Suicide Attempters in the Emergency Department Before Hospitalization in a Psychiatric Ward

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Suicide and suicide attempts are a major cause of death and morbidity worldwide. In the year 2000, approximately 1 million people died by suicide. For every completed suicide, there are somewhere between 10 and 40 attempted suicides (World Health Organization, 1999, 2002). Other sources estimate that there are 10–25 nonfatal suicide attempts for every suicide completion, and these numbers rise to 100–200 for adolescents (Maris, 2002). Although no reliable data exist on the real dimension of the burden of suicide attempts worldwide, there is general agreement that the risk of repeated nonfatal suicidal acts seems to be growing (Mann, 2002). In major affective disorders, including unipolar depression and bipolar disorder, completed suicide and suicide attempts are alarmingly common. Baldessarini, Pompili, and Tondo (2006) and Baldessarini, Tondo, et al. (2006) reported that a feature of suicidal behavior among patients with major affective disorders is the high lethality of suicide attempts (presumably reflecting both intent and means) as indicated by the ratio of estimated rates of attempts to suicides. This ratio is much lower among those with bipolar disorder than in the general population.

PURPOSE: The study aims to compare the current suicidal risk of mood disorder patients who had just attempted suicide, as compared with those who had not attempted suicide, admitted to an emergency department (ED), and then hospitalized in a psychiatric unit.

METHOD: One hundred sixty-one mood disorder patients admitted to the ED were studied. A total of 22.4% of the participants were admitted for a suicide attempt. Patients were assessed for psychopathology and diagnosis.

FINDINGS: Suicide attempters were nearly 12 times more likely to report ongoing suicidal ideation during the psychiatric evaluation in the ED than nonattempters. Men and women did not differ for current and previous suicide attempts or for ongoing suicidal ideation.

PRACTICAL IMPLICATIONS: It is important to conduct a suicide risk assessment when individuals are admitted to an ED.
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The general population ratio of suicide attempts to completed suicides varies with such factors as age, sex, ethnicity, comorbid conditions, and the accuracy of case identification, especially for suicide attempts of varied severity and potential lethality (Tondo & Baldessarini, 2005). These authors reflected that, given these caveats, rates of attempted suicide in the general population are estimated to be 0.14–0.28% per year, compared with an average suicide rate of 0.014% per year, for a ratio of at least 10 : 1 and as high as 30 : 1 (Kessler, Berglund, Borges, Nock, & Wang, 2005; Tondo & Baldessarini, 2005).

Suicide attempters admitted to the emergency department (ED) have greater medical damage than psychiatric patients without recent suicide attempts. Most of them have severe injuries and need prompt attention by the emergency physicians. However, these patients seem to be at risk not only because of the injuries that caused their admission to the ED, but also because they have a higher suicide risk even in the few hours after committing a medically serious suicide attempt, with higher suicidal ideation and depressive mood, than patients who are nonattempters.

Most people who receive treatment following a suicide attempt first come to the staff’s attention after presenting at a general hospital because of the physiological damage. Staff attitudes toward suicidal and self-harming patients are a key element influencing whether these patients will ultimately complete suicide (Pompili, Girardi, Ruberto, Kotzalidis, & Tatarelli, 2005). Suicide attempters are often discharged from ED without undergoing a psychiatric assessment, despite their risk of suicide (Hickey, Hawton, Fagg, & Weitzel, 2001) and the fact that the vast majority of suicide attempters suffer from severe psychiatric disorders (Beautrais et al., 1996; Haw, Hawton, Houston, & Townsend, 2001; Hawton, Houston, Haw, Townsend, & Harriss, 2003; Rihmer et al., 2006; Suominen et al., 1996).

The catharsis hypothesis assumes that acting-out in angry persons results in reduced tension and arousal (Baron & Richardson, 1994). Austin (1972) stated that suicide could be considered to be an ultimate form of catharsis. Recently, Walker, Joiner, and Rudd (2001) defined suicide catharsis as decreased suicidal symptoms caused by the outward expression of suicidality in the form of a suicide attempt. Several authors have confirmed this effect (Bronisch, 1992; Davis, 1990; Sarfati, Bouchaud, & Hardy-Baylé, 2003; Slorach, 1972; van Praag & Plutchik, 1985; Walker et al., 2001). Patients may not spontaneously report ongoing suicidal ideation after a suicide attempt, and so it is crucial to ask patients directly about their suicidal ideation and to seek collateral information from family members, friends, emergency medical services personnel, police, and others.

