

ORIGINAL ARTICLE

ABORTED SUICIDE AMONG PSYCHIATRIC INPATIENTS IN KERMAN

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Background – An aborted suicide attempt is an event in which an individual comes close to committing suicide but does not complete the act, and thus sustains no injury. In this study, aborted suicide attempts among psychiatric inpatients in Kerman were examined.

Methods – Of 650 patients who were admitted over a 6-month period to the Beheshti Psychiatric Hospital, Kerman, Iran, 400 were included in this study. They were assessed by a semistructured interview, and details of actual and aborted suicide attempts were clarified.

Results – Fifty-six (14%) of the subjects had had at least one aborted suicide attempt over a six-month period prior to their admission. Aborted attempts were reported more often in subjects with a diagnosis of bipolar mood disorder, than schizophrenia and other psychotic disorders, major depressive disorder and post-traumatic stress disorder but there was no relationship between any diagnostic group and aborted suicide. The mean age \pm SD of patients with aborted suicide was 30.8 ± 9.3 years, which was significantly lower than that of patients with no history of aborted suicide (34.6 ± 11.2) ($p < 0.008$). Patients who had made an aborted attempt were nearly four times as likely to have made an actual suicide attempt than subjects with no aborted attempts.

Conclusion – Patients with a history of an aborted suicide attempt are more likely to attempt suicide in the future. Psychiatrists should seek this type of behavior and take preventive steps.

Keywords • aborted suicide attempt • Kerman • psychiatric disorders

Introduction

Suicide is a significant health problem all over the world. It does not usually occur without warning, as the person who ultimately commits suicide has often attempted to communicate his or her suicidal thoughts to a friend, family member or physician.^{1,2} Certain behavior is commonplace before committing suicide—one such pre-suicidal behavior is suicidal attempt, which is an important risk factor for suicide. An estimated 10% of patients who attempt suicide, eventually commit suicide.^{3,4} One study found that the risk of a subsequent suicide attempt increases by about 32% for each prior attempt.⁵ A new category^{6,7} of such abnormal behavior has been termed aborted suicide attempt.

The essential characteristics of an aborted attempt are: 1) intent to kill oneself; 2) a change of

mind immediately before the actual attempt; and 3) absence of injury. A typical scenario is a person who holds pills in his/her hand, wanting to ingest them, but then changes this/her mind and throws the pills away. Clinicians do not routinely ask about this type of pre-suicidal behavior and, consequently, the aborted attempts may remain hidden. As mentioned above, aborted suicide attempt was recently introduced as an abnormal psychiatric behavior and needs to be examined globally. This study of psychiatric inpatients in Kerman (a city in southern Iran) was undertaken to determine whether a history of such behavior exists in our patients, and their probable association with a history of actual suicidal attempts in family members.

Patients and Methods

All patients (men and women), aged 14 to 77 years, who were consecutively admitted over a 6-

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month period to the Beheshti Psychiatric Hospital, Kerman, Iran, were enrolled in the study. Patients were excluded if they had dementia or mental retardation or did not cooperate in interview. They also were excluded if they were in a psychotic state such as catatonia and were not able to answer. Of 650 patients admitted during the study period, 150 patients did not participate or were excluded. All patients underwent a semistructured interview, which included the assessment of demographic data and history of suicidal behavior. Psychiatric diagnosis for each patient was based on DSM IV diagnostic note on discharge by the treating physician. The most severe diagnosis was selected when multiple diagnoses were made. Patients were first questioned about actual suicidal attempts and then, in order to assess the frequency of abortive attempts, each subject was also asked if he or she had ever come close to attempting a suicide, but then changed his or her mind moments before making the attempt. History of actual and aborted suicide was assessed in previous six months prior to hospital admission.

The details of method(s) used for the aborted attempts also were questioned. It was noted whether the patients stopped their attempts by themselves, without interference or rescue by others, and whether they stopped their action before any harm had occurred. The interviews took an average of 30 minutes to complete. Data were analyzed by the Chi-square test using Epi-Info 6 software which was produced by the Division of Surveillance and Epidemiology, Epidemiology Program office, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia 30333, USA in collaboration with the Global Program on AIDS, World Health Organization (WHO), Geneva, Switzerland.

Results

Four-hundred patients were included in this study, of whom 46% were females. One-hundred thirty-eight (34.5%) were single, 190 (47.5%) were married and 72 (16%) were separated, divorced or widowed. Fifty-six (14%) subjects reported at least one aborted attempt, 20 (5%) reported only one aborted attempt, and 36 (9%) had made two or more attempts. Ninety-six (24%) reported a lifetime history of at least one actual suicidal attempt, 30 (7.5%) stated only one actual attempt and 66 (16.5%) had made two or more attempts. There were nearly four times as many actual

attempts among subjects with aborted attempts as among those without.

Of the 56 patients with aborted attempts, 64.3% also had a history of actual attempts, while only 17.4% with no aborted attempts had made actual attempts (χ^2 , Pearson = 57.6, df = 1, $p < 0.0001$). Thirty-four (60.7%) subjects who had a history of aborted attempt were male, but there was no statistical relationship between sex and aborted suicide ($\chi^2 = 0.9$, df = 1, $p = 0.34$). Fifty (52.1%) of those who had a history of actual attempt were male. There was no statistical relationship between sex and actual suicide ($\chi^2 = 0.1$, df = 1, $p = 0.7$). The mean \pm SD ages of subjects with and without a history of aborted suicide were 30.8 ± 9.3 and 34.6 ± 11.2 years, respectively, with the difference being meaningful (ANOVA, $p < 0.008$). Conversely the difference between the mean ages of subjects with and without a history of actual attempt (33.7 ± 11.2 and 34.6 ± 10.3 years, respectively) was not meaningful (ANOVA, $p = 0.49$).

