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Attempted Suicide in Glasgow

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Attempted suicide has been described as the prime emergency of general practice. Although this may represent a slightly exaggerated claim, the present writers have certainly found attempted suicide to be a frequent reason for the referral of patients to the psychiatric department of a general hospital. The expression "attempted suicide" is usually taken to refer to an unsuccessful attempt to kill oneself: yet such a description is often somewhat inappropriate to describe a dramatic episode of behaviour, during which an assault upon the self occurs as the result of a mood of despair or rage. Death may not be consciously sought and it is more satisfactory to define attempted suicide as a non-fatal act of self-damage.

Suicidal attempts, unlike completed suicide, are said to be commoner in the female and may be preceded by a number of unsuccessful attempts. Completed suicide, on the other hand, more often arises out of the blue without a previous suicidal attempt. Attempted suicide was studied by Stengel (1952) from the viewpoint of its appeal effect.

Recently, attempted suicide has been studied in various urban situations in Britain, e.g., by Harrington and Cross (1959) in Birmingham, Middleton *et al.* (1961) in Gateshead, and Kessel and Lee (1962) in Edinburgh. A previous study in the Edinburgh area was carried out by Batchelor (1954).

The Present Study

It was considered worth while making a clinical assessment of cases of "attempted suicide" referred to the Department of Psychological Medicine at the Eastern District Hospital, Glasgow. Broadly speaking, the aim of the study was to discover what kind of people, with what kind of problems, assaulted themselves in what manner. Between August 1960, and July 1962, 180 randomly referred cases of attempted suicide were studied in detail. A follow-up investigation 6–12 months after the self-damage is now being carried out with the aid of a social worker, and this will be reported separately.

Details of the sample are as follows:—There were 78 male and 102 female patients. The undernoted table gives the age distribution of the patients:—

Table I
Age Distribution

	Cases		Cases
0— 5 years ..	0	41—45 years ..	13
6—10 „ ..	0	46—50 „ ..	18
11—15 „ ..	2	51—55 „ ..	12
16—20 „ ..	23	56—60 „ ..	7
21—25 „ ..	27	61—65 „ ..	4
26—30 „ ..	26	66—70 „ ..	3
31—35 „ ..	20	71—75 „ ..	3
36—40 „ ..	21	76—80 „ ..	1

Total: 180 cases

Age range: 13—77 years

Regarding the religious distribution, 120 patients were nominally Protestant and 60 nominally Roman Catholic.

Their civil status was as follows:—

Table II
Civil Status

Married	99
Unmarried	54
Separated/Divorced	17
Widowed	10
	180

Of the 180 patients 156 were referred from Glasgow Royal Infirmary and associated hospitals, 1 from an outlying hospital, 21 by general practitioners, and 2 were self-referred. The

catchment area of the patients studied was that of the hospital group.

Results

The patients were investigated with respect to the day of the week on which they attempted suicide, the method of self-assault, and possible association with alcoholic intoxication at the time. An attempt was made, furthermore, to obtain an estimate of the length of time during which the self-assault had been contemplated by the patient before its actual infliction. Any previous suicidal attempt by the patient, or by members of his family, was also noted, and an enquiry was made as to what type of medical supervision, if any, the patient had had prior to the self-assault. Finally, a psychiatric diagnosis was made in each case and any associated personal or social problems noted. In addition to the fact-finding aspects of the study, the patients were accepted as a therapeutic commitment in the Psychiatric Department.

The following table records the distribution of cases according to the day of week on which the self-assault occurred:—

Table III
Day of Week

	Cases
Sunday	26
Monday	28
Tuesday	38
Wednesday	22
Thursday	22
Friday	19
Saturday	24
Unknown	1
	180

The preponderance of cases occurring on Tuesday does not reach statistical significance.

