Incidence of Near-Death Experiences Following Attempted Suicide

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ABSTRACT: Near-death experiences (NDEs), profound subjective experiences occurring during a close brush with death and containing transcendental or mystical elements, have been reported to reduce suicidal ideation, despite their "romanticization" of death. Among 61 consecutive hospital admissions for attempted suicide, 16 patients (26.2%) reported NDEs precipitated by the attempt. NDEs were not significantly associated with any demographic factors. In light of the frequency of NDEs following attempted suicide, further studies are indicated in regard to the effect of those experiences on subsequent suicidal behavior.

Descriptions of the experiences of persons who almost die in the course of severe illness or injury, or who are believed dead but subsequently revive or are resuscitated, have been preserved for centuries in the literature of religion and folklore (Holck, 1978–1979). In the past several years, these near-death experiences (NDEs) have been the subject of considerable scientific research (Greyson, 1982; Greyson & Flynn, 1984; Lundahl, 1982). NDEs, which characteristically include strong positive affect, dissociation from the physical body, and transcendental or mystical elements, have been found both by medical investigators (Ring, 1980; Sabom, 1982) and by a nationwide Gallup poll (Gallup, 1982) to occur in about one-third of all individuals who come close to death; Gallup estimated that about 8 million adult Americans have had NDEs.

The literature on NDEs so far has been dominated by two descriptive approaches: Noyes and Slymen's (1978–1979) factorial classification, which divides the NDE into Mystical Consciousness, Depersonalization,

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and Hyperalertness components; and Ring's (1980) unitary graded classification, which regards the NDE as an unfolding sequence of stages. Study of these phenomena may yield important insights into the psychodynamics of our concept of dying (Greyson, 1983c).

NDEs are reported to induce substantial personality transformations and attitudinal changes (Flynn, 1982; Noyes, 1980), including a significant reduction in suicidal ideation and enhancement of one's will to live, despite their apparent "romanticization" of death (Greyson, 1981; Ring, 1984). A suicide-inhibiting effect has been postulated to result from the decathexis of mundane losses and failures that characteristically follows an NDE (Greyson, 1983b). The further investigation of these phenomena may have a significant impact on our concepts of effecting personality change and our strategies of preventing suicide.

Despite the potential importance of research on NDEs for suicide prevention, to date only one empirical study of NDEs among suicide attempters has been reported, in a preliminary analysis (Ring, 1980) and in a subsequent final report (Ring & Franklin, 1981-1982). Ring and Franklin (1981-1982) interviewed 36 persons who had come close to death as a result of attempted suicide, and reported that 17 of those subjects (47%) had NDEs following the suicide attempt-a percentage comparable to the incidence off NDEs found by these same investigators following close brushes with death from other causes (Ring, 1980). They noted that NDEs described by suicide attempters were not qualitatively different from those reported by other NDE survivors, and that, despite the pleasant nature of these NDEs, they appeared strongly to decrease suicidal ideation among those reporting them. Ring and Franklin cautioned that their sample might not be representative of suicide attempters, since they were collected by personal referral and responses to advertisements, and that independent corroboration of each subject's nearness to death was not attempted.

Elsewhere (Greyson, 1981), I have reviewed the empirical and theoretical literature on NDEs and attempted suicide. After elaborating several psychodynamic mechanisms to explain the suicide-inhibiting effect of these experiences, I suggested studies of NDEs among suicide attempters that might clarify the influence of one's concept of death on suicidal ideation and lead to more effective therapeutic approaches to suicide prevention.

This paper reports the first study in such a program. I describe here the first investigation of the incidence of NDEs among an unselected sample of consecutive suicide attempters. Future studies will address the effects of these experiences on subsequent suicidal ideation and behavior.

Method

Consecutive suicide attempters admitted to the University of Michigan Hospitals during a 6-month period were included in this study. Admissions were based either on severity of physiological impairment resulting from the attempted suicide, or on continued suicide risk, or both. The only criterion for inclusion in the study was admission for a suicide attempt by any means and of any severity, from minor lacerations to potentially lethal poisonings, overdoses, and jumps from extreme heights.

As soon after admission as each subject's clinical condition stabilized, he or she was given a structured interview that explored demographic and historical data, details of the suicide attempt, and features of NDEs occurring in the course of the suicide attempt or immediately thereafter. Imbedded within the structured interview were items comprising the Mystical Consciousness, Depersonalization, and Hyperalertness factors into which the NDE has been factor-analyzed (Noyes & Slymen, 1978–1979), and the Weighted Core Experience Index (WCEI), a graded unitary classification of NDEs on a 30-point scale of "depth" (Ring, 1980).

Results

No suicide attempters refused participation in this study. The 61 subjects interviewed had a mean age of 30.9 years (SD=12.1), with an age range of 17–62 years. Thirty-five subjects (57.4%) were female, and 59 (96.7%) were white. The mean elapsed time between the suicide attempt and the structured interview was 17.1 days (SD=19.7); the median was 11 days, and the mode was 2 days.

NDE Measures

The mean score of the 61 suicide attempters on the WCEI was 3.8 (SD=4.5), with a range of 0-20. Sixteen subjects (26.2%) scored 6 or higher on the WCEI, indicating the presence of an NDE. Of those, 10 subjects (16.4% of the total sample) scored in the range of a "moderate" NDE (6-9 points), while 6 subjects (9.8% of the total) scored in the range of a "deep" NDE (10 or higher).

Of the 9 items included in the Mystical Consciousness factor of the NDE, the mean number of items described by the 61 suicide attempters was $1.3 \, (SD = 1.4)$, with a range of 0-6 items. Of the 11 items included in the Depersonalization factor, the mean number of items described

was 3.2 (SD = 2.8), with a range of 0-10 items. Of the 6 items included in the Hyperalertness factor, the mean number of items described was 2.0 (SD = 1.2), with a range of 0-5 items.