The types of suicidal attempt involved various methodologies (Table 1). A family history of suicide was higher among patients with aborted suicide attempt. Family history for suicide attempt was positive among 22 (3.9%) of subjects who had aborted suicide attempt while such a history was only positive among 42 (12%) of patients with negative history of aborted suicide attempt (χ^2 ,

Table 1. Methods chosen by subjects for aborted and actual suicide attempts.

Group and method	No. (%)
Aborted attempts (n = 56)	
Overdose	28 (50)
Cutting	20 (35.7)
Burning	9 (16)
Shooting	4 (7.1)
Jumping	4 (7.1)
Hanging	3 (5.4)
Actual attempts (n = 96)	
Overdose	74 (77.1)
Cutting	28 (29.2)
Jumping	10 (10.4)
Burning	15 (15.6)
Driving recklessly	9 (9.4)
House gas	3 (3.1)
Hanging	3 (3.1)

Aborted Suicide among Psychiatric Inpatients in Kerman

Table 2. Relationship between history of aborted suicide attempt and actual suicide attempt with psychiatric diagnosis.

Group	Aborted suicide		Analysis	Actual suicide		Analysis		
	Positive <i>n</i> (%)	Negative <i>n</i> (%)		Positive <i>n</i> (%)	Negative <i>n</i> (%)	χ^2	Pearson	df
Schizophrenia and other psychotic disorders (<i>n</i> = 92)	14 (15)	78 (85)	NS	10 (11)	82 (77)	11.3	9	<i>p</i> < 0.001
Bipolar mood disorder (<i>n</i> = 166)	22 (13.5)	144 (86.5)	NS	38 (23)	128 (77)			NS
Major depressive disorder (<i>n</i> = 70)	14 (20)	56 (80)	NS	32 (46)	38 (54)	21.9	9	<i>p</i> < 0.0001
Post-traumatic stress disorder (<i>n</i> = 18)	4 (22.2)	14 (77.8)	NS	8 (44.5)	10 (55.5)	4.3	9	<i>p</i> < 0.04

NS = not significant

Pearson; 26.3, *df* = 1, *p* < 0.0001).

According to the medical records, 166 (41.5%) had a current diagnosis of bipolar mood disorder, 92 (23%) had schizophrenia or other psychotic disorders, 70 (17.5%) suffered from unipolar depression, 18 (4.5%) had post-traumatic stress disorder and 20 (5%) had some other axis I diagnosis. Four (1%) subjects' conditions fell within the list of main diagnosis of axis II personality disorders. Relationships between history of aborted suicide attempt and actual suicide attempt with psychiatric diagnosis is shown in Table 2. There was no relationship between any diagnosis and aborted attempts; however, a meaningful relationship was found between three groups of schizophrenia and other psychotic disorders, bipolar mood disorder and major depressive disorder, with actual suicide attempt.

Discussion

It has been postulated that aborted suicide attempt is a new category of psychiatric illness, which is prevalent among psychiatric patients and could help to predict subsequent suicidal behavior. Aborted suicide attempt involves a wide range of methods of varying degree of potential lethality.⁷

These findings show that many individuals who made aborted attempts had also made earlier actual attempts, and had a higher prevalence of positive family history of suicidal behavior and aborted suicide. In one study, a group of patients who had attempted suicide were as much as 140 times more likely to complete suicide than patients who did not attempt it.⁸ Some aborted attempts may have

occurred before actual attempts and, in fact, served as a practice for actual attempts in the future.

Our study indicated that aborted attempts were not uncommon among our patients (14% reported at least one aborted attempt). There was no relationship between prevalence of aborted suicide attempt and specific psychiatric diagnosis. Aborted suicide attempts were found in all diagnostic groups. Prevalence of aborted suicide attempt in our study was much lower than in two previous studies.^{6,7} In Marzuk et al's study,⁷ 29% reported at least one aborted suicide attempt, and in Barber et al's study,⁶ 52.6% had a lifetime history of at least one aborted suicide attempt.

Overdose by drug or poison was the most common method of aborted and actual suicide in our study (Table 1). In Barber et al's study, the most common method for aborted suicide was a fall from height, while that for actual suicide was overdose.⁶ In Marzuk et al's study, cutting the wrists was the most common route of aborted suicide attempts.⁷ The preference for overdose in our study patients may be attributable to free availability of drugs and culture-determined factor. In our culture, from the past periods, consumption of poisons is one of the usual routes for suicide.

Men commit suicide more than three times as often as do women, a rate that is stable over all age groups. Women, however, are four times more likely to attempt suicide than are men.⁹ In this study, however, there was no difference between males and females for aborted or actual suicide attempt. Subjects who had aborted attempt were younger than those with actual attempt. They were nearly four times as likely to have a history of

actual attempts compared to those who had never made an aborted attempt. Thus, the clinician should consider patients with aborted attempts to be at high risk for an actual attempt. It is therefore recommended that psychiatric clinicians specifically ask their patients about aborted suicide. Further research will be needed to clarify other characteristics of aborted suicide attempt.

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