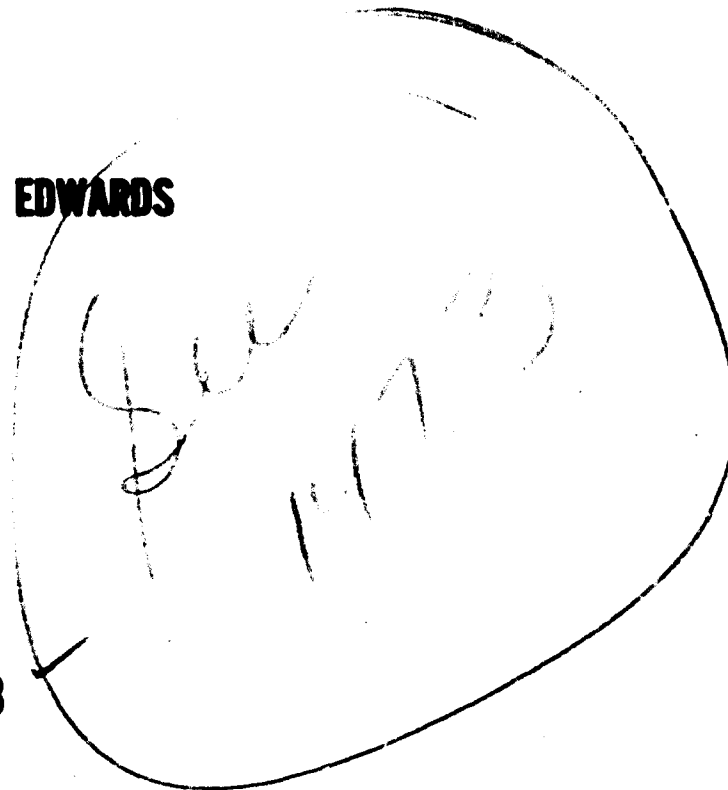


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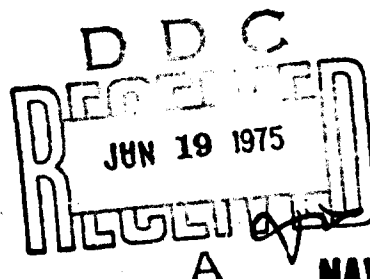
SUICIDE ATTEMPTS: AN EXAMINATION OF OCCURRENCE, PSYCHIATRIC INTERVENTION, AND OUTCOMES

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Suicide Attempts: An Examination of Occurrence, Psychiatric Intervention, and Outcome

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The term "suicide" is applied to all cases of death resulting directly or indirectly from a positive or negative act of the victim himself which he knows will produce this result. An "attempt" is an act so defined but falling short of actual death.¹

Ansel and McGee² found that patients who had attempted suicide elicited negative feelings in the staff that took care of the patient. The attempt often generated considerable activity in other individuals, with great energy being used to keep the patient alive. The individual making the suicide attempt may then have his situation temporarily or permanently modified. The changes may be noticed in the patient's family or peer group, and may extend into the community.

To date, longitudinal studies of suicide attempts with psychiatric intervention have not been available. Such follow-up studies are necessary to define the parameter for consideration by psychiatry in treating this special population. This is a report of suicide attempts to determine the long-term effects the attempts have had for the patients.

Method

Included for study were patients referred for psychiatric consultation because of attempted suicide during the reporting three years. The patients were seen on a rotation basis by one of the staff psychiatrists assigned to the Naval Hospital, San Diego, California. Patients were referred from the Emergency Room, Intensive Care, or a variety of outlying military facilities that this hospital supports. A physical examination was accomplished to determine whether the patient required hospitalization for medical reasons. If hospital care was not found to be necessary, the patient was referred to the psychiatrist. If hospital care was required, the patient was referred to psychiatry after being medically cleared, prior to discharge. If the patient did not acknowledge that he had made a suicide attempt, yet examination of his behavior indicated that potentially self-destructive activity might have resulted, the patient was considered in this study. The psychiatric evaluation was to determine if there was any continued suicidal potential or need of psychiatric hospitalization or treatment. Following the psychiatrist's evaluation, a questionnaire was completed by the examining psychiatrist. This information, along with other demographic information about the patient, was coded for analyses. During the three years of data collection, there were 22 psychiatrists involved in evaluating these patients.

