test.

2) Any relation with usage of neuroleptics. Along with these explorations, the present study was also designed to investigate if the difference of caloric responses had any effect on the pharmacotherapy.

METHODOLOGY

Subjects: Fifty-four hospitalized schizophrenic patients served as subjects in which 20 patients were tested at Boston State Hospital (8 were from chronic ward while all the other 12 were from acute intake ward) and 34 patients at Taipei City Psychiatric Center in this investigation. Patients with defective ear drums and with a history of middle ear infection or similar ailments were