

Attempted Suicide in Young Women: Correlates of Lethality

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Summary: One hundred and ten young women aged 18 to 30 years who had attempted suicide by drug overdose were divided into three groups on the basis of the physical threat to life of their suicide attempt. Young women whose suicide attempts resulted in the greatest risk to life were more often unmarried or not in a *de facto* relationship; reported little use of alcohol; had had recent contact with a psychiatrist; had taken more than 20 tablets or capsules, most often antidepressants; and had a high degree of suicidal intent and hopelessness. Furthermore, there were trends for them to be of high socio-economic status; to have had less history of violence, both used and sustained; to more often demonstrate schizoid personality traits; and to report less death anxiety.

“Was it a serious suicidal attempt?” This is a question immediately asked in every case by everybody who gets to know about the attempt”.
(Stengel, 1969)

At least three broad issues appear to be addressed by this deceptively simple question. Does the term serious apply to the physical effects of a suicide attempt, or to the degree to which that person wished to die? Does it provide a guide to the future risk of suicide, and are there readily apparent differences, either of a demographic or psychopathological nature which distinguish patients who have made attempts of differing seriousness?

The influential work of Farberow (1950) and Stengel *et al* (1958) placed emphasis on the need to distinguish the seriousness of the physical consequences (medical lethality) of a suicide attempt from the actual wish to die (suicidal intent) component of the suicidal subject. Indeed, Farberow (1950) noted that the medical seriousness of an attempt was ‘frequently . . . misleading’ in the assessment of suicidal subjects, and Stengel *et al* (1958), stated that ‘clearly the degree of danger to life is not a reliable measure of seriousness of intent’.

These views have been re-iterated by some authors (Birtchnell and Alarcon, 1971; Card, 1974; Beck *et al*, 1975a), but there is also literature which suggests that medical lethality and suicidal intent may be more closely related (Schmidt *et al*, 1954; Weiss *et al*, 1961; Dorpat and Boswell, 1963; Heyse *et al*, 1969; Worden, 1976; Pallis and Barraclough, 1977; Pallis and

Sainsbury, 1976; Pierce, 1977). Certainly the issue does not appear to be as clear-cut as Farberow and Stengel *et al* suggested.

Different results have emerged from studies examining the risk of future suicide in those who have made serious suicide attempts. Although Greer and Lee (1967) and Card (1974) found no relationship between medical lethality of a suicide attempt and subsequent suicide, Motto (1965), Weiss and Scott (1974), and Rosen (1976), who used combinations of medical lethality and suicidal intent, and Pallis and Barraclough (1977), who re-analysed Card’s data as well as presenting their own work, have recorded a greater rate of suicide in those who previously made serious suicide attempts. On balance it appears that there is a body of data accumulating which indicates that those who make suicide attempts of high medical lethality and/or suicidal intent have a greater risk of subsequent suicide than patients whose suicide attempts are of low medical lethality and/or suicidal intent.

Notwithstanding the wide variation in medical lethality and suicidal intent recorded in suicidal subjects, and its probable relationship to subsequent suicide, few demographic or psychopathological differences have been reported between those whose suicide attempts have been of widely differing degrees of seriousness. There appears to be a consensus that the more serious (both in terms of medical lethality and suicidal intent) are older (Schmidt *et al*, 1954; Graham and Hitchens, 1967; McHugh and Goodell, 1971; Pierce, 1977) and that they have more psychiatric

illness (Schmidt *et al*, 1954; Dorpat and Boswell, 1963; Graham and Hitchens, 1967; Sendbuehler *et al*, 1970; Rosen, 1970; McHugh and Goodell, 1971; Worden, 1976; Pierce, 1977). However, there have been reports which have been unable to define such differences (Farberow, 1950; Doroff, 1969; Heyse *et al*, 1969; Kinsinger, 1971; Fraser and Lawson, 1975).

In reviewing work on these issues it is apparent that there have been few studies of specific groups of patients, and it is possible that differences have not emerged because of the heterogeneity of the suicidal subjects examined. The present study is confined to young women aged 18 to 30 years, the group which comprises the majority of those who attempt suicide (Kreitman, 1977). It distinguishes those whose suicide attempt has been life-threatening and necessitated resuscitation in an intensive care unit, from both those whose attempt has required cautionary observation, and those whose attempt has resulted in no physical risk to life. In addition to using a standardized instrument for assessing suicidal intent, this study reports the differences between the groups of differing medical lethality on the basis of demographic and questionnaire data.