For the purpose of assessment, the methods of self-injury were classified as (a) "internal", and (b) "external" in nature. Internal methods involved the ingestion or inhalation of any substance within the body causing a damaging effect. External methods entailed the application of some form of violence to the surface of the body, either by manual infliction or by some other means of producing a sudden collision between the body and its environment. Internal and external methods may alternatively be considered in terms of "passive" and "active" behaviour. Table IV shows the relevant details under these headings:—

Table IV
Mode of Self-injury

(a) *Internal Methods*

	Cases
Drugs	130
Coal gas	17
Drugs and coal gas	3
Drug and sodium chlorate	1
Sodium chlorate	2
Lysol	2
Marking ink	1
Glass and razor blades	1
Broken plate	1
	158

(b) *External Methods*

	Cases
Laceration (throat, wrist, abdomen)	15
Immersion	5
Hanging	1
Descent from window	1
	22

Total 180 cases

The internal methods involved 66 males and 92 females; the external methods, 12 males and 10 females. Although there is a trend suggesting a male predilection for external methods and a female predilection for internal methods, this does not reach statistical significance.

Coal gas was used alone or in combination in 20 cases (11·1 per cent); there were 9 male patients and 11 females. Self-laceration accounted for 15 cases (8·3 per cent); there were 7 male and 8 female patients.

Cases involving drug overdosage (134 patients) were analysed in terms of the precise drug which was ingested. Table V shows the results:—

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TABLE V

Analysis of Drug Overdosage

1. *Barbiturates:*		Cases
(a) *Short-acting*		
	Pentobarbitone	19
	Butobarbitone	15
	Amylobarbitone	10
	"Carbrital"	9
	Cyclobarbitone	4
	"Tuinal"	1
	Quinalbarbitone	1
(b) *Long-acting*		
	Phenobarbitone	18
	Sodium Barbitone	2
(c)	Unspecified barbiturate	2
	Total	81

2. *Other Hypnotics:*	Cases
Methyprylone ("Noludar")	2
Glutethimide ("Doriden")	2
Carbromal	1
Total	5

3. *Analgesics:*	Cases
Acetylsalicylate	15
Codeine	4
Total	19

4. *Tranquillizers:*	Cases
Promethazine	2
Meprobamate	1
Chlorpromazine	1
Total	4

5. *Miscellaneous:*	Cases
"Migril"	1
Ephedrine	1
Dextroamphetamine	1
Primidone	1
Various Mixtures: (Barbiturates, tranquillizers, anti-depressants and analgesics)	21
Total	25

As the table indicates, barbiturates alone were taken by 81 patients; barbiturate, however, was ingested by a further 12 patients who took a mixture of drugs. The total of 93 barbiturate cases (36 male, 57 female) represents 52 per cent of the whole series. Fifteen patients took an overdose of acetylsalicylate and a further 6 patients ingested this drug as a component of a mixture. The total of 21 salicylate cases represents 11·7 per cent of the total series and comprises 15 females and 6 males.

The period during which the self-injury was contemplated by the patient before its infliction is given in the following table:—

TABLE VI

Period Contemplated

	Cases
Less than 1 hour	77
1-hour/1-day	18
More than 1 day	29
Indeterminate	56
Total	180

Investigation of the question of medical supervision prior to the self-injury was restricted to the period of one month preceding its occurrence. The following figures were obtained:

TABLE VII

Prior Medical Supervision

	Cases
By general practitioner	82
By psychiatrist	23
By neither	75
Total	180

Many of the 75 patients who denied any previous medical supervision had taken an overdose of drugs. It is inferred that (1) they were being untruthful owing to a sense of shame about their behaviour, or (2) they had obtained an illicit supply of drugs, or (3) they had utilized drugs belonging to a relative or friend, or (4) they had used a drug which was part of a former supply kept at home.

