

ATTEMPTED SUICIDES IN PENANG -- PRELIMINARY OBSERVATIONS

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SUMMARY

The characteristics of 74 patients who attempted suicide in Penang are described. Differences in the incidence and reasons for and methods of attempting were observed among the ethnic groups. There was a higher incidence in females and patients of single status. The majority of patients did not suffer from severe psychiatric disorders, but did encounter chronic inter-personal and intra-familial conflicts. Conflicts with elders were more frequent among female patients, and this finding suggested that young females were faced with a greater degree of role conflicts. Rural to urban shift among the Chinese patients was observed to be associated with a high incidence of attempts. Dwellers of high-rise flat complexes were not over-represented. In view of antecedent social factors, professionals and others besides psychiatrists have a role in the prevention and management of para-suicidal behaviours.

INTRODUCTION

Suicidal behaviour encounters mixed reactions in society. In some communities the religion forbids suicide, in others the act may be considered honourable. A multitude of thinkers have addressed themselves to explain this intriguing and perplexing aspect of human behaviour through the ages. It was not until the late nineteenth century that a medico-social approach was documented (Durkheim, 1951). However, the influences of culture and society are no less pervasive as no individual exists in isolation. An attempt to understand this aspect of human behaviour will

have to take cognizance of the immediate social environment of the individual interlinked with influences from his community and culture. With such diverse influences, it is not surprising that researchers from many disciplines have been involved in the study of this human behaviour and will continue to do so.

In Malaysia two cases studies have been documented; one on attempted suicides in Klang (Murugesan and Yeoh, 1978) and the other on the psychological post-mortem of suicides (Teoh, 1974). The study in Klang documented the differences in the incidence, manner and reasons for the attempts among the races and differences in age, sex, marital status and economic factors between the sexes. This study in Klang was conducted in a suburban centre with a relatively high concentration of Indians, two and a half times the national average. The present study in Penang documented the attempted suicides of all 3 ethnic groups both in the highly urbanised City of Georgetown and the rural district of north-east of Penang island. The Chinese were the predominant ethnic group in the two areas with 72.3 percent in the city and 68.8 percent in the district area (Vital Statistics, 1974). The Malays and Indians were approximately equally represented in the city with 13.5 percent and 12.9 percent respectively and the Malays slightly more than the Indians in the rural district area.

The diagnosis of attempted suicide runs into difficulties not only in the definition, but also in the recognition of a case. Acceptance of the attempter's intention can be misleading when taken to define a case as death may not be the desired conclusion of the attempt. Mild overdoses may not be recognised as attempts but accepted as accidents. There is a tendency for doctors to underdiagnose attempted suicides and to recognise only the medical problem,

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be it an overdose or slashed wrist or a fracture from a fall. The medical or surgical emergency is dealt with and the patients discharged. The attending doctor may suspect that this is an attempted suicide, but often finds himself unable to confirm his suspicion. The law recognises that an attempt in taking one's life is punishable, and this fact may encourage the concealment of the act by the attempter or his in-group. For the purpose of this study, the definition used is that by Stengel (1973) that "A suicidal act is any deliberate act of self damage which a person committing the act could not be sure to survive". It can be added that the lethality of the act depends not only on its medical or surgical consequences, but on the perception of lethality by the attempter. If he believes in all innocence that a tablet of analgesic is fatal, then the act of swallowing that tablet is a suicidal attempt or act.

METHOD

The General Hospital was the only public hospital for the part of Penang under study. The period of the study was from 1st. November 1978 to 30th. April 1980. All patients who were admitted to the Hospital with suspected or confirmed suicidal attempts were referred to the Psychiatric Department. Hospital colleagues were requested to refer even patients who denied suicidal intent but whose actions suggested suicide attempts. All patients were interviewed within 48 hours or as soon as their medical observations were stable. A relative or friend of each patient was also interviewed. Further management and follow-up were instituted as necessary. All data about observations on the general population in Penang are derived from the Vital Statistics, 1974, of the Department of Statistics, Government of Malaysia.

RESULTS

Ethnicity

A total of 74 patients were in the study. Forty-seven were Chinese, 20 were Indians and 7 were Malays. The proportion of Indian patients was twice the proportion in the general population, and of Malay patients, it was about half. Thus, in rank order the incidence of hospitalised attempted suicides was highest among Indians, next among

Chinese and lowest among Malays. A similar trend was observed by Murugesan and Yeoh (1978) in Klang.