Method

Subjects

Attempted suicide was defined as the deliberate acute self-administration of a drug or poison with the intention of causing or risking death or harm, or in order to give the impression of such intention. In doubtful cases, the recorded opinion of the responsible clinician was accepted. Admissions to a large city general hospital intensive-care unit of women 18 to 30 years who had attempted suicide comprised the group of high lethality. It is hospital policy to admit all patients who present having attempted suicide, and each person is assessed physically by an intensive-care unit registrar who determines whether the patient should be admitted to the intensive-care unit or to a general recovery ward. Subjects admitted to the general recovery ward were divided into two groups; those whose physical condition warranted some cautionary observation, and those whose physical condition alone would not have necessitated admission. This was done on the basis of a retrospective examination of clinical records by three senior colleagues; the medical superintendent (a specialist physician), the specialist physician-anaesthetist attached to the intensive-care unit, and the senior registrar in clinical pharmacology.

All but two subjects were seen within forty-eight hours of resuscitation. One who had initially refused

cooperation and continually expressed suicidal ideation was transferred under certificate to a psychiatric hospital, but completed assessment five days later. Another patient initially absconded before assessment, but was seen seven days later, after she had responded to a telegram. During the intake period, two subjects died, one transsexual was excluded, three subjects were acutely schizophrenic and unable to complete the questionnaires; two were unable to communicate sufficiently because of a language barrier, two refused to cooperate, and a further two subjects were seen and discharged by a psychiatric registrar because of a breakdown in communication with the researcher.

Patients were interviewed in comfortable, private surroundings, and before data collection commenced, tests of cognitive function were administered. If confusion was evident, the interview was deferred. Vignettes of subjects representative of each group have been provided elsewhere (Goldney, 1979).

Instruments

General descriptive and demographic data were recorded in a manner similar to that employed at the Edinburgh regional poisoning treatment centre. Assessment of socio-economic status was made on the basis of a five tier system developed by Krupinski *et al* (1966) for use in Australia. A history of personal violence was assessed on the basis of responses to the question: "In the past five years have you been physically violent towards another person, or has anyone been physically violent towards you?" Clinical diagnosis was made using the criteria of the international classification of diseases.

The degree of suicidal intent was measured by the suicidal intent scale (Beck *et al*, 1974a). This consists of fifteen items, each rated on a three point scale, and allows both the circumstances of the suicide attempt, and the self-reported suicidal intent, as well as a total suicidal intent score to be recorded. Depression was measured by the Levine-Pilowsky depression questionnaire (Pilowsky *et al*, 1969). Hopelessness was assessed by the hopelessness scale (Beck *et al*, 1974b), as there is evidence that this attribute may be more related to the lethality and intent of suicidal behaviour than is depression (Beck *et al*, 1975b; Wetzel *et al*, 1980). The Death anxiety scale (Templer, 1970) was employed, as one is frequently met with comments by suicide attempters that they are too afraid of death to really try to kill themselves, and thus this attribute could be anticipated to differentiate those who have made suicide attempts of widely differing lethality. Questionnaires were administered in the order described, and were completed in the presence of the author, during the assessment interview.

Analysis

The statistical package for the social sciences (SPSS) was used for data analysis (Nie *et al*, 1975).

Results

Demographic data were available for 33 subjects of high lethality (H.L.), 54 of intermediate lethality (I.L.) and 23 of low lethality (L.L.). The suicidal intent score of one subject of I.L. was lost. There were highly significant differences in the suicidal intent scores between the groups of differing medical lethality (Table I).

The mean age of subjects in each group was similar (H.L. = 22.7 years (S.D. 3.5), I.L. = 22.4 years (S.D. 3.4), L.L. = 23.2 years (S.D. 3.8)), and there was no significant correlation between age and scores of the suicidal intent scale ($r_s = .0308$, ($N = 109$), $P = .375$, n.s.). A similar proportion of each lethality group were migrants (H.L. = 6, I.L. = 12, L.L. = 7). Subjects in the L.L. group were significantly more often married or living in a de facto relationship (Table II). No person who attempted suicide was assigned to the highest socio-economic group, but there was a trend for fewer of the L.L. group to be in socio-economic class II. This trend approached significance when those in class II in the L.L. group were compared with those in the two more lethal groups (corrected $\chi^2 = 3.581$, $df = 1$, $P < .1$).