Of the 180 patients 37 (20·6 per cent) were intoxicated at the time of self-assault. The quantity and type of alcohol varied considerably; beer, whisky, gin and vodka were the most favoured. Thirty-six patients (20 per cent) had made a previous suicide attempt, and in 15 of

these instances the same method was previously employed. Of the 180 patients 6 (3·3 per cent) gave a family history of suicidal conduct and, incidentally, this had occurred invariably in male relatives.

Table VIII summarizes the physical illnesses from which the patients were suffering at the time of their suicidal attempts:—

TABLE VIII

Associated Physical Condition

	Cases
Chronic bronchitis	9
Idiopathic epilepsy	5
Pregnancy	5
Pulmonary tuberculosis	4
Valvular disease of heart	3
Peptic ulcer	2
Iron deficiency anaemia	2
Osteoarthritis	2
Hyperthryoidism	1
Hypothyroidism	1
Influenza	1
Bronchial asthma	1
Carcinoma of larynx	1
Fracture of femur	1
Disseminated sclerosis	1
Menorrhagia	1
Acute glomerulonephritis	1
Essential hypertension	1
Congenital heart disease	1
Contact dermatitis	1
Shortening of leg (old polio)	1

It will be observed that most of the disorders recorded above are of a long-term nature and that respiratory illnesses loom large. The associated physical conditions were of varying relevance to the patients' self-assaultive behaviour; it was considered that in 15 cases (8·3 per cent) the physical condition was the main precipitating event. (See Table IX). In 5 cases the suicidal attempt occurred during pregnancy and in 3 of these instances the patient was unmarried; in 4 of the 5 cases the pregnancy was judged to be highly relevant to the active self-damage (see Table IX).

Table IX summarizes the personal and social problems which were associated with the suicidal attempts. The information here is oversimplified, for only the leading problem is considered in each case; in fact, however, many patients presented multiple co-existing problems:—

TABLE IX

Associated Personal/Social Problems

	Cases
Romance/Marital problem	67
Family relationship problem	27
Financial/employment problem	16
Personal physical illness	15
Social isolation/rejection	10
Recent bereavement	7
Expiation of real or fantasied guilt	7
Illness of relative	6
Escape from legal retribution	5
Psychosexual deviation	4
Pregnancy	4
No obvious factor	12
Total	180

The marital and romance difficulties accounted for 37·2 per cent of the total cases. In many instances of marital discord, the self-assault occurred as a final act of exasperated abdication from what the patient regarded as an intolerable situation. Such patients often described their conduct as constituting "the only way out", or "the only way I could get peace", etc.

TABLE X

Psychiatric Diagnosis

	Cases
Reactive/psychoneurotic depression	93
Hysterical reaction	36
Personality disorder	27
Endogenous depression	18
Schizophrenia	6
Total	180

The psychoneurotic depressions together with the hysterical reactions accounted for 71·7 per cent of all the cases.

As an illustration of a psychoneurotic depression, one patient, a 42-year old male, gave a long-term history of inadequacy and of dependency upon his mother. There was a backlog of marital strife over a period of many years. Furthermore, he had a mentally defective daughter, a circumstance which produced a profound sense of shame within him. He had

had depressive episodes from time to time and on the present occasion this was associated with barbiturate overdosage.

Cases classified as "hysterical reactions" were strikingly lacking in subjective or objective evidence of depression. Their self-assaults usually occurred in situations which produced burning resentment and often a desire to manipulate or frighten some person or persons with whom they had become disaffected. A 27-year-old male in this group was separated from his wife, who persistently rejected all his attempts to effect a reconciliation. His drug overdosage occurred as an angry gesture on realizing the futility of his efforts.

In cases of endogenous depression, environmental pressures were strikingly lacking in the recent history of these patients. One patient, a 36-year-old woman took an overdose of chlorpromazine while recovering from a severe endogenous depression—an occurrence which supported textbook statements concerning the timing of suicidal attempts in depressive illness.

