



Comorbidity of Alcohol Dependence in Suicidal Depressed Patients

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Objectives: To study the characteristics of suicidal attempt patients who had depressive symptoms and to assess the comorbidity of alcohol problems in those patients.

Material and Method: One hundred and ten patients aged over 18 years who received psychiatric consultation for suicidal attempt and had clinical of depression without psychotic features were evaluated for clinical symptoms, details of self-harming, history of alcohol use disorder and family history of substance use or suicide. The severity of depression was measured objectively with Hamilton Depression Rating Scale.

Results: Most cases of suicidal depressed patients were female (81 cases). The mean score of severity of depression from HAM-D was 16.2 (SD 3.52) that indicated moderate degree. The method employed for suicidal attempt was ingestion of drug or chemical agents. About 33% of subjects had comorbid alcohol use disorder and in this group 12.7% was diagnosed as alcohol dependence.

Factors associated with suicidal depressed patients who had comorbid alcohol use disorder were male, aged above 30 years and lower education and additionally, in those with alcohol dependence were associated with stressor about financial problems and less likely to attempt suicide by acetaminophen overdose or be precipitated by relationship problem.

Conclusion: Comorbid alcohol use disorder is common among depressed patients who attempted suicide. More concern about recognition of these comorbidities particularly in those with associated factors and giving appropriate treatment for the comorbidity may be helpful for prevention of suicide.

Keywords: Alcohol use disorder, Depression, Suicidal attempt

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A suicide attempt is defined as a self destructive act, carried out with at least some intent to end one's life. Depression is the most common diagnosed psychiatric disorder that comprises of the most significant risk factor of suicide^(1,2). The reported prevalence of depression among suicide attempts ranges from 30% to 60%⁽³⁾. Although it is recognized that those who attempted suicide and those who committed suicide represent different populations with some overlapping areas. Approximately, 1 percent of the people who attempt suicide will commit suicide during the following year. For 8 to 50 suicide attempters, 8 will eventually commit suicide⁽¹⁾. Alcoholic persons have an increase risk of suicide, with a lifetime suicide risk of 2.2 to 3.4 percent. A subgroup of suicide attempters who often had alcohol or other substance dependence, commit

suicide while acutely depressed. High rates of suicide attempts among individuals with alcohol use disorder have been reported^(4,5). Comorbidity plays an important role; persons with alcoholism who have comorbid depressive disorder are at particularly high risk. Most findings studied in either suicidal or depressed patients, few of them studied in more specific suicidal patients with depression. Understanding how common comorbid alcohol use disorder is in suicidal depressed patients and the characteristics of this group of patients will be some benefit for the prevention of suicide. The purpose of the present study was to study the characteristics of depressed patients who attempted suicide and to determine factors associated with comorbid alcohol use disorder in those patients.

Material and Method

The patients were recruited when they were hospitalized for suicidal attempt and had clinical

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depression without psychotic features. The total of one hundred and ten patients aged over 18 years who received psychiatric consultation from June 2001 to May 2002 were brought in for clinical diagnostic interview. All the subjects were evaluated for clinical symptoms, suicidal behavior, psychosocial stressors, history of alcohol abuse and alcohol dependence, family history of substance use or suicide. Some data such as previous suicidal attempts or history of alcohol drinking were confirmed by asking relatives or their family members and through review of chart records. Current severity of depression was measured by the Thai version of Hamilton rating scale for depression (HAM-D)⁽⁶⁾. The analyses were performed by using SPSS version 11.5 software. Pearson's chi-square or Fisher's exact tests and student's t-test were used to test group difference in history of comorbidity with alcohol problems.

Results

The majority (73.6%) of the 110 depressed patients who attempted suicide in the present study were female. The mean (SD) age was 28.52 (8.78). Sixty-eight patients (61.8%) were in the age group of 18-30 years. Half of the patients (n = 58, 52.7%) was married, 44.5% were single and the others were divorced or widowed. Half of the patients were employed, 14.5% were unemployed and 13.6 % were students. Twenty-five subjects (22.7%) had financial problems. History of substance use was found in 39.1% ; alcohol 33.6%, amphetamine 7.3%, heroin 1.8%, hypnotic 0.9%. Some patients used polysubstance. According to DSM-IV TR criteria, 32.7% (n = 36) met the criteria for alcohol use disorder and this group 12.7% (n = 14) was diagnosed as alcohol dependence and their average dura-

tion of alcohol drinking was 10.7 years. The mean score of severity of depression that was measured with HAM-D in depressed patients who attempted suicide in the present study was 16.2 (SD = 3.52) and 63.6% of the patients (n = 70) had moderate depression. A family history of alcohol or substance abuse and suicide were found in 19.1% (n = 21) and 10.9 % (n = 12) respectively.