Patients in the H.L. group significantly more often took antidepressants than patients of lesser lethality. Although there was a trend for fewer of the L.L. subjects to take more than one drug/agent, this did not attain significance. The patient numbers in the analysis regarding the total number of tablets/capsules ingested is less than for other analyses as those who took liquids have been excluded. There was a highly significant relationship between the number

of tablets/capsules ingested and both the lethality of the suicide attempt and scores of the suicidal intent scale ($r_s = .527$, $P < .001$). There was no difference between the three groups when comparing the source of the principal drug ingested, with 20, 33 and 13 subjects of the H.L., I.L. and L.L. groups reporting that the drugs had been prescribed for them, and only 7, 8 and 3 of each group reporting that the drug had been prescribed for others. Significantly fewer patients in the H.L. group reported either that they used alcohol in general, or that they had taken alcohol immediately before or with their overdose.

The overwhelming majority of each lethality group reported their most recent contact with a helping agency to be with a medical practitioner (H.L. = 29, I.L. = 50, L.L. = 21). Patients in the L.L. group had significantly more often had contact with that doctor in the 48 hours immediately before their overdose than had other subjects. There was also a significant difference between the groups in the nature of their medical contact, with more of the H.L. group having had recent psychiatric consultation (Table II).

There was no significant difference between the groups with regard to a history of previous psychiatric consultation (H.L. = 21, I.L. = 24, L.L. = 12), previous attempted suicide (H.L. = 15, I.L. = 27, L.L. = 6), drug abuse (H.L. = 9, I.L. = 13, L.L. = 5), family history of psychiatric treatment (H.L. = 11, I.L. = 22, L.L. = 8), history of contact with suicide (H.L. = 12, I.L. = 17, L.L. = 5) or attempted suicide (H.L. = 16, I.L. = 29, L.L. = 12), and history of parental death (H.L. = 3, I.L. = 7, L.L. = 2), or separation/divorce before the age of fifteen (H.L. = 6, I.L. = 13, L.L. = 5). Subjects as a whole reported less history of having inflicted violence than of having sustained it, and there was a trend for

TABLE I
Suicidal intent scores of differing lethality groups

	H.L. (n = 33)	I.L. (n = 53)	L.L. (n = 23)	Comparison	Mean ranks	Mann-Whitney U	Significance (P) (one tailed)
Intent-circumstances Mean (S.D.)	5.30 (4.01)	3.18 (2.50)	1.00 (.95)	HL v. IL	51.6 38.4	1142.5	P < .01
				IL v. LL	45.1 23.3	959.0	P < .001
				HL v. LL	37.0 16.3	659.5	P < .001
Intent-self-report Mean (S.D.)	5.25 (4.01)	3.26 (2.89)	1.22 (1.45)	HL v. IL	53.5 37.3	1204.0	P < .005
				IL v. LL	43.5 26.9	876.5	P < .001
				HL v. LL	36.9 16.5	656.0	P < .001
Total intent Mean (S.D.)	10.82 (6.96)	6.45 (4.94)	2.22 (2.02)	HL v. IL	51.3 39.5	1132.5	P < .05
				IL v. LL	44.8 25.4	934.0	P < .001
				HL v. LL	36.7 16.8	649.0	P < .001

