Some researchers have attempted to connect suicide to a general history of mental illness; others have searched for diagnosis-free suicide risk factors; and still others have argued that different risk profiles may emerge for different diagnoses. In addition to these issues, it appears that suicide completers and suicide attempters show somewhat dissimilar patterns. This study explored several questions regarding suicide among psychiatric patients. Findings from 586 adolescent and young adult patients revealed that schizophrenics attempted suicide less but subsequently completed it more than other psychotics and nonpsychotics, giving schizophrenics a higher rate of completions to attempts than the other two diagnostic groups. Female patients generally attempted suicide more than did male patients, while male patients completed suicide more than did female patients. Suicide attempters were younger than nonattempters only in the nonpsychotic group. Suicide attempters were significantly more highly educated than nonattempters only for the nonpsychotic group. Suicide completers were generally more likely to have never married than were suicide attempters; had lower social competence and greater drug abuse than either attempters or nonattempters; and showed a trend toward more alcohol abuse than nonattempters. Finally, attempters generally showed better premorbid functioning than did nonattempters or completers. (NB)
Factors in Suicide Completions and Suicide Attempts Among Schizophrenic, Other Psychotic and Nonpsychotic Patients

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Hendin (1986) cites a number of retrospective studies attempting to connect suicide to a general history of mental illness and to the specific diagnoses of depression, alcoholism, schizophrenia and organic psychoses (Robins et. al., 1959; Dorpat, 1960; Barraclough et. al., 1974). Nevertheless, we are faced with the undeniable fact that the "vast majority of depressed, schizophrenic, alcoholic or organically psychotic patients do not commit or even attempt suicide" (Hendin, 1986, p. 148).

The search for diagnosis-free suicide risk factors has been espoused by a number of researchers and clinicians. Weismann and her associates (1973), for example, suggested that suicidal patients exhibited greater hostility than did depressed patients during interviewing. Beck and his colleagues (Minkoff, Bergman, Beck et. al., 1973) found that hopelessness was a stronger predictor of suicide than was degree of depression. The work of Kaplan and his associates points to the suicidal impact of conflict between individuation and attachment (Kaplan and Maldaver, 1989; Kaplan and Worth, in press). Finally, Stanley and Stanley (1988) have argued for diagnosis-free biological markers of suicide.

A third, in-between, point of view has been suggested by Fawcett et. al. (1987). They argue that different risk profiles may emerge for different diagnoses. This view suggests that schizophrenics might have one suicide risk profile, affective disorders another, and alcoholics yet a third. Drake and his colleagues (1984, 1985) and Harrow and his associates (Westermeyer
and Harrow, 1989; Westermeyer, Harrow, and Marengo, 1991) point out that traditional suicide risk factors do not seem to apply to schizophrenic samples as compared to other diagnostic groups. They found that young patients with chronic, relapsing illness; good educational backgrounds, high performance expectations, painful awareness of illness, fears of future mental disintegration, suicidal ideation or threats, and hopelessness about the future were at greatest risk. They concluded that despite the occasional dramatic psychotic suicide, the greatest risk for suicide among schizophrenics occurred during non-psychotic depressed phases of the illness. Roose et. al. (1983) report a very different suicidal risk profile with regard to depressives. Depressed patients who were delusional were five times more likely to kill themselves than were non-delusional patients. The case is still different for suicidal alcoholics. A significant risk factor here is recent loss due to separation and divorce whether or not patients show evidence of a primary depressive disorder (Murphy et. al., 1979). Another potential difference in risk factors across different diagnoses is the crucial time period within the disorder when suicide is most likely to occur. It is likely to occur early in the course of schizophrenia (Westermeyer, Harrow and Marengo, 1991) but vary across the course of depression, and occur late or well into the course of alcohol and substance abuse disorders.

A final issue is that suicide completers and suicide attempters show somewhat dissimilar patterns. Women are over twice as likely to attempt suicide as men, yet men are three times as
likely to commit suicide. A recent study by Brent et. al. (1988) found that while both the attempted and completed suicide groups showed a history of affective disorders, both in themselves and in their families, there was higher incidence of bipolar affective diagnosis of affective disorder with comorbidity in the completed group. In addition, completers were more likely to possess guns and were less likely to have been in previous treatment with mental health professionals.

The present study explores several questions regarding the above phenomena. (1) Is there a difference between suicide completers and suicide attempters in terms of psycho-social variables? (2) Is there a difference between suicide attempters and not attempters in terms of psycho-social variables? (3) Do the above patterns vary with diagnosis or are they consistent across diagnoses?