Sex

There were 48 females and 26 males, and females were twice as many as males among the Chinese and Indian patients. Among the Malays there were 4 males and 3 females. It was observed that proportionately more females were from the rural sector, in particular among the Chinese and Indians even though there was negligible difference in sex distribution in the rural population (Table III).

Age

The ages of the patients ranged from 15 years to 60 years. Two patients were 15 years old. There was no significant difference in age distribution among the 3 ethnic groups. Thirty-eight patients were aged 16 to 25 years. Females were on average younger with 59.0 percent below 25 years old compared to 40 percent in males. This trend was observed in all three ethnic groups (Table I)

TABLE I
AGE OF PATIENTS ATTEMPTING
SUICIDE IN PENANG

	Male	Female	Total
Age in years			
10-15	0	2	2
16-25	10	28	38
26-35	6	9	15
36-45	4	6	10
46-55	2	1	3
Over 55	3	5	8

Marital Status

Thirty-eight patients were single, 31 were married and 5 were separated or widowed. In each ethnic group, the number of singles, separated and widowed exceeded the married patients (Table II.)

Religion

The religious beliefs of the patients were closely identified with ethnicity. The Malays were exclusively Moslems, the Chinese were mostly Buddhists and Indians were mostly Hindus. There were 4 Chinese and 1 Indian who were Christians.

TABLE II
CHARACTERISTICS OF PATIENTS ATTEMPTING
SUICIDE IN PENANG

	Chinese	Indians	Malays	Total
Number of males	13	9	4	26
Number of females	34	11	3	48
Percentage (sample)	63.5	27.0	9.5	100
Percentage (population)	70.7	13.0	16.3	100*
Marital status				
Single	21	11	6	38
Married	21	9	1	31
Separated/widowed	5	0	0	5
Domicile				
Urban	32	12	5	49
Rural	15	8	2	25
Primary reason for attempt				
Conflict with elders	10	8	1	19
Health reasons	12	4	0	16
Marital conflict	7	3	2	12
Love disappointments	6	2	2	10
Financial problems	2	1	0	3
Unemployment	2	0	0	2
Drug addiction	1	0	1	2
Others	7	2	1	10
Method or poison used				
Psychotropics	14	4	1	19
Insecticides	5	6	1	12
Liniment	2	3	0	5
Detergent	3	0	1	4
Analgesics	3	0	1	4
Narcotics	1	0	0	1
Knife wounds	8	2	1	11
Hanging	4	3	0	7
Jumping	5	0	1	6
Other drugs	1	1	0	2
Other objects	1	1	1	3

* Excluding other ethnic groups

TABLE III
PLACE OF DOMICILE BY ETHNICITY AND SEX OF
PATIENTS ATTEMPTING SUICIDE IN PENANG

	Urban			Rural		
	Patients		General Population	Patients		General Population
	No	%	%	No	%	%
Chinese						
Male	12	37.5	48.0	1	7.1	48.7
Female	20	62.5	52.0	14	92.9	51.3
Indian						
Male	6	50.0	58.7	2	25.0	52.4
Female	6	50.0	41.3	6	75.0	47.6
Malay						
Male	2	40.0	50.2	2	100.0	50.8
Female	3	60.0	49.8	0	0.0	49.2

Occupation and Income

All patients were asked if they were working or had any income. As there were more females and young patients in the sample, provision was made to record the status of students and non-working housewives. The family income of students and non-working spouses were recorded as income of the patients. There were 7 students and 19 non-working housewives. Thirty-two patients were working, of these 22 were unskilled and 10 were teachers, clerks, skilled workers or self-employed. Sixteen were unemployed and of these, 8 were young, single females living with relatives.

Only 2 patients had income above 1,000 dollars a month. This was in the upper income bracket. Thirteen patients earned between 250 to 1,000 dollars. The 15 unemployed had no income and the remaining 43 patients earned or had family income of less than 250 dollars.

The 8 unemployed males comprised 32 percent of the 25 males and the 8 unemployed females comprised 18.5 percent of the non-student adult females.