Correlates of NDE Measures

Scores on all three factors—Mystical Consciousness, Depersonalization, and Hyperalertness—were significantly higher among those who had NDEs, as defined by a score of 6 or higher on the WCEI, than among those who did not. The relevant values are presented in Table 1.

Neither age, sex, nor race significantly differentiated between those who did and did not report NDEs, as shown in Table 1. Likewise, elapsed time between the suicide attempt and the structured interview was not significantly associated with either reporting or failing to report an NDE.

Discussion

The 26.2% incidence of NDEs following attempted suicides is lower than the 47.2% reported by Ring and Franklin (1981–1982), using similar criteria for an NDE. I believe the present figure to be closer to the actual incidence, as the present sample was derived from unselected consecutive admissions, while that of Ring and Franklin was selectively

TABLE 1. Comparison of Suicide Attempters Who Did and Did Not Report NDEs

Variable	$ NDE \\ (n = 16) $	No NDE $(n = 45)$	Statistic
NDE factors			
Mystical Consciousness items	2.8	0.7	t = 7.06, df = 59**
Depersonalization items	6.4	2.1	t = 7.12, df = 59**
Hyperalertness items	2.9	1.7	$t = 3.70, df = 59^{\circ}$
Demographic factors			
Age (years)	24.6	33.1	t = 2.51, df = 59
Sex (% female)	68.8	53.8	$\chi^2 = 1.15, df = 1$
Race (% white)	87.5	100.0	$\chi^2 = 5.82, df = 1$
Days elapsed between suicide			
attempt and interview	10.8	19.5	t = 1.53, df = 59

p = .0005 (two-tailed).

^{**} p < .0001 (two-tailed).

referred to the investigators. It should be noted, however, that both the present study and that of Ring and Franklin used, as an indicator of the presence of an NDE, the WCEI, an instrument developed to quantify experiences previously identified as NDES and liable to elicit false-positive reports, particularly among suicide attempters (Greyson, 1983a). A more accurate estimate of the true incidence of NDEs among this population may be achieved by the use of a screening instrument developed specifically for identifying NDES in an unselected population (Greyson, 1983a).

The finding that each of the three NDE factors—Mystical Consciousness, Depersonalization, and Hyperalertness—was independently significantly associated with the WCEI supports the conception of the NDE as a discrete, unitary experience, rather than a collection of weakly related symptoms.

The lack of significant differences in age, sex, and race between those suicide attempters who did and did not report NDEs confirms previous reports of the irrelevance of those variables to the occurrence of NDEs (Ring, 1980, 1984). Ring and Franklin (1981–1982) did report a higher incidence of NDEs among men who had attempted suicide than among women, though that discrepancy may also be attributable to their sample selection.

The absence of any effect of elapsed time between the suicide attempt and the structured interview supports the stability over time of NDE reports. It has been speculated (Schnaper, 1980) that, over time, persons who have had NDEs exaggerate the pleasurable nature of the experience. That speculation has been shown previously to be false over a period of years following the NDE (Greyson, 1983a), and the present data suggest that it is false as well over a period of days following the NDE.

In summary, the NDE appears to be a reliably reported phenomenon that occurs in at least a quarter of unselected suicide attempters. In light of that frequency, further study of its influence on subsequent suicidal ideation and behavior is warranted.

References

Flynn, C. P. Meanings and implications of NDE transformations: Some preliminary findings and implications. Anabiosis, 1982, 2, 3-14.

Gallup, G., Jr. Adventures in immortality: A look beyond the threshold of death. New York: McGraw-Hill, 1982.

Greyson, B. Near-death experiences and attempted suicide. Suicide and Life-Threatening Behavior, 1981, 11, 10–16.

Greyson, B. Near-death studies, 1981–82: A review. Anabiosis, 1982, 2, 150–158.

Greyson, B. The Near-Death Experience Scale: Construction, reliability, and validity. Journal of Nervous and Mental Disease, 1983, 171, 369-375. (a)

- Greyson, B. Near-death experiences and personal values. American Journal of Psychiatry, 1983, 140, 618–620. (b)
- Greyson, B. The psychodynamics of near-death experiences. Journal of Nervous and Mental Disease, 1983, 171, 376-381. (c)
- Greyson, B., & Flynn, C. P. (Eds.). The near-death experience: Problems, prospects, perspectives. Springfield, Ill.: Charles C Thomas, 1984.
- Holck, F. Life revisited: Parallels in death experience. Omega, 1978-1979, 9, 1-11.
- Lundahl, C. R. (Ed.), A collection of near-death research readings. Chicago: Nelson-Hall, 1982.
- Noyee, R., Jr. Attitude change following near-death experiences. Psychiatry, 1980, 43, 234-242.
- Noyes, R., Jr., & Slymen, D. J. The subjective response to life-threatening danger. Omega, 1978–1979, 9, 313–321.
- Ring, K. Life at death: A scientific investigation of the near-death experience. New York: Coward, McCann & Geoghegan, 1980.
- Ring, K. Heading toward omega: In search of the meaning of the near-death experience. New York: William Morrow, 1984.
- Ring, K., & Franklin, S. Do suicide survivors report near-death experiences? Omega, 1981-1982. 12. 191-208.
- Sabom, M. Recollections of death: A medical investigation. New York: Harper & Row, 1982.
- Schnaper, N. Comments germane to the paper-entitled "The reality of death experiences" by Ernst Rodin. Journal of Nervous and Mental Disease, 1980, 168, 268-270.