Survival analysis, contact vs. no-contact group

In these analyses, observations of survival time to suicide were taken as "censored" at times of non-suicidal death and, for those not known to have died, at the elapsed time from admission to latest death clearance data (December 31, 1977). All available data were used in this analysis with time to suicide or censoring expressed in whole months. Actual time at risk ranged from 3 years to 11 years.

Estimated probabilities of [non-suicidal] survival (Kaplan-Meier) by years after admission were as follows (The figures in parentheses are the estimated standard errors of these survival probability estimates):

Years after admission	Contact group	No-contact group
1	0.990 (0.005)	0.978 (0.007)
2	0.983 (0.006)	0.964 (0.009)
3	0.976 (0.008)	0.960 (0.009)
4	0.968 (0.009)	0.955 (0.010)
5	0.957 (0.010)	0.955 (0.010)
6	0.948 (0.011)	0.952 (0.011)
7	0.948 (0.011)	0.944 (0.012)

~~The figures in parentheses are the estimated standard errors of these survival probability estimates.~~
Qualitatively, these figures suggest a divergence of survival probabilities between the groups out to about two years, followed by a gradual convergence until, after 5 years, there is essentially no difference in survival rates between groups.

Standard tests for equality of survival distributions indicated no significant differences. The Cox test (of questionable validity here, given the apparent violation of the "proportional hazard" assumption) gave a one-tailed $P = 0.43$, while the Breslow test (generalized kruskal-Wallis) gave $P = 0.35$ for either equal or unequal censoring.

The maximum observed difference in estimated survival probabilities occurred at two years. To test equality of survival distributions over the first two years, the

above analyses were repeated with all observations taken as censored at 29 months. Resulting one-tailed P values were 0.043 for the Cox and Breslow analyses. Given that the hypothesis tested was in part suggested by the data, these results should not be taken as legitimate tests of significance of effects of contact vs. no contact.

Overall, there is no indication of improved long-term survival due to contact vs. no contact, but a short-term effect over the first two years is suggested.

~~These analyses were carried out using a computer program by Thomas and Gart.~~

Reference:

Thomas, D.G. and Gart, J.J.: Statistical analysis of dose response including life table adjustment, Version 9/26/75. Technical Report, National Cancer Institute.

as of 9/18/79

		N	%
Col 1	Treatment	1939	64.5
* 2	Contact	194	6.5
3	No "	453	15.1
✓ ● 5	Suic dischg	6	0.2
✓ ● 6	Death stat det	(24)	0.8
✓ ● 7	Undet contact	9	0.3
✓ ● 8	Undet no cont	48	1.6
* 9	Lost p inquiry	16	(0.5)
* 10	Refused contact	11	0.4
* 11	Completed contact	34	1.1
✓ * 20	Lost p contact	162	(5.4)
● 21	Lost a inquiry	102	3.4
● 22	No chart	7	0.2

Rf: #1
No Rf: #2-22
Cont: #2, 9, 10, 11, 20
No Cont: #3
Undet: #5-8, 21, 22

suic status determined ✓

6 non-suic
18 suic

= No reply = 57

16	0.5
162	5.4
178	5.9%

= Lost = 109

Rf - - - - - - 1939
No contact - - 453
* = contact - - - 417
● = undetermined 196
3005

Title _____

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Educational Objectives (type single-space, 50 words or less): At the conclusion of this presentation, the participant should be able to (e.g., demonstrate, recognize, diagnose, treat . . .)

Literature References (list two)

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35mm Slide Projector (w/Remote Control) and Screen

Electric Pointer

Overhead Projector (w/Transparencies and Markers)

ABSTRACT: DOUBLE-SPACED TYPEWRITTEN SUMMARY OF PAPER SUBMISSION, INCLUDE OBJECTIVE, METHOD, RESULTS AND CONCLUSION (DO NOT EXCEED 200 WORDS). All copy must be contained in this box.

Objective: This study tested the hypothesis that long-term contact with persons at risk for suicide can exert a suicide-prevention influence. This influence is hypothesized to result from the development of a feeling of connectedness and is most pertinent to individuals who refuse to enter the health care system. Method: 3,005 persons hospitalized for a depressive or suicidal state were evaluated on admission and recontacted 30 days after discharge. The 843 who had declined ongoing care were randomly divided into two groups, one of which was contacted (contact group) on a preset schedule for five years. A followup procedure identified subjects who died during the 15-year period following evaluation. The rates of suicide in the Contact group and No Contact control group were then compared. Results: Formal survival analyses revealed a statistically significant (P<.04) lower rate of suicide in the Contact group for the first two years, with converging rates that intersect in the fourteenth year. Non-suicidal deaths revealed no significant differences. Conclusions: A program of contact with persons at risk for suicide who refuse to enter the health care system exerts a significant suicide prevention influence for at least two years after initial assessment.