Environment

Georgetown has an inner city environment of relatively dense population mostly living in terrace houses with pockets of make-shift housing along part of its eastern sea front. On the periphery of the city are suburban housing complexes of comparatively recent origin with less dense population. The rest of the island state is rural. There are 3 areas of multi-storey housing built by the government. The largest of these 3 apartment complexes houses approximately 25,000 people.

The type and area of housing of the patients were recorded. Thirty-two patients lived in the inner city, 12 in the suburban sector, 3 in the apartment complexes and 25 in the rural sector. The percentage of the general population living in the rural sector was 20.8 percent whereas the percentage of patients was 33.8 percent. Both Chinese and Indian patients from the rural sector were over-represented, but this pattern was reversed among Malay patients (Table II). As the number of Malay patients was small, this observation needs cautious interpretation and may merit further investigation in future studies.

The patients living in the apartment complexes numbered 3 (4 percent) of all patients. The estimated population in the complexes was 50,000 and comprised approximately 13.4 percent of the population in the area under study. The percentage of 4 among the patients was an under representation.

The cultural practice of living in an extended family system was noted in the histories of 30 patients. Another 33 patients lived within a nuclear family environment, 3 lived alone and 8 with friends. Two married Indian females lived with their parents instead of their husbands. Two Chinese females who had separated from their husbands lived with parents.

One of the many reasons for attempting suicide observed in this study was conflict with elders and other family members. The importance of the patient's immediate family life in influencing his behaviour was recognised, and patients from nuclear families were compared with patients from extended families. Of the 30 patients living in extended families, 9 experienced conflicts with other members whereas 10 of 33 patients living in nuclear families did so.

Crowded living conditions were observed in the environment of 52 patients. These patients were living 3 or more to a room. There were more patients living in such crowded conditions in the city than in the rural sector, but this difference was not significant.

Causes and Precipitants

Each patient and a contact were interviewed to ascertain the antecedents of the attempt. Chronic underlying causes were differentiated from immediate precipitants.

In a patient population where more than half were single and residing with parents or elders, it was not surprising to note that conflict with elders was the cause for 19 patients (Table II). Fifteen of these were young, single and lived with their parents or in extended families. The number of females encountering this difficulty was thrice the number of males. There was no significant difference between urban and rural patients nor among the ethnic groups.

Almost 42 percent of all married patients experienced marital conflicts. Unsatisfactory love affairs were the reasons mentioned by 10 patients. Financial difficulty, unemployment, arrests by the police, examination failure and transfer to another place of work were the other reasons. Four patients attempted suicide because of addiction to drugs. Sixteen patients attempted as a result of physical or psychiatric illness. All physical illnesses were chronic. Eight patients attempted suicide during acute schizophrenia and another was in remission but was depressed.

Attempts frequently resulted from chronic distress or discontent, and were usually precipitated by current events which were trivial if viewed in isolation. Quarrels often of an abusive or humiliating nature were encountered in the immediate past histories of 32 patients. Among young single patients, a reprimand rather than a quarrel was the precipitant. In 36 percent of the patients no immediate precipitant was attributable. Among them were those who suffered chronic illnesses, depressive illness and schizophrenia.

The findings on the expressed reasons for attempting suicide indicated differences in psychosocial stresses of the 3 ethnic groups. Conflicts with elders was the reason quoted by a disproportionately higher percentage of Indians, in particular females. Love and marital conflicts were quoted by 4 out of 7 Malays. Poor health was the most frequent reason among Chinese and exclusively among the females.

The family structure of patients encountering difficulties with elders was of the nuclear type in 10 of the 19 patients. Of the 5 encountering financial difficulties and unemployment, 4 were from nuclear type families.

Warning, notes

Four patients left notes before the attempt, and 11 had verbally informed that they intended to attempt suicide. Four of the verbal communications had been directed to persons with whom the patients had conflicts. The duration these written and verbal warnings had preceded the attempts ranged from the day of the attempt to the preceding 6 months.

Method of Attempt

Self-poisoning was the method used by 47 patients (65 percent) (Table II). This figure was noticeably lower than the study in Klang which was 99 percent (Murugesan and Yeoh, 1978). Other methods were chosen by patients in Penang; these included attempted hanging, wrist or neck slashing, stabbing and jumping from heights. These 4 methods were chosen by 17 Chinese, 5 Indians and 2 Malays. There was no significant difference observed between rural and urban patients in the choice of violent methods, but relatively more males than females used these methods.