Farberow (1950) and Farberow and Shneidman (1955) compared three groups of veterans who had been hospitalized, one group for suicide attempts, one for suicide threats, and a third for nonsuicidal psychiatric problems. The primary result from that study was that, while no significant differences between the attempters and the threateners were observed in demographic details or case histories, marked differences were found in the mood of the attempters and threateners. The attempters showed a much more favorable psychiatric picture, with significantly less anxiety, depression, and hostility/aggression. Apparently, the attempt had provided a release from most of the pressures that had preceded their suicide attempt.

After a suicide attempt, the patient sometimes appears to be calm, which may make staff think that he or she had not intended to die. Some researchers have reported that a suicide attempt has a cathartic effect. Bronisch (1992) and Slorach (1972) found that a significant improvement of the depressive state of a suicidal group was observed within a few days after hospitalization. They concluded that the cathartic effect of a suicide attempt may be restricted to patients with severe major depression or to violent suicide attempters.

Van Praag and Plutchik (1985) reported that a suicide attempt might specifically serve to alleviate negative feelings that the patient experiences prior to the attempt. They found that hospitalized patients exhibit a significant reduction in depression after a suicide attempt, whereas hospitalized patients who were depressed but not suicidal did not report the same decrease in depression upon hospitalization. The authors suggested that the postsuicide drop in depression for the suicidal patients could be attributed to a cathartic effect of the suicide attempt.

We hypothesize that there might be a decrease of suicidal symptoms in suicide attempters. This hypothesis suggests a rather sudden change in the individual’s emotional or physical disposition as a result of the catharsis (immediate reduction in suicidality following suicide attempt). One of the aims of the present study was to investigate the catharsis hypothesis in a well-defined sample of consecutive patients admitted to an ED and then hospitalized in a psychiatric unit. Further aims were to compare mood disorder patients who had just attempted suicide with those who had not attempted suicide and to explore gender differences between attempters and nonattempters.

Methods

Design

This is a cross-sectional study of patients suffering from mood disorders (either a bipolar affective disorder or a major depression) admitted to the ED of Sant’Andrea Hospital and then hospitalized in the Department of Psychiatry of the same hospital. The sample consisted of all patients admitted in the time frame April 2006 to January 2008, satisfying the inclusion criteria (admission to the ED and hospitalization in the
Psychiatric Department of the same hospital, a diagnosis of mood disorder, ability to take part in the assessment procedure, and provision of informed consent). Patients were assessed for the presence of a recent suicide attempt causing the admission at the ED, psychiatric diagnosis, current mental status, and psychiatric history.

Participants

Between April 2006 and January 2008, a total of 1,264 patients seeking psychiatric consultation were admitted to the ED of Sant’Andrea Hospital. A detailed clinical record is provided by the ED physician for each patient, which includes a comprehensive psychiatric evaluation conducted by a psychiatrist on duty in the ED. Depending on the seriousness of the symptoms, patients are referred either to outpatient clinics or hospitalized. Of the 1,264 patients admitted at the ED, 300 patients were hospitalized. One hundred and sixty-one of 300 patients were diagnosed as suffering from mood disorders. Of these, 42.9% of patients with mood disorders were male (n = 69), and 57.1% (n = 92) were female. Their mean age was 42.9 years (SD = 13.6; range = 19–79).

The initial evaluation performed in the ED for each patient was discussed in a diagnostic conference to decide on the appropriate diagnosis (according to ICD-10 criteria, which is the official mode for providing diagnosis in the Italian Health Service) within 3 days of the admission. Of the major mood disorder patients included in this study, 73.9% suffered from a bipolar disorder (76.5% of bipolar patients were diagnosed as type I disorder), and 26.1% suffered from a major depressive disorder. Of the patients with bipolar disorder, 37.8% had a manic episode at index observation, 9.2% had a depressive episode, and the remaining 52.9% had a mixed episode. Suicide attempts had been made by 22.4% of the hospitalized patients. More than 30% used a violent method (for example, hanging, deep knife wound, using firearms, jumping in front of a moving train vs. poisoning, gas, drowning, and overdose) for attempting suicide: of these, 28.6% had bipolar disorders and 33.3% had major depressive disorders. Of the suicide attempters, 36.1% were diagnosed as bipolar disorder type I, 22.2% were diagnosed as bipolar disorder type II, and 41.7% were diagnosed as major depressive disorder.

According to the revised nomenclature (Silverman, Berman, Sanddall, O’Carroll, & Joiner, 2007a, 2007b), these acts should be labeled suicide attempts type II; that is, a self-destructive act with some degree of intent to end one’s life and some identifiable injuries. Patients were interviewed for clinical data as soon as the psychiatrist on call had medical clearance. Subjects participated voluntarily in the study, and each subject provided written informed consent. The study protocol received ethics approval from the local research ethics review board.