Among the group of personality disorders, there were many bizarre attempts at self-injury, and here alcoholic intoxication was commonly noted either as an accompaniment of the self-injury or in the patient's previous history. A 19-year-old male in this group attempted to hang himself while under the influence of alcohol; there was a lengthy record of personality disturbance commencing in early childhood when he was evacuated from the city to a rural area in wartime conditions; thereafter he had always been a lone wolf.

In the schizophrenic group a 30-year-old male gave a 10 year's history of recurrent psychotic episodes, many of which had necessitated hospitalization. He took an overdose of meprobamate shortly after being discharged from a mental hospital because he could not cope with day-to-day difficulties and wished to "get something done in hospital".

Discussion

The foregoing evidence indicates that "attempted suicide" is certainly not a disease *sui generis*; nor is it even a syndrome in its own right. It is rather a behavioural manifestation or symptom, common to a wide variety of psychological and environmental problems. The variety of psychiatric diagnoses indicates the different settings in which self-assault may occur.

In the present series all age groups from adolescence to old age were represented. The peak of incidence was in the 16–40 age range. These data contrast sharply with those for completed suicide, which has its highest incidence over the age of 50.

Regarding religious affiliation, the distribution in this series (120 Protestant, 60 Roman Catholic) is probably little different from that in the local population served by the hospital, i.e., the industrial east side of Glasgow, although no figures are available in this regard.

The civil status of the sample is unremarkable except that 17 (9·4 per cent.) of the patients were either separated or divorced. This would appear to be a rather high figure, and no doubt the dislocation of these patients' marriages—entailing isolation, resentment or loss of emotional and economic support—played a background role in determining their acts of self-damage.

Regarding the day of the week on which self-assault took place, Tuesday showed the highest incidence and Monday the next highest. If this trend is meaningful, it may be explicable on the basis of economic exhaustion following weekend spending in a group which is mainly remunerated on a weekly basis.

With respect to the modes of self-damage adopted by the patients, much diversity was observed. The chief group was attributable to drug overdosage, i.e., 134 patients (74·4 per cent.) of whom 93 ingested barbiturates. Of the barbiturate group, pentobarbitone, phenobarbitone, butobarbitone and amylobarbitone were most favoured. Doubtless this reflects local prescribing practice. Acts of drug overdosage are obviously fostered by unduly liberal prescriptions as well as by the acquisition of illicit supplies by some patients. The "black market" is certainly difficult to control, but general practitioner prescribing should not be beyond curtailment. It is suggested here that if short-acting barbiturates do not alleviate insomnia within a month, review of the situation or

referral to a psychiatrist is then indicated. A fortnight's supply of the drug would seem to be adequate on a single prescription. Many observers, however, are dubious as to whether such advice would substantially modify the incidence of self-assaultive conduct.

In the current series 37 (20·6 per cent.) of the patients were under the influence of alcohol at the time of their self-assault. This is a strikingly higher proportion than that reported by Stengel and Cook (1958) who noted a 10 per cent. rate of alcohol intoxication among attempted suicides in an urban population. Batchelor (1955) rightly comments that when the individual is under the influence of alcohol it becomes all the more difficult to assess the seriousness of the suicidal attempt. Capstick (1960) in his study of completed suicides, found that only 2·3 per cent. were drunk at the time of their death. Perhaps the high rate of alcoholic intoxication in the present study simply reflects the high level of alcoholic indulgence in the population served by the hospital.

The most difficult question arising from the present investigation is that of the seriousness of each act of self-injury. No objective yardstick exists for making such an estimate, and the total circumstances must be taken into account. It is certainly impossible to divide the cases in rigid fashion into those which are serious and those which are trivial. Many cases entail impulsive drug overdosage which poses a potential threat to life, and some patients who would have died in previous years as a result of their barbiturate intake are now resuscitated by means of haemodialysis or with the aid of the anaesthetist in establishing an adequate airway. There would appear to be a continuous series from the most trivial to the most serious. Broadly speaking, the group of endogenous depressives and that of the schizophrenics represent the more serious end of the spectrum.