The different ethnic groups showed differences in the choice of poisons. The use of insecticide and weedicide was predominant among Indians of both sexes. The Chinese attempted most frequently with psychotropic medications. The method of second choice for the Chinese was jumping from heights. The methods chosen by Malays in this study were ubiquitous. Among the poisons ingested by the patients were contraceptive pills, antacids, oral bronchial dilators, analgesics, narcotics, detergents and embrocations. Three patients swallowed objects instead of poisons; the objects were buttons, razor blade and costume jewellery. Of the 3 patients who lived in the flat complexes, one attempted by jumping down. Medical sources for the use of psychotropic drugs were noted in 12 patients out of the 19 who used this method. Two of these patients took drugs belonging to others and 5 acquired the drugs from non-medical sources.

Previous Attempts

Fourteen of the patients had previous suicidal attempts. Eleven patients had 1 previous attempt each, 1 patient had 2, and 2 patients had 3 attempts each. Six of the eleven had tried six months prior to the current attempt.

Psychiatric and Medical Diagnoses

Situational stress reactions which were acute in onset and transient in nature were the most frequent diagnosis (Table IV). Neuroses, mainly depressive neurosis, were observed in 11 patients. There were 9 schizophrenic patients and 3 manic

TABLE IV
PSYCHIATRIC DIAGNOSES OF PATIENTS
ATTEMPTING SUICIDE IN PENANG

Depressive Neurosis	10
Other Neuroses	1
Psychoses	12
Personality Disorder	1
Organic Psychosis	1
Drug Addiction	5
Situational Stress Reaction	44

depressive psychotic patients. There were 5 narcotic addicts. Eight patients suffered from chronic medical conditions which included dermatitis, glaucoma, thyrotoxicosis, severe migraine and collapsed vertebra with accompanying severe pain. Seven of these patients gave their illnesses as the reasons for their attempts.

Site of Attempts

Most attempts were in domestic surroundings or in public places like hotels, clubs, parks and places of employment. Only 2 attempted in isolated sites viz. the fringe of jungle and in a rubber estate. Another 2 attempted in jail and in a police lock-up.

More than half were alone at the time, but 15 attempted in the presence of others. Eleven other patients attempted, knowing that others were nearby e.g. in the next room. Fourteen patients, after the act of self-harm, had informed others. The rest were discovered unconscious, or their attempts were uncovered by the side effects of the poisons they had ingested. Vomiting and drowsiness were the common side effects which drew attention of relatives or observers.

Urban Shift

Ten patients had moved to the city within the previous 12 months. They were 9 Chinese and 1 Malay. None of the rural domiciled patients was from the city. The reasons for the shift were the seeking of employment, marriage and education. A few patients did not give any reasons. The 9 Chinese comprised 28 percent of the 32 urban domiciled Chinese. This urban shift among the Chinese patients was unexpectedly high.

DISCUSSION

The findings in this hospital-based study revealed

the high incidence among Indians, the younger age groups, females and people of single status.

The almost exclusive method of attempting suicide by poisoning in Klang (Murugesan and Yeoh, 1978) was not observed in Penang. Only two-thirds of the patients in Penang poisoned themselves, but the types of poisons were similar in both studies. The preference for insecticide and weedicide poisoning was again frequently observed among Indians. Psychotropic drug poisoning was preferred by Chinese. Among the self-injuries inflicted, relatively more males used these methods. There was no significant difference in preference for these more violent methods among the 3 ethnic groups. It is of interest to note that of the 3 patients who lived in the high-rise flat complexes, 1 attempted by jumping down.

The living environment of the patients indicated a relatively higher incidence among Chinese and Indians from the rural areas. This trend was reversed among Malays. As the number of Malays in this study was small, this finding does not lend itself to firm interpretation but would merit further investigation. However, of the 32 Chinese in the city, 9 had moved from the rural sector within the past year. This was an unexpectedly high finding, and added to 15 rural Chinese, would exceed the number of urban derived Chinese. This finding raises the possibility that urban Chinese sought admissions or assistance other than in the General Hospital, or that the rural to urban shift contributed to or was the consequence of events leading to attempted suicide.

