"ATTEMPTED SUICIDES"

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INTRODUCTION

A suicidal attempt, according to Stengel (1964), is any act of self-damage inflicted with self-destructive intention, however vague and ambiguous. Sometimes this intention has to be inferred from the patient's behaviour. If the person succeeds in the attempt it is classified as "suicide. "Attempted suicide ' covers all those who do not die from their act. No attempt is made here to review the voluminous literature on the subject. A recent bibliography by Farberow (1969) listed 1,267 publications from 1958 to 1967. The subject has been studied at various angles ranging from sociological surveys, follow-up studies, psychoanalysis of single case, to the use of psychological and biochemical tests for suicide proness.

As far as the author is aware, there has been no publications on attempted suicides in Singapore. This is a survey and analysis of 192 patients admitted to Thomson Road General Hospital (of Singapore), believed to have "attempted suicide", over a period of about three years (1967 to 1969). Instructions were given to all doctors to refer such cases to the author who is the psychiatrist attached to the hospital. All the patients were examined as early as possible after admission and special attention was paid to the psychiatric aspect of the cases. The number does not represent all the possible cases, and a few which appeared to be accidents, were rejected. It is difficult to sort out in most cases whether the patients had intentions to die. Many denied suicidal intent, and in many others the methods used were so non-traumatising that if death resulted, it would be coincidental. It is more appropriate to call the latter group "pseudocides", a term coined by Lennard-Jones and Asher (1959) for those who lack the desire to die. The purpose of this paper is mainly to present some of the data obtained, and compare them with other studies.

THE RESULTS

Age and Sex

The youngest patient was a 12 years old male Indian student who took a bleaching solution after he was punished by his parents for neglecting his studies. The oldest was a 80 year old Chinese male who cut his throat after slashing the neck of his grand-daughter during an episode of rage and probably confusion. The most common age group (the mode) was 20-24 years (48 cases), and the next, 14-19 years (41 cases), which together accounts for almost half the patients. There were 146 females to 46 males. This 3 to 1 ratio is due mainly to the large difference in the groups below age 39 years.

Table I compares the age and sex distribution with that of the mid-1968 population. All figures are in percentages worked out from data given in the Year Book of Statistics (1968). It is noticed that for females age 15-29 years, the number was three times that of the expected figure. The 10-14 age group was very low—one tenth the expectation. For females above 40 and males above 20, the proportion followed closely that of the control figures.

Ethnic Group

Table II shows that the Indian group was three times the expected figure, while the Malay group was extremely low. It is difficult to comment further because of the small numbers involved. However this feature was also noticed in hospital admission rates, and mental hospital in-patients on record, but not to the same degree.

Marital, Educational and Occupational Status

This is shown in Tables III, IV and V. The marital status of the females did not differ much from the control, but there appeared a higher number of widowed and divorced males. More patients received incomplete secondary education than the control population. This could partly be accounted for by the younger patient population. There is no control figures for occupational class. The general impression is that Class I and II were under-represented. The domestic environment shown in Table VI did not show any difference from that of the control. Simple family means living with parents and siblings, or with spouses and children. Only 4 patients (2%) stayed alone. Social isolation, which was shown by Stengel

TABLE I

A comparison of the age and sex distribution with the mid-1968 Singapore population as control. All figures are in percentages.

Age Groups	Males		Females		Total	
	Patient	Control	Patient	Control	Patient	Control
10-14	1.0	9.6	1.0	9.2	2.0	18.9
15-19	2.1	8.1	19.3	7.7	21.4	15.9
20-29	8.3	10.4	32.3	9.8	40.6	20.2
30-39	4.2	8.5	13.1	8.0	17.3	16.5
40-49	3.1	6.7	5.7	5.4	8.8	12.1
50-59	2.6	5.2	2.6	4.2	5.2	10.4
60-69	1.0	2.7	2.1	2.5	3.1	5.1
70-80	1.6	0.7	0.0	1.3	1.6	1.9
TOTAL	23.9	51.4	76.1	48.1	100.0	100.0

$P < 0.1\%$ for "Females".

TABLE II

A breakdown of the ethnic distribution and its comparison with the mid-1968 Singapore population.

Ethnic Groups	Chinese	Malay*	Indian†	Others	Total
Male	33	0	12	1	46
Female	113	3	27	3	146
Total	146	3	39	4	192
Patients (%)	76.0	1.6	20.3	2.1	100%
Singapore Population (%)	74.2	14.6	8.1	3.1	100%

*Malay includes Indonesian.

†Indian includes Pakistani and Ceylonese.

$P < 0.5\%$.

TABLE III

This shows a breakdown of Civil (Marital) status and compared with data obtained from a 1966 survey*. All figures are reduced to percentages. Only patients age 15-49 are included.

Matrial Status	Male		Female	
	Control	Patients	Control	Patients
Single	50	41	37	37
Married	49	46	59	57
Widowed	0.4	9	3	$3\frac{1}{2}$
Divorced†	0.6	4	1	$2\frac{1}{2}$
Total %	100	100	100	100
Actual Number	—	46	—	146

†Includes "separated".