The patients were divided into three groups: Navy active duty males (N = 83); Marine Corps active duty males (N = 60), and female dependents (N = 66).

The questionnaire employed in the present study is a 22 item modification of the questions developed by Stengel and Cook.³ The entire Suicide Attempt Information sheet is presented in Fig. 1. Explanations regarding degrees of dangerousness related to the nature of intent and effects of suicide attempts on a patient's life situations and his relationship to the environment are not reproduced here, but can be obtained from the authors. Follow-up information was obtained for all military men. If the military patient was recommended for return to full duty or was recommended for discharge prior to completion of his obligated active duty, outcomes of recommended action were obtained from personnel files. Both dispositions and follow-up action were considered an effect of the suicide attempt. Dependents were given essentially one disposition. They were referred to private therapy and were not analyzed for disposition or follow-up.

Results

Phase I. Characteristics of Patients Who Made Suicide Attempts

The total sample was examined initially for major trends. The results are summarized in Table I. Four areas were examined: (1) personal history; (2) clinical history; (3) characteristics of the suicide attempt; and (4) Service history—applicable only to Navy and Marine Corps servicemen.

Personal History. The Marine patient was younger than either the sailor or the dependent. In addition, the dependent wife seen for suicide attempt was older than the Service members who were seen. Although both the Navy and Marine Corps Service members had similar ethnic origins, there was a significant proportion of Negroid and Malaysian dependents in the sample. The Navy and dependent patients had completed more education than had the Marine Corps members.

Clinical History. Few attempts were made in conjunction with a psychotic process. Characteristically, a suicide attempt was associated with the diagnosis of Character and Behavior Disorder. However, a significant number of dependents made suicide attempts in association with situational stresses or neurotic turmoil. The older active duty Navy patients and the dependents had more alcoholic histories, but fewer drug histories, than did the young Marine patients. All groups had a history that generally reflected no previous suicide attempts, but a significant number in all three groups had more than one previous attempt. Consonant with the implications of the diagnosis, Character and

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attempts under the influence of such toxins. Suicide attempts resulted in temporary hospitalization and few positive life changes for all groups.

Source Histories. For both the Navy and Marine Corps, the samples were essentially the lower three pay grades. The Marine typically attempted suicide earlier in his service than did the Navy man. Hospital corpsmen were seen in the Navy sample more frequently than any other specialty. The job groups for the Marines were evenly represented in the sample.

Phase I. Degree of Dangerousness and History of Acting-out

The distribution of degree of dangerousness and acting-out histories in the samples indicated that examination of the variables for each group with first degree of dangerousness and then acting-out history controlled might further define the relationships.

Navy. Suicide attempts under the influence of drugs were more likely to have been dangerous than those without drug influence ($\chi^2 = 4.98$, $df = 1$, $p < .05$); alcoholic influence did not have an attenuating effect. Dangerous attempts were also associated with more severe psychiatric disorders ($\chi^2 = 16.64$, $df = 5$, $p < .01$) and thus resulted in more intense treatment than did harmless attempts ($\chi^2 = 9.77$, $df = 3$, $p < .05$). Harmless attempts were more indicative of the patient diagnosed Character and Behavior Disorder.

A Navy man with a history of acting-out was not likely to have attempted suicide under the influence of alcohol; those who had no history of acting-out were likely to have attempted suicide while drinking ($\chi^2 = 10.66$, $df = 3$, $p < .01$). Degree of dangerousness did not vary with acting-out history. Those who had a history of acting-out were also likely to attempt suicide without threat of individual loss; those without a history of acting-out were likely to have perceived a real or threatened loss ($\chi^2 = 23.60$, $df = 6$, $p < .01$). Consonant with psychiatric practice and diagnostic definition, patients with a history of acting-out were diagnosed Character and Behavior Disorder in 86 per cent of the cases ($\chi^2 = 38.16$, $df = 15$, $p < .001$).

Marine Corps. Only the site of the attempt discriminated between dangerous and harmless degree for the Marine sample ($\chi^2 = 14.20$, $df = 5$, $p < .01$). Fifty-eight per cent of the harmless attempts were with others present or likely to discover them, while nearly one-third of the dangerous attempts were done while the patient was alone.