Measures

All patients admitted to the ED suffering from psychiatric disorders or who have attempted suicide are referred to a psychiatrist while in the ED where an interview is conducted. During such interviews, a complete mental examination is performed. Patients are asked about “ongoing” suicidal ideation or plans for suicide. Hospitalized patients are then evaluated again during their stay in the psychiatric unit where previous clinical records, generally provided by family members, are discussed.

Ongoing suicidal ideation was defined as thoughts of serving as the agent of one’s own death. Patients who were reported as suicidal ideators were those patients who were still thinking that suicide was a good option for their problems, wished that they were dead, or were unhappy to be rescued.

Clinicians performing mental examinations relied on the Mini International Neuropsychiatric Interview (MINI). The MINI is a short structured interview developed in France and the United States to explore 17 disorders according to the DSM-III-R (American Psychiatric Association, 1987). It has undergone many reliability and validity studies (Amorim, Lecrubier, Weiller, Hergueta, & Sheehan, 1998), and one section of this instrument is dedicated to the assessment of suicidal risk, with questions about past and current suicidality. In our patients, MINI diagnoses were confirmed by clinical DSM-IV-TR diagnoses (American Psychiatric Association, 2000). Clinical diagnoses were assigned by a staff psychologist and the attending psychiatrist.

Both during admission to the ED and during hospitalization, nurses contributed greatly to the assessment of suicide risk. The psychiatric ward was comprised of 15 nurses, and for each shift at least three nurses were always on duty during night and day. At least two nurses took part in the daily assessment of patients performed by psychiatrists on duty. Nurses also took part in the daily clinical meeting where, for each patient, psychiatrists, psychologists, and nurses discussed therapeutic options and discharge plans.

Statistical Analysis

Chi-square tests with Yates’ correction, one-way Fisher exact tests, and t-tests were used to perform bivariate analyses. Benjamini and Hochberg’s (1995) procedure was used to correct for multitesting. Logistic regression analysis was employed to assess the multivariate association among variables. Variables statistically significant (p < .05) after correction for multitesting were selected for inclusion in the logistic regression model. Odds ratios (OR) and 95% confidence intervals (95% CI) were calculated. All statistical analyses were performed using the SPSS 13.0 statistical software package (SPSS Inc., Chicago, IL, USA).
Results

Bivariate analyses resulted in eight significant differences between patients who had attempted suicide and those who had not. Five of these differences were still significant after correction for multiple testing (see Table 1). Suicide attempters were more likely to report ongoing suicidal ideation during the psychiatric evaluation in the ED than nonattempters. Suicide attempters were less likely to report delusions, thought disorder, and agitation than nonattempters. In addition, suicide attempters were more likely to give evidence of major depression, both unipolar and bipolar, and were less likely to show manic symptoms. The two groups did not differ in their history of previous suicide attempts (13.9% vs. 5.6%; \( p = .10 \)).

To evaluate multivariate associations among variables, a logistic regression analysis was performed with the group (attempters vs. nonattempters) as the dependent variable and the significant variables as predictors (delusions, thought disorder, suicidal ideation, agitation or motor restlessness, and current mood episode; see Table 2). The multivariate model showed good fit for the data (\( \chi^2 = 58.59 \) degrees of freedom [\( df = 7 \]; \( p < .001 \), –2 Log likelihood = 54.50), explaining 47% of the variability of the dependent variable (Nagelkerke \( R^2 = 0.47 \)). When controlling for other variables, only ongoing suicidal ideation was statistically significant (Wald \( \chi^2 = 18.19 \) [\( df = 1 \]; \( p < .001 \)). Suicide attempters were nearly 12 times more likely to report ongoing suicidal ideation than nonattempters (95% CI: 3.81/37.04) during the assessment in the ED. Thus, suicide attempters had a higher suicidal intent even in the few hours following the index episode.

We further assessed whether independent variables associated with attempted suicide were predictive of ongoing suicidal ideation (not reported in the tables). The logistic