TABLE II
Data distinguishing the differing lethality groups

	HL (33)		IL (54)		LL (23)		χ^2 Sig.
	O*	E**	O*	E**	O*	E**	
<i>Civil state</i>							
Married/ <i>de facto</i>	13	14	17	22	15	9	7.639, df = 2, P < .05
Single/separated/divorced/widowed	20	21	37	32	8	13	
<i>Socio-economic status</i>							
I	—	—	—	—	—	—	5.619, df = 6, n.s.
II	7	5	9	8	—	3	
III	10	10	15	17	9	7	
IV	6	6	10	10	5	5	
V	10	12	20	19	9	8	
<i>Class of drug ingested:</i>							
Analgesic	2	5	10	9	6	4	4.332, df = 2, n.s.
Minor tranquilliser	8	10	16	17	10	7	2.430, df = 2, n.s.
Major tranquilliser	3	3	6	4	—	2	+
Barbiturate	6	3	2	4	1	2	+
Other hypnotic	9	8	9	13	8	5	3.278, df = 2, n.s.
Antidepressant	14	6	6	10	1	5	17.094, df = 2, P < .001
Other	11	12	23	19	5	8	3.158, df = 2, n.s.
More than one drug	16	13	21	21	5	8	4.128, df = 2, n.s.
<i>No. of tablets ingested:</i>							
< 12	2	7	7	12	15	5	42.257, df = 6, P < .001
13-20	4	8	18	14	6	6	
21-30	13	9	17	16	1	6	
> 30	10	5	9	9	—	5	
<i>Use of alcohol</i>							
Use of alcohol with or before overdose:	5	11	19	17	11	7	7.224, df = 2, P < .05
History of use of alcohol in general	8	15	30	25	12	10	8.559, df = 2, P < .02
<i>History of violence</i>							
Violence inflicted	4	8	16	13	7	6	3.935, df = 2, n.s.
Violence sustained	13	17	32	27	11	12	3.345, df = 2, n.s.
<i>Most recent medical contact:</i>							
< 48 hours	8	7	7	11	8	5	10.764, df = 4, P < .05
2-28 days	15	17	27	27	14	12	
> 28 days	10	9	20	16	1	6	
<i>Nature of recent medical contact:</i>							
Psychiatric	12	7	8	12	4	5	6.839, df = 2, P < .05
Other medical	17	22	42	38	17	16	

* Observed.

** Expected on the basis of the null hypothesis that no difference existed between the three lethality groups.

+ Insufficient numbers for analysis.

the H.L. group to report less history of violence, both inflicted and sustained (Table II).

Neurotic depression was the most common clinical diagnosis, being made in equal proportions in the three groups (H.L. = 24, I.L. = 34, L.L. = 14). There was a trend, which approached significance when the χ^2 was partitioned, for patients in the L.L. group to be diagnosed as presenting a transient situational disturbance more often than patients in the groups of greater lethality (H.L. = 3, I.L. = 11, L.L. = 8; corrected $\chi^2 = 2.889$, $df = 1$, $P < .1$). No patient in the L.L. group was given a schizophrenic, schizoaffective or anorexia nervosa diagnosis, whereas 3 and 5 in the H.L. and I.L. groups were schizophrenic, 2 and 3 respectively were schizo-affective and one in each of the H.L. and I.L. groups was diagnosed as anorexia nervosa. Similar proportions of each group demonstrated obsessional (H.L. = 4, I.L. = 5, L.L. = 2), hysterical (H.L. = 17, I.L. = 25, L.L. = 16) and sociopathic (H.L. = 4, I.L. = 9, L.L. = 5) personality traits. However, there was a trend for there to be fewer patients with schizoid traits in the L.L. group (H.L. = 11, I.L. = 14, L.L. = 2; corrected $\chi^2 = 2.937$, $df = 1$, $P < .1$).

The questionnaire scores of the differing lethality groups are presented in Table III. There was no significant difference between the scores of the depression questionnaire for the differing lethality groups, but there was a significant correlation with suicidal intent scores ($r_s = .3837$, $n = 104$), $P < .001$). Subjects in the H.L. group scored significantly higher on the hopelessness scale than did those in the L.L. group. There was also a significant correlation of hopelessness scores with suicidal intent scores ($r_s = .4403$, $n = 103$), $P < .001$). When the correlations of depression and hopelessness with suicidal intent were partialled, controlling for hopelessness and depression

respectively, the correlation of depression with suicidal intent (controlling for hopelessness) was no longer significant ($r = .1605$, $n = 103$), $P = .107$, n.s.), whereas the correlation for hopelessness with suicidal intent (controlling for depression) remained significant ($r = .2608$, $n = 103$), $P < .01$). (The Pearson correlation coefficient was used as the SPSS programme did not allow for partialling of non-parametric data).

There was no significant difference in scores on the death anxiety scale, but there was a significant, though weak, correlation with suicidal intent scores, with the negative correlation indicating a lesser death anxiety with higher suicidal intent ($r_s = -.1803$, $n = 103$), $P < .05$).