Acting-out was a significant modifier for the Marine Corps. As with the Navy sample, those with a history of acting-out were not likely to attempt suicide while under the influence of alcohol. However, those without a history of acting-out were likely to attempt suicide under the influence (eight per cent versus 50 per cent; $\chi^2 = 15.01$, $df = 3$, $p < .001$). Degree of dangerousness did not vary with acting-out. Those who had a history of acting-out were likely to intervene themselves or have someone expected during their attempts ($\chi^2 = 46.83$, $df = 27$, $p < .01$). Seventy-five per cent of the Marine sample were diagnosed Character and Behavior Disorder, regardless of their acting out histories; 67 per cent of those with acting-out histories were under 25 years old ($\chi^2 = 8.10$, $df = 3$, $p < .05$).

Dependents. There were no differences between degree of dangerousness and other variables for dependents, but the dependents presented a different pattern of acting-out related attempts than did Service members. Degree of dangerousness of attempt was uncorrelated with acting-out history, and diagnoses were evenly distributed among the Neuroses, Character and Behavior Disorders, and Situational/Transitory Adjustment Reactions. In contrast with the Service men, alcohol with the attempt was associated with a history of acting-out ($\chi^2 = 13.89$, $df = 3$, $p < .01$). While Malaysian dependents were more likely to be seen for attempted suicide, those with a history of acting-out were likely to have a designated ethnic origin of Caucasian or Negroid ($\chi^2 = 24.64$, $df = 9$, $p < .01$). Those with an acting-out history were also likely to have had previous suicidal attempts, while those who did not have an acting-out history were not likely to have made an earlier attempt on their own life (46 per cent versus four per cent; $\chi^2 = 26.28$, $df = 15$, $p < .05$). Those patients who had acted-out in the past were more likely to have previous psychiatric contact ($\chi^2 = 19.06$, $df = 9$, $p < .05$).

Phase III. Dispositions and Outcomes

An important question to be answered for the military samples concerns the dispositions and outcomes for those members who attempted suicide. After treatment is completed, the psychiatrist makes a recommendation considering the patient's suitability for continued active duty. The dispositional recommendation then is accepted or rejected by the Service member's commanding officer. The action taken leads to a successful or unsuccessful occupational outcome for each man. Outcome and disposition information was available for only the active duty samples.

Disposition

There were no significant differences between dispositions for Navy and Marine Corps patients. The men were released from the hospital in the following manner:

- Thirty-one per cent of the sample were returned to duty with no treatment recommended.
- Forty-one per cent were recommended for administrative separation.
- Sixteen per cent were returned to duty with recommendation for management.
- Six per cent were returned to duty with recommendation for outpatient treatment.
- Six per cent were admitted to the hospital and separated from the Service because of psychiatric disability.

Degree of dangerousness of the attempt was related to the disposition ($\chi^2 = 21.20$, $df = 12$, $p < .05$). Persons who made more dangerous attempts were admitted to the hospital and/or recommended for administrative separation; those whose attempts were of less dangerousness were returned to duty with no treatment recommended. If there had been previous attempts in the man's history, he was likely to be given psychiatric treatment. If no history of previous attempts was obtained, he was recommended for administrative separation or was returned to duty without

Table 1
Relationships of Demographic Information and
Suicide Attempt Characteristics to Patient Group

Characteristic	Patient Groups		
	ALL	HOSPITALIZED	UNHOSPITALIZED
Number of patients in each group	85	68	66
Percentages for each group			
Personal History^a			
***Age			
17 - 20	69	83	18
21 - 30	31	17	42
31+	4	0	40
***Race			
Caucasian	90	87	75
Negro	7	12	16
Mexican and other	3	1	9
***Education			
- 8 years	1	8	9
9 - 11 years	20	63	24
12 years	31	17	43
Any college	14	7	17
Clinical History			
***Diagnosis			
Psychosis	1	0	3
Neurosis	5	0	26
Character and Behavior Disorder	75	73	42
Situational Maladjustment	7	8	23
No disease	4	2	5
Diagnosis deferred	7	17	2
History of previous psychiatric contact	5	15	18
***History of alcoholic problems	17	3	11
***History of drug problems	13	17	3
Number of previous attempts			
None	73	62	70
One (1)	15	25	15
More than one (1)	12	13	17
Indications of acting-out behavior			
None	13	7	32
Past	23	30	15
Present	6	10	6
Both	58	53	47
***Degree of perceived loss of object relationship			
None	61	73	52
Real	20	15	27
Threatened	10	0	13
Fantasy	8	12	8
***Degree of interpersonal isolation			
Special person available	18	8	49
Others available	43	56	18
Alone	14	17	12
Unknown	26	20	21