### Table 1. Bivariate Differences Between Suicide Attempters and Nonattempters

<table>
<thead>
<tr>
<th></th>
<th>Suicide attempters ( n = 36 )</th>
<th>Nonattempters ( n = 125 )</th>
<th>Test ( t = 0.41 (df = 158) )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age—M ± SD</td>
<td>43.72 ± 15.46</td>
<td>42.66 ± 13.11</td>
<td></td>
<td>.68</td>
</tr>
<tr>
<td>Women (%)</td>
<td>72.2</td>
<td>52.8</td>
<td></td>
<td>.05</td>
</tr>
<tr>
<td>Confusion (%)</td>
<td>8.3</td>
<td>10.4</td>
<td></td>
<td>.50</td>
</tr>
<tr>
<td>Positive attitude toward psychiatric interview (%)</td>
<td>97.1</td>
<td>92.4</td>
<td>.29</td>
<td></td>
</tr>
<tr>
<td>Hallucinations (%)</td>
<td>8.3</td>
<td>9.6</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>Delusions (%)</td>
<td>8.3</td>
<td>42.4</td>
<td></td>
<td>.001**</td>
</tr>
<tr>
<td>Insomnia (%)</td>
<td>22.2</td>
<td>38.4</td>
<td></td>
<td>.05</td>
</tr>
<tr>
<td>Thought disorders (%)</td>
<td>25.0</td>
<td>63.2</td>
<td>.001**</td>
<td></td>
</tr>
<tr>
<td>Suicidal ideation (%)</td>
<td>83.3</td>
<td>22.4</td>
<td>.001**</td>
<td></td>
</tr>
<tr>
<td>Previous suicide attempts (%)</td>
<td>13.9</td>
<td>5.6</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Anxiety (%)</td>
<td>44.4</td>
<td>45.6</td>
<td></td>
<td>.53</td>
</tr>
<tr>
<td>Agitation or motor restlessness (%)</td>
<td>33.3</td>
<td>56.8</td>
<td>.05*</td>
<td></td>
</tr>
<tr>
<td>Previous hospitalizations (%)</td>
<td>16.7</td>
<td>28.8</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Compulsory hospitalization (%)</td>
<td>5.6</td>
<td>15.3</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Previous psychopharmacotherapy (%)</td>
<td>71.4</td>
<td>68.4</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>Psychiatric history (%)</td>
<td>59.4</td>
<td>68.0</td>
<td>.24</td>
<td></td>
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<tr>
<td>Bipolar disorder (%)</td>
<td>58.3</td>
<td>78.4</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Mania (%)</td>
<td>5.6</td>
<td>34.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed (%)</td>
<td>36.1</td>
<td>40.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bipolar major depression (%)</td>
<td>16.7</td>
<td>4.0</td>
<td></td>
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</tr>
<tr>
<td>Unipolar major depression (%)</td>
<td>41.7</td>
<td>21.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: One-way Fisher exact test where not specified. Benjamini & Hochberg’s (1995) correction: * \( p < .05 \); ** \( p < .01 \).

### Table 2. Logistic Regression Model—Criterion: Suicide Status

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>OR (95% CI)</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delusions (%)</td>
<td>0.32 (0.06/1.58)</td>
<td>.16</td>
</tr>
<tr>
<td>Thought disorders (%)</td>
<td>0.78 (0.25/2.48)</td>
<td>.68</td>
</tr>
<tr>
<td>Suicidal ideation (%)</td>
<td>11.88 (3.81/37.04)</td>
<td>.001</td>
</tr>
<tr>
<td>Agitation or motor restlessness (%)</td>
<td>0.92 (0.33/2.56)</td>
<td>.87</td>
</tr>
<tr>
<td>Current episode (%)</td>
<td>Reference category</td>
<td>—</td>
</tr>
<tr>
<td>Mania</td>
<td>1.65 (0.29/9.46)</td>
<td>.58</td>
</tr>
<tr>
<td>Mixed</td>
<td>1.65 (0.29/9.46)</td>
<td>.58</td>
</tr>
<tr>
<td>Bipolar major depression</td>
<td>12.26 (1.45/103.87)</td>
<td>.05</td>
</tr>
<tr>
<td>Unipolar major depression</td>
<td>2.81 (0.46/17.18)</td>
<td>.26</td>
</tr>
</tbody>
</table>

*Nonattempters are the reference group.

\( \chi^2 \) refers to the chi-square statistic, \( df \) refers to the degrees of freedom, \( OR \) refers to the odds ratio.
regression model showed good fit for the data ($\chi^2 = 47.82 \ [df = 6]; p < .001$, $-2 \log \text{likelihood} = 61.74$), explaining 35% of the variability of the dependent variable (Nagelkerke $R^2$ = 0.35). Ongoing suicidal ideation was associated with (a) thought disorders (Wald $\chi^2 = 7.97 \ [df = 1]; \ OR = 0.26 \ [95\% \ CI: 0.10/0.66]; p < .01$) and (b) mood episode. Those who reported ongoing suicidal ideation were 5.97 times more likely to have bipolar depression (Wald $\chi^2 = 4.17 \ [df = 1]; \ 95\% \ CI: 1.07/33.20; p < .05$), 8.67 times more likely to have unipolar major depression (Wald $\chi^2 = 11.10 \ [df = 1]; \ 95\% \ CI: 2.43/30.88; p < .001$), and 7.20 times more likely to have mixed symptoms (Wald $\chi^2 = 10.27 \ [df = 1]; \ 95\% \ CI: 2.15/24.09; p < .001$) than patients without ongoing suicidal ideation (those with mania are the reference group). Thus, thought disorders are a protective factor for ongoing suicidal ideation, while current depressive or mixed episodes are predictors of ongoing suicidal ideation.

