S.A.F.E.R.: A FOLLOW-UP SERVICE FOR ATTEMPTED SUICIDE IN VANCOUVER

by

1. Paul E. Termansen, M.D.
2. Cathryn Bywater, BSW, et al

The S.A.F.E.R. (Suicide Attempt. Follow-Up, Evaluation, Research) Project

The S.A.F.E.R. (Suicide Attempt, Follow-Up, Evaluation, Research) Project presented here was developed in an attempt to establish contact with individuals who had attempted suicide and been admitted to the Vancouver General Hospital (Suicide and Attempted Suicide in Vancouver; Part I & II, B.C.M.J., May, 1972). It was hypothesized that more intensive intervention at the time of the suicide attempt might have preventative value with respect to repeated attempts and completed suicide.

Further purposes of the Project were to examine:

- 1. the demographic characteristics, the degree of psychological and social impairment, and recent life changes of the population admitted for attempted suicide.
- the extent to which para-medical personnel and Crisis Centre volunteers could be effective in the management/follow-up of patients who had attempted suicide.

# PERSONNEL:

Seven mental health (lay) workers were personally selected by the author for their experience in working with people. These mental health workers interviewed patients and provided a direct contact follow-up service. A small group of volunteers from the Vancouver Crisis Centre were selected for the purpose of a telephone follow-up service. These mental health workers and the Crisis Centre Volunteers who participated in the follow-up study were trained in basic interviewing skills and data collection. Training meetings continued on a monthly basis throughout the project. The mental health workers also met weekly with the clinical supervisor to discuss cases, data collection, methods and personal approaches to working with people in distress.

.....2

<sup>1.</sup> Assistant Professor, Dept. of Psychiatry, Health Sciences Centre Hospital, Univ. of B.C., Vancouver 8, B.C.

<sup>2.</sup> Research Associates.

The role of the mental health worker was to act as liaison person between the patient and his significant others, and between the patient and the appropriate community resources. The role was not therapeutic in the conventional psychiatric sense; rather it was the role of the helper expressing concern for the person in his total environmental situation.

# METHODOLOGY:

Definition: For the purposes of this study, a suicide attempt was defined as any act of self injury, regardless of its seriousness, which was motivated by self-destructive tendencies.

Subject: From February 1 to April 30th, 1972, all attempted suicide admissions to the Vancouver General Hospital - Emergency Room, were brought to the attention of the project staff. The patient's doctor and/or psychiatrist and the patient himself were approached as to their willingness to be included in the programme, and were then allocated to 1 of 4 follow-up groups alternating according to sequence of admission.

The Follow-up Groups were as follows:

- Group 1 -- Assessment in Emergency Ward (as soon as possible after the suicide attempt) by the mental health worker, follow-up for 3 months and reassessment at 3 months following the suicide attempt, by the same worker.
- Group 2 -- Assessment in Emergency WArd by mental health worker, follow-up for 3 months by Crisis Centre Volunteer and reassessment by Crisis Centre Volunteer in conjunction with a mental health worker at 3 months following suicide attempt.
- Group 3 -- Assessment in Emergency by mental health worker, no follow-up.

  Reassessment at 3 months by original mental health worker.
- Group 4 -- Identification from Emergency admission records only. Assessment at 3 months by mental health worker.

Definition of follow-up: Follow-up was defined in terms of telephone and/or face to face contact. The minimum contact was - daily for week 1, every 2 days for week 2, twice a week for weeks 3 & 4, once a week for weeks 5 to 8, every 2 weeks for weeks 9 to 12.

#### Assessment:

The mental health worker evaluated the suicide patients on the basis of a card system (3), coding the following areas:

- 1. Demographic data
- Recent stressful life changes (eg. marital, family, work, social life, etc.,)
- Role impairments (eg. mate, housekeeper, family, wageearner, etc.)
- 4. Psychological impairments (eg. anxiety, depression, social isolation, dependent behavior, drug, alcohol abuse, etc.)
- 5. Suicide/lethality data
- 6. Medical outcome (ie. whether the patient was in a medically unsatisfactory condition on admission and/or several days later.)

A total of 37 ratings of impairment or life changes were made in the above categories. Twenty-one of these ratings were chosen on the basis of prior theoretical and practical knowledge of the relevance of the variables. The ratings were expressed on a percentage basis of the total possible score in each variable.