Methods

Patient Sample. The current investigation represents part of the Chicago Follow-up Study, a larger research program investigating thought disorders, psychotic symptoms and other symptoms (Harrow et. al., 1986). The sample of 586 adolescent and young adult patients was prospectively assessed at index hospitalization and followed up at an average of 2.2 years after hospital discharge. Patients were diagnosed according to the Research Diagnostic Criteria (RDC, Spitzer et. al., 1978) based on several sources of inpatient information including the tape-recorded Schizophrenia State Interview (SSI, Grinker and Holzman, 1973) and the Schedule
for Affective Disorders and Schizophrenia (SADS; Endicott and Spitzer, 1978). The sample included 148 schizophrenics (including 73 paranoid schizophrenics and 75 nonparanoid schizophrenics), 181 other psychotics (including 67 with schizoaffective disorders, 84 with psychotic affective disorders, and 30 with other types of non-psychotic disorders) and 257 nonpsychotics (including 165 with nonpsychotic depressive disorders and 92 with other types of nonpsychotic disorders. There were no significant differences among the diagnostic groups in age at first hospitalization or time of first follow-up. There were some sex differences however, 64% of the schizophrenics, 52% of the other psychotics and only 39% of the nonpsychotics being men.

Procedure. All patients were prospectively assessed at index hospitalization prior to being followed up. Diagnosis and prognostic factors were rated blindly as to subsequent outcome. The predictors of suicide completions and attempts include (a) diagnosis, (b) demographic items (e.g., age, marital status, education, and (c) prognostic items including social competence (the Zigler-Phillips Scale, 1961), and assessments of premorbid functioning (Vaillant, 1978, and Stephens, 1978). Suicide attempts were assessed from the intake at initial hospitalization and subsequent completed suicides were located from follow-ups, state records and the National Death Index. Thirty-eight patients had completed suicide at the time of this research and over 100 had attempted suicide prior to or at index hospitalization.
Results

(1) **Diagnosis:** Schizophrenics attempted suicide less (as of index hospitalization) but subsequently completed it more than the other psychotics or nonpsychotics (p<.01). Schizophrenics thus have a higher rate of completions to attempts than do the other two diagnostic groups.

(2) **Sex:** Female patients generally attempt suicide more than do males (p<.01). This effect is consistent in the nonpsychotic group (p<.05). Male patients complete suicide more than do females (p<.01). This effect is consistent among the other psychotics (p<.05).

(3) **Age:** Suicide attempters are younger than nonattempters only in the nonpsychotic group (p<.05).

(4) **Education Level:** At hospital admission, suicide attempters were significantly more highly educated than nonattempters only for the nonpsychotic group (p<.05). This effect was even stronger at first follow-up (p<.01) and was additionally significant for the entire sample (p<.05).

(5) **Marital Status:** Suicide completers are generally more likely to have never married than are suicide attempters (p<.05).

(6) **Social Competence:** Suicide completers generally have lower social competence as indicated on the Zigler-Phillips scale than do either suicide attempters (p<.05) or nonattempters (p<.01). The difference between suicide completers and attempters tended to be consistent among other psychotics and nonpsychotics but only as a trend (p<.10 for both groups).
(7) Alcohol Abuse: At admission, suicide attempters generally show a trend toward more alcohol abuse than do nonattempters (p<.10). This trend is significant among the other psychotics (p<.05) but not among the schizophrenic or nonpsychotic groups. At our first follow-up, suicide completers generally show a trend toward greater alcohol abuse than do the other two groups (p<.05). This trend is accentuated for the other psychotics, especially with regard to greater alcohol abuse shown by suicide completers as compared to attempters (p<.05).

(8) Drug Abuse: At admission, suicide completers generally tend to show greater drug abuse than do the other two groups (p<.05). The direction of this trend is consistent among the schizophrenia and nonpsychotic groups.

(9) Premorbid Functioning: Suicide attempters generally show better premorbid functioning than nonattempters and/or completers on a number of indices measured by the Vaillant-Stephens scale. Attempters show (a) less previous hospitalization than completers (p<.01), (b) better premorbid work history than completers overall (p<.01), (c) more acute onset of their disorder than completers overall (p<.01) and than nonattempters among the nonpsychotics (p<.05), and (d) less affective blunting than completers (p<.10). On other indices, attempters show (e) greater preoccupation with death overall than either completers or nonattempters (p<.01), the latter difference consistent for other psychotics and nonpsychotics (p<.01), (f) greater depression at admission overall than either completers (p<.10) or nonattempters (p<.01), and (g) less confusion.
at admission overall than nonattempts (p<.01), especially for the nonpsychotic group (p<.05).
REFERENCES