Looking at differences by gender, one difference was still significant after correction for multiple testing (see Table 3). Men were three times more likely to report thought disorder than women (71.0% vs. 42.4%; $p < .001$; OR = 3.33 [95% CI: 1.71/6.47]; $p < .001$). Most importantly, men and women did not differ on variables measuring suicidal behaviors and ideation (despite the fact that two of these three variables were significant before correction for multiple testing): (a) current (14.5% vs. 28.3%; $p < .05$) and previous suicide attempts (5.8% vs. 8.7%; $p = .35$) and (b) suicidal ideation after the index suicide attempt (24.6% vs. 44.6%; $p < .01$).

### Discussion

#### Main Findings and Comparison With Previous Studies

Bipolar manic-depressive disorders are prevalent, often severe, and disabling illnesses with greatly increased early mortality as a result of accidents, complications of comorbid substance use and medical illnesses, and particularly suicide. Suicidal acts often occur early in the illness, in association with severe depressive and dysphoric-agitated mixed phases, and following repeated, severe depressions (Table 4).

The high lethality of suicide attempts is suggested by the much lower ratio of attempts to completed suicide among bipolar manic–depressive disorder patients (5 : 1) versus the general population (about 20 : 1; Baldessarini, Pompili, et al., 2006; Baldessarini, Tondo, et al., 2006). Consideration of risk factors helps to identify patients at increased risk for suicide, but ongoing clinical assessment is essential to decrease risk. Suicide risk is an important issue when dealing with mood disorder patients. The patients included in this study who reported a suicide attempt and who were assessed during the ED visit had significantly more ongoing suicidal ideation than nonattempters, reported fewer delusions and thought disorders, and were less agitated than nonattempters. Sex was associated only with thought disorders (men were more likely to report thought disorders), while it was not associated with current and previous suicide attempts and ongoing suicidal ideation.

### Table 3. Bivariate Differences Between Male and Female Patients

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Test</th>
<th>p  &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age—M ± SD</td>
<td>41.30 ± 13.58</td>
<td>44.11 ± 13.61</td>
<td>t = -1.29 (df = 158)</td>
<td>.20</td>
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<tr>
<td>Confusion (%)</td>
<td>5.8</td>
<td>13.0</td>
<td>.10</td>
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<td>Positive attitude toward psychiatric interview (%)</td>
<td>93.8</td>
<td>93.3</td>
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<td>Hallucinations (%)</td>
<td>7.2</td>
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<td></td>
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<tr>
<td>Delusions (%)</td>
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<td>29.3</td>
<td>.07</td>
<td></td>
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<tr>
<td>Insomnia (%)</td>
<td>31.9</td>
<td>37.0</td>
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<tr>
<td>Thought disorders (%)</td>
<td>71.0</td>
<td>42.4</td>
<td>.001**</td>
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<tr>
<td>Suicidal ideation (%)</td>
<td>24.6</td>
<td>44.6</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Previous suicide attempts (%)</td>
<td>5.8</td>
<td>8.7</td>
<td>.35</td>
<td></td>
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<tr>
<td>Anxiety (%)</td>
<td>34.8</td>
<td>53.3</td>
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<td></td>
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<tr>
<td>Agitation or motor restlessness (%)</td>
<td>47.8</td>
<td>54.3</td>
<td>.26</td>
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<td>Previous hospitalizations (%)</td>
<td>26.6</td>
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<td>Previous psychopharmacotherapy (%)</td>
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<td>Bipolar disorder (%)</td>
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<tr>
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<td>.05</td>
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suicide attempt had a 11-fold higher probability than nonattempters for reporting ongoing suicidal ideation. This finding has important implications for suicide prevention. As indicated in the introduction, it is widely acknowledged in suicidology that a suicide attempt provides a release from most of the pressures that have been building up and which resulted in an attempt to take one’s life. However, suicide attempts remain, in most cases, the most important risk factor preceding completed suicide (Isometsä & Lönnqvist, 1998; Suokas, Suominen, Isometsä, Ostamo, & Lönnqvist, 2001). Recently, Pompili et al. (2009) investigated the cathartic effect in a sample of patients who were admitted to the ED for a suicide attempt but who were not hospitalized in a psychiatric ward. Patients were either admitted to internal or surgical medicine units, transferred to other hospitals, or not hospitalized. These authors found that attempters still wished to be dead, suggesting that no cathartic effect could be identified. The present study reported stronger evidence that a suicide attempt in patients who need a psychiatric admission is followed by persistence of the wish to die.