#### RESULTS:

280 patients were identified during the 3 month period. 54 patients either refused participation in the programme or were discharged before seen. 5 Doctors refused; 2 patients died in hospital. A further 17 patients in the C category turned out not to be suicide attempts. Of the remaining 202 patients, a reevaluation at 12 weeks was possible only for 128. The breakdown into the groups were as follows:

.....4

<sup>3.</sup> Developed by Dr. Phil Long

Initial Assessment & Follow-up		Drop-Out	Initial Assessment & Follow-up & Final Assessment	
Group 1	57	12 (21%)	45	
Group 2	57	24 (42%)	33	
Group 3	50	18 (36%)	32	
Group 4	38	20 (53%)	18	
Totals	202	74	128	

Using data collected at the initial and final assessment on three treatment groups, two questions were posed:

- 1. Are the three groups different with respect to initial assessment and demographic variables, and if so, which groups are different from which others?
- 2. Are the three groups significantly different in improvement between the initial and final assessments with respect to the degree of psychological and role impairments and life changes, and if so, which groups are different?

To answer the questions on significant differences among the three groups at initial, and between initial and final assessment, the U.B.C. MFAV analyses of variance and co-variance were run using Duncan's Multiple Range Test. The level of significance chosed for all analyses was > 10.

For these two analyses, it was necessary to exclude those subjects who received either no initial or no final assessment; therefore, this exclusion included Group 4 which received no initial assessment, and reduced the number of subjects from 202 to 110.

# RE

ESULTS:	
DEMOGRAPHIC VARIABLES:	
1. SEX: Male Female	33 95 128
2. MARITAL STATUS:	epni .
a. Single	32 47
<ul><li>b. Legally Married</li><li>c. Common-Law</li></ul>	8
d. Legally Separated -Divorce	d 16
e. Separated-Divorced(not leg	
f. Widowed	4
g. Unwed Mothers	1
h. Other	5
i. d & b.	128
3. EMPLOYMENT	4. OCCUPATION:
a. retired 2	a. Professional 6
b. Unemployed - not	b. Clerical 17
seeking 65 c. Unemployed - seeking 11	c. Skilled or semi- skilled 23
d. Employed - not full time 15	d. Unskilled 38
e. Employed - full time 33	e. Student
f. Don't know 2	f. Housewife 28
128	g. Don't know $\frac{3}{128}$
5. EDUCATION	6 LIVING ARRANGEMENTS:
a. University Complete 2	a. Living with spouse 40
b. University Imcomplete 14	b. Living with Children 11
c. High School Complete 31	c. Living with Parents 10
d. High School Incomplete 58	d. Living with Friends 15
e. Elementary or less 14	e. Living with Strangers 9
f. Don't know $\frac{9}{128}$	f. Living alone 18 g. a. & b. 22
production to the person of the burning	g. a. & b. 22

h. Don't know

#### 7 PSYCHIATRIC CONTACT:

a.	No psy	ch. Contact in Emergency		19
b.	Psych.	Contact in Emerg no referral		25
c.	Psych.	Contact & Referral refused		14
d.	Psych.	Contact & Referral - went	-	70 128

# TYPE OF TREATMENT - Following Assessment (ie. 7d.)

Psychiatric inpatient		22
Day Care		1. 11
Outpatient		17
Office Visit		_33
		70

#### CURRENT TREATMENT AT 12 WKS

Inpatient		21		4
Outpatient			e e	8
Office Visit				23
No Treatment	at 12 weeks			35
				70

## I. Demographic Variables:

To test for significant differences among the groups in the demographic data, the Biomedical BMD:080 cross-tabulation programme was used. Of the 12 demographic variables cross-tabulated with Group, only Living Arrangements was significantly different at (.01

#### II. Impairments:

Table A shows the adjusted group means of those impairments and changes at initial assessment that were significantly different, and how the groups differed from each other.

In the psychological impairments of Anxiety-Depression, Impairment of Daily Routine, and Dependent Behaviour, Group 1 had the greatest degree of

# TABLE A

VARIABLE	GR.1	GR.2	GR.3	P VALUE	GROUPS SIGNIFI- CANTLY DIFFERENT
Marital changes	11.07	14.64	8.78	.10	2 & 3
Anxiety-Depression	34.67	26.42	26.28	<.05	1 8 2; 1 8 3
Impairment of Daily Routine	14.29	13.79	5.91	< .02	1 & 3; 2 & 3
Antisocial Acts and Attitudes	2.82	8.21	0.91	< .05	1 & 2; 2 & 3
Alcohol Abuse	7.53	18.21	7.09	< .03	1 & 2; 2 & 3
Suspicion-Persecution	4.0	6.97	2.81	<.10	1 & 2; 2 & 3
Agitation- Hyperactivity	5.73	10.85	1.31	< .03	2 & 3
Dependent Behavior	33.89	24.64	17.19	< .10	1 & 3
Impaired Coping Behavior	13.27	18.91	7.25	<.02	1 & 3; 2 & 3

impairment. Group 2 had the greatest degree of impairment in Marital Changes, Antisocial Acts and Attitudes, Alcohol Abuse, Suspicion-Persecution, Agitation-Hyperactivity, and Impaired Coping Behaviour. Group 3 had no greater degree of impairment than the other two groups, and in Impairment of Daily Routine and Impaired Coping Behaviour, this group was significantly less impaired than the other two.