The history of a previous suicidal attempt in 20 per cent. of cases is in conformity with the statement of Stengel and Cook (1958) that previous attempts at suicide are common in this group of individuals. The figures in this respect, and those concerning family incidence of suicide (3·3 per cent.), must be regarded as minimum statements. A further interesting feature is the fact that 41·7 per cent. of the patients, many of whom had taken an overdosage of drugs, denied any recent attendance by the medical profession. It is suggested that illicit drug supplies and untruthfulness of statements in this regard may account for most of these cases; lack of veracity may arise from a sense of guilt about having disregarded medical instructions in respect of the drug.

In the neurotic-depressive and hysterical groups (71·3 per cent.) the motivation apparently underlying the self-damage was consistent with the "appeal for help" hypothesis put forward by Stengel and Cook (1958). The self-assault occurred as a reaction to a transient personal crisis or to a recurring problem in the lives of the patients. In these instances the self-directed aggression arose from despair or temporary breakdown of personal resources. It is unsatisfactory to regard this large group as being insincere or frivolous in their behaviour. Such a negative description fails to answer the question, "Why *do* they do it?" This question may conceivably be answered in terms of existentialist theory. A loss of meaning and purpose in the person's life may, in this frame of reference, be regarded as the relevant mechanism. Likewise it is well known that suicide rates tend to diminish in wartime when national aims become more definitely crystallized.

Alternatively, this question may be dealt with in terms of communication theory. Many of our patients who assailed themselves did so in response to complex and overwhelming situations. The result was an "information overload"—an overload of unbearable stimuli to which the self-injury represented a final attempt at adaptation. Communications engineers equip their computers with automatic fuses which protect their mechanical brains from excessive stimulation. It would seem that some human beings, lacking such built-in fuses, find a substitute in self-assault.

In psychoanalytic terms, the attack upon the self may constitute an effort to destroy a hated or ambivalently regarded introjected object.

Prevention of attempted suicide has been discussed by a number of writers, e.g., Parnell and Skottowe (1957), Middleton *et al.* (1961). Emphasis is generally placed upon (1) more

adequate control of drugs, and (2) the early recognition of depression. The present investigation lends further support to these recommendations.

Such recommendations concerning the control of drugs and the early recognition of depression leave out of account the need for paying attention to the frequent occurrence of social problems and interpersonal difficulties noted in this investigation. This finding is similar to that of Kessel and Lee (1962). Possibly a case could be made for attaching health visitors to busy general practices in industrial areas in order to help family doctors to deal with interpersonal crises as they occur. Such an approach has already been successfully employed by Chalke and Fisher (1957). In the present series, arrears of hire purchase payments figured prominently among the relevant social problems, but it is dubious whether a mere change in hire purchase legislation would substantially alter this situation; a number of people will probably always remain susceptible to high pressure sales techniques and will wish to live at a standard beyond their economic means.

Summary

1. A limited epidemiological study was made of 180 cases of "attempted suicide" occurring in an industrial area of Glasgow.

2. Females outnumbered males in the proportion of 102 to 78.

3. The age group 16 to 40 accounted for 117 (65 per cent.) of the cases.

4. Drug overdosage of various types accounted for 134 (74·4 per cent.) of the cases.

5. More detailed breakdown of the figures indicates the following order regarding method of attempted suicide:—

Barbiturates alone or in combination in 93 (51·7 per cent.) cases.

Salicylate alone or in combination in 21 (11·7 per cent.) cases.

Coal gas alone or in combination in 20 (11·1 per cent.) cases.

Self-laceration in 15 (8·3 per cent.) of cases.

6. Psychoneurotic or reactive depressions and hysterical reactions together accounted for 129 (71·7 per cent.) of the psychiatric diagnoses.

7. Marital and romance problems appeared to provoke 67 (37·7 per cent.) of the suicidal attempts.

8. Some aspects of prevention are discussed.

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