The timing (the patient has just attempted suicide) is a key point in further exploring suicidal risk as patients may give important clues about their perturbed psychological state as well as mentioning the distressful events that may have precipitated the suicide attempt. While the cathartic effect may reduce suicidal wishes in some patients, clinicians must account for persistence of suicide risk in some individuals after a suicide attempt. For instance, Matsuishi et al. (2005) interviewed suicide attempters to determine whether there were any changes in suicidal ideation just before and just after a suicide attempt and to identify factors that may affect this. The decrease of suicidal ideation after the suicide attempt was thought to be a cathartic effect because most subjects were not treated by either psychotherapy or psychotropic medications at the time of the interview. Our results are somewhat discordant with Matsuishi et al.’s (2005) findings as we found disturbingly high suicidal ideation after the suicide attempt, pointing to persistent wishes to die in our patients rescued in the ED.

It seems fair to conclude that, given the high level of ongoing suicidal ideation (including wishes that they were dead) reported by the suicide attempters in the present study, they regretted failing in their suicide attempt. Hall, Platt, and Hall (1999) found that, among the 100 serious suicide attempters investigated in their study, the vast majority had a psychiatric disorder, a recent loss of close personal relationship, and feelings of hopelessness, helplessness, and worthlessness.

Suicide attempters have a high incidence of subsequent completed suicide (Suokas et al., 2001). Henriches, Wenzel, Brown, and Beck (2005) found that, among 193 suicide attempters evaluated within 24–48 hr of admission, using a survival analysis, those who said that they wished they had died after their suicide attempt were 2.5 times more likely to...
complete suicide subsequently than those who were glad they survived and those who were ambivalent about their attempt. In our sample, some 84.2% of suicide attempters reported ongoing suicidal ideation at the time of admission to the ED, expressing the wish that they were dead and that they had not been rescued. Beautrais (2004) found that, among 302 individuals making medically serious suicide attempts, 6.7% died by suicide within 5 years. In that study, those who were angry that they had not died, who were not relieved that they had survived, who still had thoughts of suicide after the index attempt, and who stated immediately after surviving the index attempt that they thought they would make a further attempt, were more likely to attempt suicide again. Moreover, those who went on to complete suicide were those patients who, at the index attempt, still had thoughts of wanting to die and those who reported, immediately after the index attempt, that they might make another attempt. That research and our results call for appropriate evaluation of suicide attempters, including assessment, therapy, and, above all, follow-up programs. Too often, patients are treated at the index episode and then no further evaluation is made.

The role of primary care providers is also of great value. Numerous studies have found a beneficial role for these professionals in helping to reduce suicide (Rihmer, Rutz, & Pihlgren, 1995; Rutz, 2001; Szanto, Kalmar, Hendin, Rihmer, & Mann, 2007). As Akiskal (2007) recently reported, treatment adherence is a crucial factor among bipolar patients. Reduced adherence results in increased severity of episodes and a higher risk of suicide. Both psychiatrists and primary care providers should be aware of the importance of regular follow-ups to monitor treatment adherence and suicide risk.

Of paramount importance is the role of nurses in the management of suicidal patients (Pompili, Mancinelli, Girardi, & Tatarelli, 2003, 2004). These patients are often difficult and demanding, and suicide risk may increase during initial acclimation to ward life or when plans for discharge or rehabilitation are being arranged.

Our results have implications for the management of suicide risk during and after hospitalization. Evidence suggests that 1 in 10 suicides are by people seen in an ED within 2 months of dying, and many were never assessed for suicide risk (Suicide Prevention Resource Center, 2009). Moreover, extreme agitation or anxiety (Busch, Fawcett, & Jacobs, 2003), or a rapidly fluctuating course (Sharma, Persad, & Kueneman, 1998) is common before suicide. Thus, it is important to conduct a suicide risk assessment, as discussed earlier, when individuals are admitted for inpatient treatment, when changes in observation status or treatment setting occur, when there are significant changes in the patient’s clinical condition, or when acute psychosocial stressors come to light during the course of the hospitalization. For patients with repeated hospitalizations for suicidality, each suicidal crisis must be treated as new, with the patients assessed accordingly at each admission.

Russ, Kashdan, Pollack, and Bajmakovic-Kacila (1999) reported that, of 69 patients admitted to a hospital because of suicide risk, 30 (44%) were completely free of suicidal ideation 24 hr after admission. Scores on a scale for suicide ideation at the time of admission distinguished patients who continued to have suicidal ideation 24 hr later (the sustained-ideation group) from those who did not (the transient-ideation group). Clinicians should bear in mind that hospitalization often does not reduce suicide risk even if patients improve. Pompili, Lester, Leenaars, Tatarelli, and Girardi (2008) investigated the role of psychological pain or psychache (Shneidman, 1993) in mediating suicide risk among inpatients. Using the Psychological Pain Assessment Scale (Shneidman, 1999), these patients were rated for their worst and current psychological pain. Those patients currently at risk for suicide reported significantly higher current psychache and higher worst-ever psychache. Most of these patients considered their worst-ever psychache unresolved. They had been hurt so much that they felt that the pain associated with those adverse events in their lives could not be relieved and that they were condemned to face this pain forever. This suggests that, for these suicidal psychiatric inpatients, amelioration of symptoms is not sufficient.