Table B shows the adjusted means of the degree of impairment at initial and final assessment and the  $\underline{P}$  value and order of improvement for those groups which were significantly different.

Of the 21 variables tested, 8 showed significant differences among the three groups, and in 7 of these 8, Group 1 showed the greatest improvement. Group 2 showed the greatest improvement in one of these 8 variables, and greater improvement than Group 3 in 7 or the 8. For the variable Son-Daughter Role Impairment, Group 1 showed improvement at the final assessment, where as Group 2 and 3 showed greater impairment, and for the variables Social Isolation, Impairment of Daily Routine, Denial of Problem, and Impaired Coping Behaviour, Groups 1 and 2 showed improvement where as Group 3 showed greater impairment at final assessment.

Of the remaining 13 variables that weren't significantly different at final assessment, Group 1 showed the greatest improvement in three instances, and greater improvement than Group 3 in another 6. Group 2 showed the greatest improvement in 8 of the variables, and greater improvement than Group 3 in another 2, Group 3 showed the greatest improvement in 2 of the variables, but greater impairment in 4.

The number of repeated suicide attempts in the 4 groups were as follows:

Group	1	1/45	2.2/100
Group	2	2/33	6.1/100
Group	3	7/32	21.9/100
Group	4	2/18	11.1/100
		12/128	

TABLE B

	GROUP 1 INITIAL ASSESS.	FINAL ASSESS.	GROUP 2 INITIAL ASSESS.	FINAL ASSESS.	GROUP 3 INITIAL ASSESS.	FINAL ASSESS.	P VALUE	ORDER OF IMPROVEMENT
	05 00	11.33	19.69	6.24	15.93	7.93	NSD :	1,2,3,
Tid Co Ito C Zing a Title	25.33	3.78	7.39	0.77	5.78	1.91	< .10	2,3,1
Parent Role Impairment		4.58	9.69	10.67	6.25	9.73	< .005	
Son/Day. Role Impairment	11.33	4.30	2.03	10.07				
Wags Earner Role	10.60	10.27	15.63	11.27	14.13	12.69	NSD	2,3,1
Impairment	111.07	9.17	14.64	8.67	8.78	9.51	MSD	2,1
Marital Changes	6.84	$\frac{1}{6.19}$	7.67	6.92	8.25	1 4.44	I NSD	13,2,1
Family Changes	0.04	0.13						
Health & Living	20.73	16.18	20.33	15.08	16.63	20.53	NSD	2,1
Habit Changes Social Life Changes	12.56	8.78	12.05	7.0	11.99	4.81	NSD	3,2,1
Anxiety/Depression	34.67	7.97	26.42	70.48	26.28	14.26	0.11	1,2,3
Social Isolation	27.20	6.33	24.81	14.70	119.40	24.58	< .001	11,2
Impairment of Daily	127.20							
Routine :	14.28	4.60	13.79	7.21	5.91	8.60	0.10	1,2
Antisocial Acts								
and Attitudes	2.82	2.41	8.21	2.70	0.91	1.47	NSD	2,1
Drug Abuse	8.11	2.74	7.79	4.99	5.09	4.19	NSD	11,2,3
Alcohol Abuse	7.53	5.81	18.21	2.93	7.09	5.29	NSD	2,3,1
Suspicion-							100	0.1.2
Persecution	4.0	1.43	6.97	1.67	2.81	1.60	NSD	2,1,3
Showing Lack							1100	1 2 2
of Emotion	16.11	1.69	13.27	2.01	75.06	4.36	NSD	1,2,3
Agitation-						0.00	NCD	2.7
Hyperactivity	5.73	2.63	10.85	1.87	1.31	2.80	NSD	2,1
Controlling Behavior	8.89	4.47	8.61	3.36	4.0	6.69	NSD	2,1
Dependent Behavior	33.89	7.13	24.64	11.29	17.19	15.27	0.11	1,2,3
Denial of Problem	115.33	7.19	13.94	10.18	13.13	14.07	0.11	1,2
Impaired Coping Behavior	13.27	6.06	18.91	7.26	7.25	12.28	< .05	1,2

#### SUMMARY:

A follow-up service for patients admitted to an Emergency Room for attempted suicide indicated that only 45% of all attempted suicides received psychiatric follow-up subsequent to their discharge, and that a follow-up service employing trained community mental health workers, contributed to a greater degree of improvement with respect to Social Isolation, Son-Dau. Role Impairment, Impaired Coping Behaviour, Impairment of Daily Routine, Anxiety/Depression, Dependent Behaviour, Denial of Problem, Mate Role Impairment, Drug Abuse, Showing Lack of Emotion. In the last 3 categories, the improvement was not statistically significant. Those patients who were assessed and followed by the community mental health worker also show a much lower rate of repeated attempts over a 3-month follow-up period.