

SELF-POISONING: A STUDY OF MALE PATIENTS HOSPITALISED IN A GENERAL MEDICAL DEPARTMENT IN ONE YEAR

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SYNOPSIS

In the year 1982, 28 out of 1981 (1.5%) male admissions to a general medical department were for self-poisoning. The majority were young and single Chinese. Eleven (39.3%) wanted to die but only one died while ten (35.7%) took poison to express their "cry for help". Six patients had psychiatric illnesses and in another five, personal or family illness or death precipitated the self-poisoning. Ingestion of washing detergent and kerosene and solvents was popular (36.4%). Barbiturates taken by three proved lethal in one. None took an overdose of paracetamol. Hospital stay was short - less than 4 days in 82.1% of the cases. Further referrals of the patients to the social worker (9 cases) and the psychiatrist (7 cases) were deemed necessary.

INTRODUCTION

For 1982, there were 1981 male medical admissions to the Department of Medicine III; Tan Tock Seng Hospital (1) of which only 28 (1.5%) were admitted for management of self-poisoning. Attempted suicides in 1980 had a male to female ratio of 1 to 2.2 with self-poisoning accounting for 95% of the cases in Singapore (2). Are there any circumstances in which a patient's expressed desire to commit suicide makes enough sense for a doctor to offer help in achieving this? The answer is negative. To connive with suicides is to fail the patient by confirming his despair and denying hope; doctors should re-double their efforts to help rather than give permission to die(3). What of the debilitated?(4). How about the drug addicts taken to hospital by the police? The non-therapeutic use of psychoactive drugs is a modern epidemic in America (5,6). What is the pattern of drug abuse for intended suicide in Singapore?

This paper analyses the management of these twenty-eight patients. Rather than be a statistical study (2) this is more a medico-social report.

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MATERIAL AND METHOD

Subjects studied comprised the twenty-eight male patients admitted to this department in 1982 for self-poisoning, from the Accident and Emergency Department of the hospital. From a careful history, each patient's intent for ingesting the poison was ascertained (unless he refused to disclose), also the type of substance(s) taken. Where possible, toxicological analyses were carried out on stomach washout contents, blood and/or urine samples. The reasons for self-poisoning were evaluated with the help of the medical social worker where necessary. Also analysed were the length of hospital stay and the outcome of the hospitalisation.

RESULTS AND DISCUSSION

1. Demographic characteristics.

TABLE 1
AGE DISTRIBUTION

Age Group (years)	Number (%)
Less than 20	6 (21.4)
20 —	16 (57.1)
30 —	2 (7.2)
40 —	0 (0.0)
50 & above	4 (14.3)
Total	28 (100.0)

TABLE 2
ETHNIC GROUP DISTRIBUTION

Ethnic Group	Number (%)
Chinese	19 (67.8)
Malay	4 (14.3)
Indian	4 (14.3)
Others	1 (3.6)
Total	28 (100.0)

The majority were Chinese and the peak age group was 20 to 29 years old and 78.5% were below 30 years old. Twenty-one were single. The youngest patient was a 12-year old Primary Six student who took 19 tablets of APC for headaches. The oldest was 66 years old with lung cancer and took "Fab" detergent to kill himself.

2. Patient's intention and reasons for self-poisoning.

TABLE 3
PATIENT'S INTENT FOR SELF-POISONING

Intent	Number (%)
Suicide	11 (39.3)
Parasuicide	10 (35.7)
Nonsuicide	5 (17.9)
Accident	2 (7.1)
Total	28 (100.0)

By suicidal intent is meant the expressed desire to want to die but as shown later the mode of self-poisoning did not always bear this out. Para-suicides took the drug(s) wrongly or in excessive dose. These are arbitrary definitions.

The solitary suicide was a 60 year old European who carefully executed his act with letters addressed to relevant persons before he consumed butobarbitone (blood level 3.6 mg%) and was found unconscious by his secretary at home. He died 6 hours after admission. Three psychiatric patients, one of whom was a newly diagnosed paranoid schizophrenic, wanted to

commit suicide. The remaining patients with suicidal intent took substances like Ridsect, salbutamol, "Fab" detergent, diazepam and kerosene which in all probability would not have led to death.

The ten parasuicidal cases were all single save one who took 20 Saridon tablets after a family quarrel. He was not receptive to counselling. Others substances used in parasuicide were rubber solvent (inhaled), diazepam, shampoo, chlorox, dettol and nail varnish remover. The five non-suicide patients ingested terbutaline, bisolvon, APC, diazepam and alcohol. Two patients accidentally mistook kerosene and turpentine for liquid medicine.