Discussion

There was a highly significant difference in the degree of suicidal intent between the groups of differing lethality. This was so both for the circumstances related to the suicide attempt and for the self-report components of the scale, as well as the total suicidal intent score. Thus this study does not support the views of Farberow (1950) and Stengel *et al* (1958) that the medical lethality of suicide attempts is misleading with regard to suicidal intent. Rather, it supports those studies which have noted that suicidal intent and medical lethality are more closely related (Schmidt *et al*, 1954; Weiss *et al*, 1961; Dorpat and Boswell, 1963; Heyse *et al*, 1969; Weisman and Worden, 1972; Pallis and Barraclough, 1977; Pallis and Sainsbury, 1976; Pierce, 1977). Although these findings indicate that such subjects are aware of their mixed suicidal wishes, and that these are translated into actions, the lethality of which can be said to approximate those feelings, the association is not perfect. Thus in the clinical situation the medical

TABLE III
Questionnaire scores of differing lethality groups

Questionnaire	H.L.	I.L.	L.L.	Comparison	Mean ranks	Mann-Whitney U	Significance (one tailed)
Depression (n = 104)	9.85	9.60	9.10	HL v. IL	43.3 41.1	868.5	n.s.
Mean (S.D.)	(5.14)	(4.40)	(3.91)	IL v. LL	36.7 34.4	358.0	n.s.
				HL v. LL	28.8 25.4	391.0	n.s.
Hopelessness (n = 103)	10.58	9.46	7.40	HL v. IL	45.0 40.0	925.0	n.s.
Mean (S.D.)	(5.91)	(5.41)	(4.81)	IL v. LL	37.8 29.9	612.5	n.s.
				HL v. LL	30.0 22.0	430.5	$P < .05$
Death anxiety (n = 103)	6.88	7.48	7.80	HL v. IL	39.8 43.4	752.5	n.s.
Mean (S.D.)	(2.80)	(2.90)	(3.19)	IL v. LL	34.9 36.9	472.5	n.s.
				HL v. LL	25.5 29.5	280.0	n.s.

lethality should be considered no more than a useful guide to the degree of suicidal intent.

Although the subjects were all aged 18 to 30 years it was unexpected that there should have been no difference in age between the groups of differing lethality. Previous studies have suggested that the lethality of a suicide attempt increases with age (Weiss *et al*, 1961; Motto, 1965; Graham and Hitchens, 1967; Rosen, 1970), and it is a general clinical belief that the younger age group, particularly young women, are more prone to make suicide attempts of low lethality. Consistent with the work of Pierce (1977) there was no correlation between age and scores of the suicidal intent scale. This lack of association between age and both lethality and intent suggests that the age range of this population is too restricted; that differing age within the limits of 18 to 30 does not influence lethality and intent; or that intervening variables, such as physical illness, are not yet sufficiently manifest in this age group to be reflected by differing degrees of lethality and intent.

The trend for fewer subjects of the L.L. group to be in the higher socio-economic classes is in accord with the reports of Sendbuehler *et al*, (1970) and Rosen (1970). Such a finding is consistent with the suggestion that suicide attempts of low lethality have more of a communication component, as the lesser verbal facility of those in the lower socio-economic classes (Brandis and Henderson, 1970) may predispose them to communicate in this manner.

Significantly more subjects of the L.L. group were either married or in a de facto relationship. Weiss *et al* (1961) and Leon *et al* (1972) found no association, and Rosen (1970) reported more single subjects in his 'non-serious' group. However, age and civil status are closely related, and may account for those findings, particularly as the 'non-serious' group in the study of Rosen (1970) were younger, and therefore more likely to be single. In subjects of comparable age, as in this study, the finding that subjects in the L.L. group were more likely to be married or in a de facto relationship is both in keeping with the importance of the communication component which has been postulated in such minimally lethal acts, and also with the role that isolation appears to play in more serious suicide attempts.

The numbers of individual drugs was small, and the only statistically significant finding was for subjects of the H.L. group to have more often taken antidepressants than those in the groups of lesser lethality. This may reflect the admission policy to the intensive-care unit and the caution regarding the cardiotoxic effects of tricyclic antidepressants, or it may indicate that doctors have perceived more severe depression, and have prescribed antidepressants

more readily in those subjects who subsequently make the most lethal suicide attempts. Sixty per cent of subjects used medication prescribed for themselves by a medical practitioner, and a further 16 per cent used drugs prescribed for others, with the proportions being similar in each lethality group. In so far as taking another person's drugs can be considered an act of communication, it is of interest that there was no preponderance of this in the L.L. group.