*Singapore Sample Household Survey, 1966.

TABLE IV

EDUCATIONAL STATUS

	Number	%	Control %*
Nil	48	31	25
Primary I-VI	56	36	58
Secondary I-IV	36	23	8
Completed Secondary	12	7½	7
Tertiary—College	4	2½	2
Unknown	36	—	—

*Singapore Sample Household Survey, 1966.

TABLE V

OCCUPATIONAL GROUPINGS

	Whole Group	Husbands of Housewives	Students' Guardians	Gross Total
Professional/Managerial	0	0	0	0
Semi-Professional	3	7	0	10
Skilled/Clerical	20	11	4	35
Semi-skilled/Hawker	16	39	4	58
Unskilled/Labourer	20	5	1	43
House-wife	99	—	—	—
Student	12	—	—	—
TOTAL	192	99	12	192

TABLE VI

This table shows the domestic environment. The cases are subdivided into 3 groups as shown.

	Female Age 10-29	Female Age 30-70	Male	Total	%	Control*
Simple Family	56	36	30	122	66	60
Extended Family	20	7	4	31	16	15
Others	22	1	8	31	16	15
Alone	1	1	2	4	2	4
Unknown	2	0	2	4	—	—
TOTAL	101	45	46	192		

*Singapore Sample Household Survey, 1966.

TABLE VII

This is a breakdown of events that are related to the act of self-injury. They are subdivided as in Table V.

CHRONIC DOMESTIC DISHARMONY

	101 Females Age 16-29	45 Females Age 30-70	46 Males	Total of 192
Marital	24	18	1	43
Others	11	3	1	15

PRECIPITATING EVENTS

	101 Females Age 16-29	45 Females Age 30-70	46 Males	Total of 192	
Quarrel with spouse	22	14	4	40	
Quarrel with friend	14	0	2	16	
Quarrel with others	7	6	4	17	
All Quarrellings	43	20	10	73	99
Scolded or Beaten	20	2	4	26	
School Examination	5	0	2	7	
Poverty	4	8	14	26	
Ill-health	32		5	37	
Schizophrenia	6		10	16	
Other Psychoses	4		5	9	

TABLE VIII

This shows a breakdown of the methods used. A few cases used multiple methods.

Sedating Tablets	Number	Other Tablets	Number
More than 40	6		
20-39	6	More than 20	6
6-19	25	6-19	10
1-5	17	1-5	5
TOTAL	54	TOTAL	21

Total for tablet ingestion 75

		Physical Methods:	
Chlorinated Solution	23	Cut throat	6
Washing Detergent	23	Cut or stab	3
Insecticide	19	Blunt Injury	4
Sodium Alkali	6	Hanging	5
Other Substance*	26	Jumping	1
		Electrocution	1
Ingestion of Substance	97		20

*Others include Liniment, Dettol, Gentian Violet, Cough Linctus, Royal Jelly, Alcohol, Needles.

TABLE IX

This compares the methods used in this series with those reported by Ellis *et al* (1966) in Leicester.

	Ellis *et al** Number		%	Present Series Number	%
Barbiturate	72	92	45	54	28
Tranquilliser	20				
Aspirin etc.	78	88	44	21	12
Mixture	10				
Poison	8		4	97	49
Trauma Miscellaneous	9		4	20	11
Carbon Monoxide	7		3	0	0

*Modified from Ellis *et al* (1963) Attempted Suicide in Leicester. The practitioner 196, 557.

$P < 0.1\%$.

(1958), to play a role in the causation of attempted suicide, was not apparent in this series.

Previous Health and Child-bearing

Out of 97 cases with information, 29 sufferred from past medical illnesses (mainly asthma), 22 had ill-defined multiple complaints, 14 had headaches or other pain, and 4 had severe insomnia. 15 cases were known to have been admitted to Woodbridge Mental Hospital previously mainly for treatment for Schizophrenia. Out of 136 cases 18 (13%) had history of one previous attempt. One had two previous attempts. He was a 28 year old single male Indian who had history of thefts, debts, multiple job changes and dismissals, and paranoid ideas. He swallowed glass in 1964, nails in 1965 and a safety pin on this occasion. One had four previous attempts. She was a 17 year old Chinese girl with an immature personality, whose attempts were all in the form of swallowing soap or washing detergent solutions. 9 patients were readmitted to the same hospital for subsequent attempts and brought to the author's notice. Of these 4 suffered from Schizophrenia and the rest from Personality Disorder. Only one is a male, a single Indian age 19 who had 5 previous admissions to the hospital for fits, faints, falls, "depressions" and overdose of tablets. At least one patient who suffered from Schizophrenia was known to have killed himself in a subsequent suicide. He was a 20 year old Chinese male.

21 (31%) out of 68 females above age 15 had a history of pregnancy or of having a child under six months old. Many were young mothers living with and having difficulties with their mothers-in-law. The incidence of such cases in the study in Leicester was only 15% (22 out of 142 cases). Events around the period of child-bearing, especially unwanted pregnancies, appeared to have adverse effects on the mothers' mental health. The expected rate of a chance occurrence is worked out to be about 10%.