TABLE 4
PREDISPOSING FACTORS TO SELF-POISONING

Predisposing factor	Number (%)
Personal psychiatric illness	6 (21.4)
Other illness — personal/family	5 (17.9)
Boy-Girl relationship	5 (17.9)
(Ex)-drug addiction	3 (10.7)
National Service	2 (7.1)
Others	5 (17.9)
Refused to disclose	2 (7.1)
Total	28 (100.0)

Personal psychiatric illness (21.4%) was the commonest predisposition. Two patients had personal illness, one with lung cancer and the other with paralytic poliomyelitis while another three were depressed over illness and/or death in the family. Two Malay and one Chinese drug addicts were single. The Chinese patient was a morphine addict and had been into the Drug Rehabilitation Centre (DRC) thrice. A Malay drug addict who had also been to DRC several times before took amylobarbitone (blood level 1.1 mg%). Despite being in coma four and in respiratory failure, he survived and was transferred to Changi Prison Hospital.

Four of the 28 patients were of National Service age when warded for self-poisoning but in only two of them could National Service be said to be the predisposing factor. One was so scared of going into National Service that he became depressed and hypokinetic and had to be warded in Woodbridge Hospital. The other took chlorox to show his frustration at weekend confinements and the low army pay. He was referred to the Social Work Unit of the Ministry of Defence. The third soldier had gone absent without leave for unknown reasons and ingested chemical solvent. He also was sent back to the above department. The fourth soldier had headaches for the past one and a half years and took his mother's terbutaline tablets.

3. Types of poisons.

TABLE 5 TYPES OF POISONS TAKEN

Intent	Number of patients who ingested it (%)
Washing detergent	6 (18.2)
Kerosene/solvents	6 (18.2)
Diazepam	4 (12.0)
Alcohol	3 (9.1)
Barbiturate	3 (9.1)
Asthma pills	3 (9.1)
Analgesics	3 (9.1)
Chlorpromazine	2 (6.1)
Insecticide	1 (3.0)
Unknown	2 (6.1)
Total	33* (100.0)

* Some ingested several poisons

As expected there was a wide array of substances ingested. Most were not potent enough to cause death. Clinically only two patients gave cause for concern. Both took barbiturates and one died. Stomach washouts were performed except in those six who ingested kerosene or solvents. The above list reflects common items found in the house. Surprisingly there was no case with paracetamol overdose. Forced alkaline diuresis is a method of treatment for those with aspirin and barbiturate overdose but recognised complications of diuresis therapy viz. water intoxication, cerebral and pulmonary oedema should be borne in mind. Patients have died from these complications rather than from the poisoning itself. Recently it was recommended that for salicylate overdose, simple alkalinisation alone with 225 mmol of sodium bicarbonate over three hours is probably satisfactory and even more effective than the standard forced alkaline diuresis (7).

The list of poisons above suggests that most patients do not consume exotic cocktails of controlled drugs but rather tablets, chemicals, and liquids readily available in the house. Whereas in America, there are over 400 poison centres to provide better information on the management of the poisoned patient (8); locally there seems to be no need for such centres.

4. Hospitalisation.

TABLE 6
LENGTH OF HOSPITAL STAY

Days	Number of patients (%)
0 —	23 (82.1)
4 —	3 (10.7)
10 and above	1 (3.6)
Died	1 (3.6)
Total	28 (100.0)

The majority stayed about 3 days or less. They were usually admitted in the night, stayed the whole of the next day and discharged the following day. Medical cases to this department stay an average of 7.8 days (9).

5. Discharge and Follow-up.

TABLE 7
MANAGEMENT OF PATIENTS ON DISCHARGE FROM THE WARD

	Number (%)
Referred to social worker	9
Referred to psychiatrist	7
No follow up	2
Self-discharged	2
Transferred to Changi Prison Hospital	1
Total	27*

* 1 died

Referral of patients to the Medical Social Worker was not routine. Out of the nine cases referred to her, eight were given crisis intervention where counselling and, in some cases, joint interview were conducted. Those patients assessed to require long term follow up were referred to the following agencies:

- 1) Two were referred to the Social Work Unit of the Ministry of Defence.
- 2) Three were referred to the Social Welfare Department of the Ministry of Social Affairs.
- 3) One of the two from 1) was referred to the Government Psychiatric Outpatients also.

No follow up was given to four patients. One declined any help from the Medical Social Worker and three were assess-

ed to be uncooperative and non-receptive to further counselling.

Although there were six patients with personal psychiatric histories (see Table 4) seven were subsequently referred to the psychiatrist as in or out-outpatients. The seventh patient who after consuming diazepam (which was detected in his blood) tried to jump out of the window from the fourth storey. One of these seven went to a private psychiatric home.

SUMMARY

1. 1.5% (28 patients) of all male medical admissions to this department in 1982 were cases of self-poisoning. Only one patient committed suicide.
2. The majority were below 30 years old (22 patients out of 28) and 21 were single.
3. Eleven expressed suicidal intent while ten took poison as a means of crying for help.
4. Psychiatric illness accounted for six of the poisonings and medical illness in the individual or family for another five cases.
5. The poisons consumed were mainly common household substances, freely available with washing detergent and kerosene/solvents taken in 12 of 33 instances. None took paracetamol. Barbiturate taken by three proved fatal in one patient.
6. Hospital stay was short - less than 4 days in the majority of cases.
7. It was necessary to refer 9 cases to the Medical Social Worker for further assessment and seven to the psychiatrist as part of the management.

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