There was a highly significant relationship between the total number of tablets/capsules ingested and both the lethality of the suicide attempt, and scores of the suicidal intent scale, indicating that the number of tablets/capsules taken is a useful and simple guide in the assessment of suicidal subjects. Thus, only one subject in the L.L. group took more than 20 tablets, and two subjects in the H.L. group took 12 or less tablets. This suggests that there is a grey area, of between 12 and 20 tablets, above and below which both the suicidal intent and medical lethality of an attempt can be reliably estimated.

The relationship between the use of alcohol and suicidal behaviour is complex. The H.L. group reported significantly less use of alcohol, both in general, and with or immediately prior to their suicide attempt. Although such a finding may be unexpected, in the sense that there appears to be a clear relationship between suicide and alcohol, and many of those in the H.L. group would have died but for resuscitation, there have been previous similar observations (Schmidt *et al*, 1954; Pierce, 1977). There are several possible explanations. Those who survive potentially lethal overdoses may owe their very survival to not having ingested alcohol as well as drugs; those whose attempts are of lesser lethality, with lesser suicidal intent, may be 'treating' their difficulties with alcohol; or the use of alcohol may be related to other more enduring traits. Thus, those who use alcohol may communicate more, and have a greater component of communication in their attempt, whereas those who do not use alcohol may be more inhibited, and communicate less. It is also possible that alcohol may have ameliorated suicidal wishes and the subsequent lethality of the suicide attempt for these subjects. These postulations are highly speculative, but their elucidation would appear to be a matter of some concern, as it has been noted that there is an increasing use of alcohol by young women who have attempted suicide (Kreitman, 1977).

The overwhelming majority of subjects, and in equal proportions in each group, reported their most recent contact with a 'helping agency' to be with a medical practitioner. There was a significant difference between the groups of differing lethality in the timing of that contact. Those in the L.L. group had

made significantly more recent contact, and this was most marked when considering their greater contact in the 48 hours prior to the overdose. This greater recent contact of the L.L. group is consistent with the component of communication attributed to these subjects, but suggests that the nature of the contact was not such as to prevent suicidal behaviour. When the nature of the medical contact was examined, significantly more of the H.L. group had had a recent psychiatric consultation. This suggests that the psychiatric services are fulfilling their role in seeing patients with the potential for suicide attempts of high lethality, or that they may be contributing in some way to the lethality of attempts, perhaps by the provision of lethal drugs such as antidepressants. At the very least, such psychiatric contact has not prevented potentially lethal suicide attempts. These results suggest that this is an important area for primary prevention, and that further research into the optimal management of potentially suicidal patients is required.

There was no significant difference between the groups of differing lethality on the basis of previous psychiatric consultation, previous attempted suicide, history of drug abuse, family history of psychiatric treatment or history of contact with persons who had either attempted or committed suicide. However, there was a trend for subjects of the H.L. group to report less violence, both inflicted on others and sustained by themselves. This is consistent with Murthy's (1969) report that serious suicide attempters were more intro-punitive in the direction of their hostility, and with the clinical observation of 'inhibited aggression' which Ringel (1973) has noted before completed suicide.

Differing diagnostic practices make comparison with previous work difficult. In this study a distinction was made between psychiatric illness and abnormalities of personality. Thus subjects who were given the primary illness diagnosis of 'transient situational disturbance' probably appear in other studies as either 'no diagnosis' or as 'personality disorders'. No subject in the L.L. group was given the diagnosis of schizophrenia, schizo-affective disorder or anorexia nervosa, and there was a trend, which approached significance, for patients in the L.L. group to be diagnosed more often as presenting a transient situational disturbance. These trends are in accord with earlier work which has noted a greater degree of psychiatric illness in persons who make suicide attempts of high lethality (Schmidt *et al*, 1954; Dorpat and Boswell, 1963; Graham and Hitchens, 1967; Sendbeuhler *et al*, 1970; Rosen, 1970), but the fact that the trends did not attain significance suggests that it would be unwise to assume that suicide

attempts of low lethality will necessarily have low psychological morbidity. The only personality diagnosis which tended to distinguish the groups of differing lethality was the schizoid personality, with fewer of the L.L. group exhibiting this trait. In so far as persons with schizoid personality traits have difficulty in communicating with others, it is not unexpected that the L.L. group should have fewer persons exhibiting this trait.