Pompili, Mancinelli, et al. (2005) reported several factors associated with suicide risk during and after hospitalization, such as fluctuating suicidal ideation, increased length of stay, increased number of ward changes, apparent improvement, negative attitudes toward medication, discharge planning, charged feelings about their illness and hospital admission, difficult relationships with staff, and difficult acclimation in ward environment. Suicide attempters are often stigmatized, and their management both in the ED and in the psychiatric environment is made difficult by this negative attitude on the part of the staff (Pompili, Girardi, et al., 2005; Pompili, Mancinelli, Girardi, et al., 2003, 2004; Pompili, Mancinelli, & Tatarelli, 2003). Proper education of medical staff on suicide and how to face personal problems when encountering suicidal patients is a priority. This fact may result in limitations in the results of this study. Although the psychiatrists in charge of the units where this study was performed are educated and trained to assess suicide risk, there might be differences in their skills. Psychiatrists perform a comprehensive mental examination, and sometimes suicide risk is overshadowed by more severe and visible symptoms with the result that they may consider hospitalization regardless of the suicidal crisis per se. However, and this is a strength of the present study, the evaluation performed in the ED was always confirmed in clinical conferences soon after the psychiatric admission.

The present study provides evidence that some mood episodes such as mixed-irritable-dysphoric states are associated with increased suicide risk, especially in suicide attempters. Future studies should focus on follow-up and survival analysis for patients admitted to the ED in order to learn more.
about their outcome, their treatment adherence, and whether their suicidal intent was appropriately treated.

The strength of the present study is the methodological assessment of suicide attempts of the patients during their admission to the ED and during their hospitalization in the psychiatric ward. The clinicians in charge of patients included in this study were able to also examine previous clinical records and charts as it is common to have such documents available for patients. The present investigation, therefore, was particularly accurate on diagnosis and how serious the suicide attempts were for these patients and whether they clearly stated that they still wished to die.

There are limitations to the generalization of the present results. First, the relatively small sample sizes may affect the replicability of results. Second, the study did not examine the effect of the lethality of the present suicide attempt, and the ED assessment did not use a psychometric instrument to measure future suicide risk. Nevertheless, participants were consecutive patients who were admitted for a medically serious suicide attempt, which constitutes a measure of homogeneity. In fact, all required the same emergency protocol carried out in the ED.

We stress the need for hospitals to handle suicide attempters more effectively. Specifically, immediate acceptance of the patient and treatment should be the first duty of hospitals. Some of the common reasons for refusing registration and admission include a nonaccepting attitude on the part of the hospital staff, considering suicide emergencies as increasing the workload, thinking that suicidal patients are merely seeking attention, and medico-legal fears (such as lawsuits; Pompili et al., 2006). The unsympathetic attitude of some hospital staff discourages people from seeking help. Publicity should be provided about first-aid measures and the location of emergency help centers, especially for handling poisoning and burn injuries. Many common household first-aid practices can, in fact, be dangerous, and there should be no delay in taking the affected person to a hospital.

**Implications for Nursing Practice**

Both during admission to the ED and during hospitalization, nurses contributed greatly to the assessment of suicide risk, to administering psychometric instruments, and to the management of difficult and demanding patients.

Nurses should be regularly trained in recognizing “terminal malignant alienation” in suicidal patients (Morgan & Priest, 1984, 1991); that is, some patients, particularly those with recurrent relapses and resistance to treatment, may be perceived by staff as manipulative, provocative, unreasonable, overdependent, and feigning disability. Patients with fluctuating suicidal ideation are particularly likely to fall into these categories, which may lead to underreporting of suicidal ideation by the nursing staff. The combination of such alienation and fluctuating suicidal ideation can lead to a failure to recognize the seriousness of suicidal risk. For instance, the so called “dependent-dissatisfied” patient (Farberow, Shneidman, & Neuringer, 1966) complains incessantly, makes demands, and tries to control others. These patients show inflexibility and lack of adaptability, reiterating their complaints to others regardless of whether the others can do anything to remedy the situation. These patients turn to the staff for support, but continually succeed in alienating them with their insatiable demands for special attention. Discharge planning may be a proximal factor for suicide in long-stay patients who have to deal with the painful realization that they are losing the hospital and the staff and/or that their families are not prepared to have them home.