Characteristics of Attempt

Degree of dangerousness			
Absolutely dangerous	7	7	8
Relatively dangerous	27	47	47
Relatively harmless	51	37	39
Absolutely harmless	14	7	7
Degree unknown	1	2	0
***Primary method			
Isolation	0	0	1
Disinfectant	0	5	1
Narcotic	5	3	1
Aspirin	21	8	7
Prescribed medication	40	8	74
Non-prescribed medication	15	13	9
Other poison	0	37	3
Stove	15	10	1
Height	15	16	1
Miscellaneous	2	13	1
***Location of the attempt			
Most frequented public place	24	43	3
Little frequented public place	4	5	0
Other in the house	17	10	40
Others in room	18	15	12
Alone	14	17	17
Unknown	23	10	19
Intervening agent			
Patient	19	10	8
Special person	25	28	58
Other person	29	48	14
Unknown	25	15	20
Social effect of the attempt			
Temporary hospitalization	79	88	76
Prolonged hospitalization	1	5	4
Escape from stressful situation	7	5	11
Change in interpersonal relationship	13	2	9
Attempt made under influence of alcohol	14	7	21
Attempt made under the influence of drugs	6	3	4

Service History^b

***Rank		
E-1	13	85
E-2 to E-3	64	12
E-4	13	0
E-5 to E-9	9	3
***Years in service		
-6 months	39	77
1 - 12 months	17	12
1 - 4 years	35	10
5 - 12 years	5	0
13+	4	0

^aThe probability values noted by *'s are based on chi square methods indicating that the three samples differ significantly for the variable intervals. Significant levels indicate the differentiation between groups for proportions of occurrence of events. The amount of variance contributed by each cell was examined and summarized in the text. (*p < .05; **p < .01; ***p < .001).

recommendation for treatment ($\chi^2 = 9.28$, $df = 4$, $p < .05$). There was an interaction between diagnosis and disposition. Those patients diagnosed Character and Behavior Disorder were administratively processed or returned to duty without treatment. However, other diagnostic categories were characteristically hospitalized ($\chi^2 = 53.87$, $df = 16$, $p < .001$). Those men who were unrated ($\chi^2 = 24.21$, $df = 12$, $p < .05$), and unmarried ($\chi^2 = 18.84$, $df = 8$, $p < .05$) were most likely to be returned to duty with no treatment and/or recommended for administrative separation. Drugs were prescribed only for patients hospitalized. No drugs were prescribed for the patients (in or out of hospital) recommended for administrative separation ($\chi^2 = 24.00$, $df = 4$, $p < .001$).

Outcomes

Navy. Occupational outcomes and effects of the attempt on the patient's lives were examined. Failure at a suicide

attempt may be construed as the first criterion for occupational success, but the industrial criterion was further defined as follows: (a) success—completion of contracted service with adequate performance to merit a recommendation for new contract negotiation (recommutation for reenlistment); (b) failure—premature separation from service. With this expanded outcome criterion, an analysis was made of the male military groups. Active duty sailors who were actually returned to duty were followed for a minimum of one year. Final discharge information was lacking for 39 per cent of the sample one year after psychiatric contact, these individuals having remained on active duty at least that long. Eighteen per cent of the sample had been discharged from the Service as successes, having finished obligated tours of duty. Forty-three per cent had been separated from the Service as failures. Generally, it appeared that the recommendations had been followed for disposition in most of the cases. Thirty-nine per cent of the men had not been separated from the Service and were

presumed to be on active duty. The overall occupational success rate for the total Navy sample was higher than the rates for a psychiatric population without suicidal factors, with demographic characteristics similar to this sample of suicide attempts (18 per cent versus 11 per cent, respectively).¹