There was no significant difference in either the clinical diagnosis of depression or depression questionnaire scores between the groups of differing lethality. These results are consistent with those studies using a comparable research design (Birtchnell and Alarcon, 1971; Pallis and Birtchnell, 1976).

There was a significant difference between the H.L. and L.L. groups in scores of the hopelessness scale. Similarly, there was a high degree of correlation between scores of the hopelessness scale and those of the suicidal intent scale, a finding in accord with previous work (Beck *et al*, 1975b; Wetzel *et al*, 1980). Beck *et al* (1975b) placed particular emphasis on hopelessness in the assessment and management of suicidal subjects, and believe it to be more closely related to suicidal intent than depression. In the present study, although there were non-significant differences in depression scores between the groups of differing lethality, there was a significant correlation of depression scores with suicidal intent. However, this correlation did not remain significant when it was partialled, controlling for hopelessness. On the other hand, when the significant correlation of hopelessness with suicidal intent was partialled, controlling for depression, it remained significant. Thus, notwithstanding the difficulties of delineating hopelessness from depression, the present study adds weight to the suggestion of Beck *et al* (1975b) that hopelessness in particular should be focussed upon in the management of suicidal subjects.

Although, as had been anticipated, subjects of the H.L. group expressed less death anxiety than those of the I.L. and L.L. groups, the differences in scores did not attain statistical significance. It is of note that Tarter *et al* (1974) reported a weak significant correlation between death anxiety and the potential for rescue component of a risk-rescue rating scale, a component which appears analogous to the suicidal intent scale. In the present study there was a significant, though weak negative correlation with suicidal intent scores, indicating less death anxiety with greater suicidal intent. The degree of the correlation is such that in the clinical situation it would be unwise to accept the comment of a patient that he or she was too afraid of death to commit suicide as either indicative of a markedly reduced suicidal intent,

or of suggesting that if a suicide attempt were to occur that it would be of minimal risk to life.

Conclusion

These results indicate that for young women aged 18–30 years who have attempted suicide by drug overdose there is a close relationship between the seriousness of the medical lethality of their attempts and the seriousness of their suicidal intent. This suggests that the medical risk to life provides a guide to the suicidal intent for such subjects, and indicates that it is not misleading as has been previously suggested.

The differences between the groups of differing lethality are consistent with certain broad generalizations. Thus the significantly greater frequency of marriage (or *de facto* relationship), and the more frequent contact with a medical practitioner in the 48 hours before the suicide attempt by the L.L. group, and less general use of alcohol by the H.L. group; as well as the trends for the L.L. group to less often demonstrate schizoid personality traits, and to be of lower socio-economic status, and the H.L. group to have had less experience of violence, could all be associated with a greater communication component in the attempters of low lethality.

There was equivocal evidence of greater psychiatric morbidity in the H.L. group. They had significantly more often had recent psychiatric contact than those of the other lethality groups, no subject in the L.L. group was diagnosed as having a schizophrenic, schizo-affective or anorexia nervosa illness, and there was a trend for those in the L.L. group to be more frequently diagnosed as having a transient situational disturbance. However, none of the diagnostic differences attained significance, indicating that in the clinical situation it would be unwise to assume that subjects who have made a suicide attempt with negligible risk to life necessarily have minimal psychiatric morbidity. The hopelessness score was significantly greater in the H.L. group, thus supporting the contention that this attribute may be of special importance in suicidal behaviour.

Although distinguishing features have emerged between these groups of differing lethality, our knowledge of the factors which may be responsible for these is incomplete. Indeed, the paucity of differences between those subjects who nearly die in their suicide attempt and those who make what are frequently dismissed as 'suicide gestures' indicates that Kreitman (1979) is correct in asserting "that we know less than we usually imagine". There is certainly a need for further delineation of particular groups of suicidal patients, and until we are able to distinguish them more clearly, the suggestion of Shneidman (1976)

that suicide attempts, "whatever their lethality, ought to be taken seriously", should be adhered to in the clinical situation.

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