A program for preventing suicide in these patients is not easy to devise for it has been found that these patients provoke rejection and, thereby, bring about the state of affairs that they dread most—loneliness and the feeling that no one, not even the staff, cares (Pompili et al., 2006). It is difficult to give extra and special attention to patients who are insatiably demanding and ungrateful. For these reasons, psychiatric nurses may have higher levels of burnout and hopelessness (Pompili et al., 2006). Moreover, those nurses who work in the ED need to have any taboo about suicide eliminated, and they need to be trained for proper suicidal assessment. If not properly addressed, such issues may lead to stigmatization of suicidal patients and insufficient suicidal assessment, as well as facilitating self-discharge by patients at risk (Pompili, Girardi, et al., 2005). Medical staff should familiarize themselves with the items reported in Box 1 for assessing suicidal risk.

Future research should be devoted to the role of nurses in the development of a therapeutic relationship with clients; how they can listen attentively, give reassurance, and offer support and empathy. The establishment of protocols aimed at early recognition of negative feelings toward suicidal patients as well as warning signs for further suicide risk are of paramount importance. Training in the ED should include proper recognition of resentful feelings and supervision of those individuals who may react to difficult situations by externalizing negative reactions toward patients. Feelings of anger and frustration should not be denied or acted out but instead handled with specific resources, such as seminars, supervision, and counseling, to name just a few.

General understanding and willingness to nurse, as measured by psychometric scales, can be improved significantly, and the suicide risk of patients described in case vignettes can be estimated more accurately after a dedicated program. Clearly, the early recognition of suicide risk as well as the improvement of nursing skills is no doubt a major goal for future programs in this area.
Box 1. Making Sense of Suicide Risk in the Emergency Department: Resources for Doctors and Nurses

Every patient should be asked about suicidal ideation, and every communication of suicidal plan should be taken seriously when patients are admitted to the Emergency Department. Patients who attempt suicide are at higher risk of repetition of the suicidal act. Medical staff should investigate past suicide attempts since these increase the risk for a subsequent attempt or suicide. Triggering events leading to humiliation, shame, or despair elevate risk. These may include loss of a relationship, financial or health status—real or anticipated. Firearms accessible to a person in acute risk magnify that risk.

The following items may be useful for assessing suicide risk, for handling it, and for making sense of future likelihood of self-destruction.

**Assessment of suicide risk**
- Have you ever thought about death or dying?
- Have you ever thought that life was not worth living?
- Have you ever thought about ending your life?
- Have you ever attempted suicide?
- Are you currently thinking about ending your life?
- What are your reasons for wanting to die and your reasons for wanting to live?

Conduct a thorough psychiatric examination, identifying risk factors and protective factors, and distinguish risk factors that can be modified from those that cannot.
- Ask directly about suicide.
- Determine level of suicide risk: low, moderate, high.
- Determine treatment setting and plan.
- Investigate past and present suicidal ideation, plans, behaviors, intent; methods; hopelessness, anhedonia, anxiety symptoms; reasons for living; associated substance use; homicidal ideation.

**Warning signs**
- Expressing suicidal feelings or bringing up the topic of suicide; giving away prized possessions, settling affairs, making out a will; signs of depression: sad mood, alterations in sleeping/eating patterns; change of behavior (poor work or school performance); risk-taking behaviors; increased use of alcohol or drugs; losing interest in their personal appearance; social isolation; developing a specific plan for suicide.

**Signs of Acute Suicide Risk**
- Talking about suicide
- Seeking lethal means
- Purposeless
- Anxiety or agitation
- Insomnia
- Substance abuse
- Hopelessness
- Social withdrawal
- Anger
- Recklessness
- Mood changes

**Management of suicide risk**
1. Be aware. Learn the warning signs.
2. Get involved. Become available. Show interest and support.
3. Ask if he/she is thinking about suicide.
4. Be direct. Talk openly and freely about suicide.
5. Be willing to listen. Allow for expression of feelings. Accept the feelings.
6. Be non-judgmental. Don’t debate whether suicide is right or wrong, or feelings are good or bad. Don’t lecture on the value of life.
7. Don’t dare him/her to do it.
8. Don’t give advice by making decisions for someone else, or telling them to behave differently.
9. Don’t ask “Why?” This encourages defensiveness.
10. Offer empathy, not sympathy.
11. Don’t act shocked. This creates distance.
12. Don’t be sworn to secrecy. Seek support.
13. Offer hope that alternatives are available; do not offer glib reassurance; it only proves you don’t understand.
14. Take action! Remove means! Get help from individuals or agencies specializing in crisis intervention and suicide prevention.

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References