Causes and Precipitating Factors

This is shown in Table VII. Marital and domestic disharmony were much more common in the females. The most common precipitating event was in the form of interpersonal difficulties, mainly those of quarrelling or misunderstanding with husbands or boy-friends. Poverty and mental illness were more common in the males. Drinking problems which occurred in 51% of Kessel's 170 male cases of self-poisioning (Kessel, 1965), were too infrequent to attract the author's notice; so were "isolation" and "crime" (15% each in Kessel's male patients). Otherwise the precipitating factors were similar. Multiple causes were common in the females.

Methods

As shown in the Table VIII, by far the most common method was the ingestion of substances believed to be poison. Of these 28% were sedating tablets, 21% other tablets (salicylate compounds, antacids, vitamins, unknown tablets, etc.), 49% were household "poisons" comprising 12% chlorinated solutions, 12% washing alkali detergents, 10% insecticides, and 14% miscellaneous substances (dettol, gentian violet, cough linctus, liniment, needles, etc.). There were only 6 cases (3%) of sodium hydroxide (or carbonate) ingestion. This used to be a well-known method in the past. In 20 cases (11%), physical methods were used, of which cutting was most common. There was no drowning attempts. There was one attempt by electrocution by a retired electrician who suffered from a slowly degenerating neurological disorder resulting in a depression. Table IX compares the methods used in this series with those reported by Ellis *et al* (1966) in Leicester. In their studies "poison" which made up 4% compares with 49% in this series. Carbon monoxide poisoning has been unknown in my personal experience of about 500 cases. On the other hand only in 9 cases (5%) was alcohol involved, against 40 cases (20%) in Leicester.

Time and Place of Attempt

Most attempts were at the patients' home (164 cases), 3 were in public and 1 in a secluded uncompleted building. Most of the attempts (77%) took place between 7 a.m. and 11 p.m. 14% were between 12 mid-night and 6 a.m. and the rest unknown.

Psychiatric Illness

27 patients were found to suffer from Schizophrenia, 1 Psychotic Depression, 2 "Alcoholics", 2 Dementia, 28 neurotic or personality disorders, and 2 mentally "dull" totalling 62 cases. The presence of mental illness was much higher in the investigations of Stengel (1958). The 28 cases of Schizophrenia and Psychotic Depression (Functional Psychoses) were sorted out and compared with the rest as shown below.

	Functional Psychoses	The Rest	Total
	N = 22	N = 126	N = 128
Serious Injuries	3	5	8
Injuries requiring treatment	4	12	16
Injuries requiring no treatment	7	20	27
No apparent injuries	8	89	97

It is difficult to assess the seriousness of the attempts and the motivations. From the behaviour of the patients before and after the distress which the patients experienced, the following table is derived.

Motives	Functional Psychoses	The Rest	Total
	N = 14	N = 130	N = 144
Calling for help	3	120	123
Half-hearted intention	7	8	15
Serious intention	4	2	6

From these comparisons it is noticed that the chances of successful suicides are highest among the psychotics, either transient or chronic. This confirms the findings of Stengel (1957) in which absolutely dangerous methods were ascribed to 50% of the Schizophrenics.

SUMMARY AND CONCLUSION

A survey and analysis was made of 192 patients admitted to a general hospital for "Attempted Suicide" over a period of three years (1967-1969). The age range was 12 to 80 with the mode at 20-24 years. The female to male ration was 3 to 1. Compared with the mid-1968 Singapore population as a control, there was excess of females in the 15-29 age range which accounted for more than 50% of all the cases. Below age 14, there were only 4 cases which is one ninth the expected rate. Ethnically the Indians were three times more numerous than expected. There were only 3 Malays (all women), which is one ninth the expected rate. The marital status did not deviate much from the control figures. There were more patients with incomplete secondary education than expected, but Social Class I and II were under-represented. Many patients had history of past ill-health. Suicidal attempts were three times more frequent than expected in pregnant mothers or those with a child under six months old.

The most common causes were acute or chronic marital and domestic disharmony, and interpersonal difficulties in the younger female group; but poverty and mental illness were just as common if not more, among the males and older females. Alcohol and social isolation, which were reported to be important associations in British studies, did not attract the author's notice in this study. By far the most common methods were the ingestions of harmful substances. Household poisons like chlorinated solutions, detergents and insecticides, sedatives and other tablets accounted for about 75% of the "cases". In one British study ingestion of drugs accounted for about 90% of the cases. Physical methods were uncommon—cutting accounted for half the number. They were mostly confined to males.

Psychotic patients tended to use more dangerous methods and were more determined to self-destruction than the rest. Mental illnesses in this series were less common than Stengel and Cook's studies (1958), but Schizophrenia were relatively much more common, and they tended to use more dangerous methods.

Only about 10% of the cases were believed to have intention to die. The rest appeared to have other motivations.

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