Lower socioeconomic status has been associated with higher incidence of attempted suicide. Crowded living condition in the deprived sections of cities is a factor associated with low socioeconomic status, and this study did reveal that two-thirds of the urban patients lived in the older and more crowded section of the city. Frequently, they lived 3 or more persons to a room. The rural patients had lived in less crowded conditions, but the difference between urban and rural patients did not reach significant levels. The occupants of the high-rise flat complexes did not appreciably have a higher incidence of attempted suicides than the rest of the population. The incidence of suicides for flat

dweller was unfortunately unknown as the search for published figures was unsuccessful. The immediate family environment was almost evenly balanced between the nuclear and extended family systems. Conflicts with elders were not more frequent in extended families than nuclear families in spite of the greater number of elders in the extended family system. On the other hand, the extended families did not appear to accord any protection from familial stress leading to suicidal attempts. In spite of the high proportion of patients from the lower socioeconomic strata, financial difficulty was mentioned in only 3 patients. Similarly, unemployment was infrequently the reason for attempting suicide.

The most frequent reason expressed by the patients for their attempts was conflict with elders. These conflicts were usually over their choice of or interaction with members of the opposite sex. Other conflicts arose over difficulties of adolescent self-identity and expression, and encompassed in these conflicts were educational, occupational and financial differences between the patients and their elders. Four times as many females than males encountered conflict with elders. This finding suggested that young females in the Malaysian family structure are faced with a greater degree of role conflicts than the males. The recent emphasis for education and greater occupational opportunities for the female sex have altered the role and expectations of young females. These changes would appear to be less acceptable to their elders in the case of females than males in all 3 ethnic groups in both urban and rural environments.

Attempted suicide during psychotic illness is not uncommon and 8 patients attempted during acute schizophrenia, and another while in remission but was secondarily depressed. Three other patients were suffering from manic-depressive psychosis. Neuroses were diagnosed in 11 patients. Forty-four patients were placed in the psychiatric diagnosis of situational stress reactions. These patients were usually admitted after impulsive attempts at suicide. They were withdrawn and reticent on admission though some were distraught, agitated or aggressive. After a few days, they emerged from their withdrawn state or settled down from their agitated state. They often had pathological defence

mechanisms and inadequate coping behaviours. It can be argued that depression is present in all patients who attempt suicide. This may be so if depression is accepted as a symptom or transient variation of mood, but for the purpose of this study, depression is accepted as a syndrome with its set of physiological and effective responses. Attempted suicides do not occur only in the psychiatrically disturbed. In this study, only 34 percent of patients, and in Klang (Murugesan and Yeoh, 1978) 47 percent were psychiatrically disturbed. These figures excluded drug addicts.

Any attempt in gathering data for a more complete examination of para-suicidal behaviour would have to involve sources other than the public hospitals. Hopefully these data would help to increase insight into this particular human behaviour. A better understanding of this phenomenon in the Malaysian context would perhaps indicate trends for management. As observed in Penang and Klang, the majority of patients were not suffering from severe psychiatric illness and that intra-familial and inter-personal conflicts predominated. These observations would support the basis for the involvement and intervention by professionals and others besides psychiatrists. The family doctor is placed in a position where an understanding of the individual patient and his family environment would lead to early awareness of the difficulties of the patient. He is also placed in a situation where his intervention would be more readily acceptable. The contribution of the social worker would certainly need to be recognised in view of the antecedent social factors in the background of the patient. Voluntary organisations have been recognised in their contributions to assist and advise people in crisis. One such organisation in Penang was the Befrienders which was established in 1978.

Further enquiries into para-suicidal behaviours would contribute to the body of data about this phenomenon. From these data, insights into individual behaviour and formulations on a broader public health model may be drawn with the aim of translation into preventive measures in the Malaysian context.

ACKNOWLEDGEMENT

I thank the Director-General of Health for permission to publish this paper. I also thank Dr.

(Mrs.) V.K. Willie, Dr. Rajaratnam, Dr. Mohd. Uni and the staff of the Psychiatric Department of the General Hospital, Penang, for their cooperation. My appreciation is extended to Mrs. J.L. Yeoh for her typing of this paper.

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