Several factors were related to outcome. Generally, those recommended for administrative separation were separated from the Service. Diagnosis was the most significant correlate with outcome. Character and Behavior Disorders were consistently given a failing outcome code (reflecting premature separation from the Service for administrative reasons). Those patients diagnosed neurotic were successful in 33 per cent of the cases and those diagnosed Situational Adjustment Reaction were successful at duty (completing their enlistment) in 100 per cent of the cases ($\chi^2 = 30.33$, $df = 4$, $p < .001$). Age was also related to outcome. Those men over 31 were successful in completing their enlistment 67 per cent of the time, while those under 31 were successful in only seven per cent of the cases ($\chi^2 = 17.27$, $df = 4$, $p < .001$). If the man was rated above E-5, he might succeed (50 per cent), while those under E-5 were unsuccessful in every case reported in the sample with follow-up information ($\chi^2 = 21.96$, $df = 5$, $p < .001$). In addition, the longer the man was in the Service the more likely he was to succeed ($\chi^2 = 11.25$, $df = 4$, $p < .05$), and the married man was more likely to succeed than the single man (38 per cent versus seven per cent; $\chi^2 = 7.97$, $df = 2$, $p < .05$).

Marine Corps. Forty-one Marines were actually returned to duty. Seventeen per cent of the Marine Corps sample was discharged from active duty as successes. This is greater than one would expect from a general psychiatric sample (success rate = nine per cent), with similar demographic characteristics. Nearly all of the cases had less than one year in the Service and were single (95.2 per cent). The only variable related to outcome was the psychiatric impression of the degree of acting-out reflected in the suicide attempt ($\chi^2 = 17.38$, $df = 2$, $p < .001$). No other variable was important. Essentially, the likelihood of being successfully returned to duty was slight if an attempt had been made. Administrative separation was recommended in 87.8 per cent of the cases. Generally, the follow-up data suggest that the recommendation was followed.

Discussion

The sample reported is representative of the active duty military population and dependents seen at a general military hospital. Several significant factors emerge: the diagnosis, age, length of active duty, pay grade, and marital status. When these five factors are known, the psychiatric evaluation becomes more predictable. The seriousness of the attempt, the location, and under what circumstances the attempt was made will assist in the overall diagnostic evaluation.

No policy guidelines were promulgated regarding disposition. Preexisting directives were used to recommend various possible outcomes. Further, the evaluation resulted in a diagnosis which, when combined with the clinical judgment of the examiner, led to a decision. The other demographic parameters, including the patient's motivation for

continued service or his need for treatment, were also significant factors in reaching a decision.

There were 148 active duty Navy and Marine Corps members that were diagnosed as having an underlying Character and Behavior Disorder. The suicide attempt was the precipitating event that caused the Character Behavior patient to be evaluated, frequently leading to a recommendation for administrative separation. It is felt that separation of the more severe Character Behavior Disorder is good preventive psychiatry. It is speculated that Character and Behavior Disorders generally adapt in civilian communities without seeking psychiatric treatment, although there is usually considerable drifting, goal changes, and menial jobs during this time of striving for emotional maturation. This is in marked contrast with the requirement for remaining on active duty. Adjusting to the authoritative structure, along with the necessity to complete assigned tasks on schedule, produces stress for the individual. Such stress frequently led to further acting-out, incurring disciplinary problems or possibly additional suicide attempts. It can then be said that the patient diagnosed as a Character Behavior Disorder achieved what he wanted, namely separation from the Service.

Those active duty Navy patients diagnosed as having an acute Situational Maladjustment at the time of their suicide attempt were returned to duty and satisfactorily remained at duty for at least one year. The patients requiring further psychiatric treatment were so treated and separated with a medical disability for their mental illness, the suicide attempt having been a manifestation of the basic problem.

It may be speculated that the suicide attempt is a primitive but effective cry for help, resulting in a psychiatric evaluation. The psychiatrist must then consider each individual patient, and evaluate the current status and past history, making recommendations that are in the patient's best interests and consistent with the underlying psychiatric disorder.

Summary

This report is a study of 209 suicide attempts at a Naval hospital installation over a three-year period.

Pertinent factors in the attempts are reviewed, and their relationships to outcome and military disposition are discussed and evaluated.

Acknowledgment

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was not seen as dangerous, if other problems were minimal, and if an acting out history was not indicated. Occupational outcomes were at least as good for men who had attempted suicide as for parallel diagnostic groups.



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