Regarding suicidal behavior, most of the patients (n = 105, 95.5%) attempted suicide by ingestion of drugs (; acetaminophen 35.5%, anxiolytics 14.5%, combined drug 13.6%) or chemical agents (; cleansing agent 21.8%, insecticide 8.2%), two by jumping, one by hanging and one by stabwound and others. One fourth of the subjects (n = 30, 27.3%) had an earlier episode of suicidal attempt. All of them reported psychosocial problems and it was found that half of them had stressors about their interpersonal relationships as precipitating factors for decision to attempt suicide. From Table 1 the results show that depressed patients who attempted suicide and had comorbid history of alcohol use disorder were older and found more in the male group and also had fewer years of education compared with subjects without a history of alcohol use disorder

Considering the alcohol dependence subgroup, the authors also found that depressed patients with comorbid alcohol dependence were older and less likely to attempt suicide by acetaminophen overdose. Stressor about financial problems were more common in those with alcohol dependence (42.86% versus 10.42%, $X^2 = 10.34$, $df = 1$, $P = 0.001$) but reported stressor about interpersonal relationship problems were found less common as shown in Table 2. However subjects with and without comorbid alcohol dependence

Table 1. Characteristics of suicidal depressed patients with and without comorbid alcohol use disorder

	Suicidal depressed patients					
Characteristics	with comorbid alcohol use disorder (N = 36)		without comorbid alcohol use disorder (N = 74)		X ²	p-value
	N	%	N	%		
Gender						
male	19	52.78	10	13.51	19.233	0.000**
female	17	47.22	64	86.49		
Education level						
Secondary school or lower	33	91.67	53	71.62	5.705	0.017*
Above secondary school	3	8.33	21	28.38		
	Mean	SD	Mean	SD	t	p-value
Age	32.42	9.37	26.62	7.87	3.402	0.001**
Hamilton depression scale	16.08	3.62	16.26	3.51	-0.241	0.81



Table 2. Clinical features of depressed patients with and without comorbid alcohol use disorder who attempted suicide

Variables	Subjects with alcohol dependence		Subjects without alcohol dependence		Analysis	
	N	%	N	%	X ²	p-value
Gender						
Male	11	78.57	18	18.75	22.52	0.000**
Female	3	21.43	78	81.25		
Education level						
Secondary school or lower	14	100.00	72	75	4.47	0.037*
Above secondary school	0	0	24	25		
Method of suicidal attempt						
Acetaminophen overdose	2	14.29	42	43.75	4.42	0.043*
Others	12	85.71	54	56.25		
Stressor ; relationship problem						
Yes	2	14.29	48	50	6.286	0.019*
No	12	85.71	48	50		
Stressor ; financial problem						
Yes	6	42.86	10	10.42	10.34	0.001**
No	8	57.14	86	89.58		
	Mean	SD	Mean	SD	t	p-value
Age	35	7.56	25.57	8.57	3.069	0.003**
Hamilton depression scale	17.14	4.77	16.06	3.32	1.07	0.287

did not differ by severity of depression from HAM-D scale, history of physical illness, history of previous suicidal attempt, occupation or family history of suicide or substance use disorder.

Discussion

About 73% of suicidal attempt patients in the present study were female and the mean age was 28.52 years. The findings are consistent with other reports that women are 3-4 times more likely to attempt suicide than men and about 50% of suicidal attempts were under 30 years of age⁽¹⁾. A large number of studies have reported that young people with affective disorder have a markedly increased risk of suicidal attempt (OR estimates ranging from 7 to 28, median 13)⁽⁷⁻¹⁰⁾. Ingestion of drugs or chemical agents resulting in self-poisoning was the most common method of suicidal attempt^(1,11) and acetaminophen or cleansing agent ingestion were found predominately in the present study.

Recently, a systematic review reported a median prevalence of current or lifetime alcohol problems in depression of 16% (range 5-67%) and 30% (range 10-60%), respectively⁽¹²⁾. This compared with 7% for current and 16-27% for lifetime alcohol problem in the general population^(13,14). In the present study it was found that depressed patients who made a suicidal attempt had a history of alcohol use in 33.6% and

alcohol use disorder in 32.7%. Current alcohol dependence was found in 12.7% of the subjects. So alcohol problems are more common in suicidal depressed patients. Most cases had moderate depression but depressed subjects with and without a history of alcohol use disorder did not differ in current severity of depression. This finding is similar to Sher L et al⁽¹⁵⁾ and they also found that subjects with the first depressive episode were younger at the time of first hospitalization than subjects without alcoholism. Davis LL et al⁽¹⁶⁾ found that patients with symptoms consistent with substance use disorder (SUD) were more likely to be men, to be either divorced or never married, to have a younger age of onset of depression and to have high rate of previous suicide attempts than those without SUD symptoms. In the present study the results showed that males, aged over 30 years with a lower level of education were associated with comorbid alcohol use disorder in suicidal depressed patients. So these characteristics should be concerned in evaluating depressed patients for the possibility of comorbid alcohol use disorders.

Regarding alcohol dependence in the comorbidity subgroup, although in the present study self-poisoning by acetaminophen overdose was the most common method for presenting suicidal attempt and half of the patients had stressor about interper-



sonal relationships it was found that stressor about financial problems were associated with attempted suicide and they used more violent or lethal methods rather than acetaminophen ingestion. Some studies indicate that alcohol-dependent subjects with a history of suicide attempts have more aggressive and impulsive traits and depressed subjects with a history of alcoholism had higher lifetime aggression and impulsivity⁽¹⁵⁾. Chronic alcohol intake may lead to a state of lowered central serotonergic functioning characterized by a propensity towards disinhibited behavior, thus increasing the potential for aggressive behavior⁽¹⁸⁻²⁰⁾. Alcohol use during an initial attempt predicts increased risk of suicide⁽²¹⁾. Alcohol and its effect play some important roles on mood and impulse control for decision making. Assessing suicidal risk in depressed patients with comorbid alcohol dependence should include exploring stressor about financial problems and suicidal precautions should be paid more attention for availability of violent or lethal methods beyond drug ingestion.

These findings must be interpreted in the context of an inpatient setting that were consulted for psychiatric evaluation in which the severity of illness may limit generalization to experience with outpatients or those who committed suicide. Second, the present study was conducted at a hospital in the capital of Thailand and most of the patients had residence in Bangkok, the social factor about urbanization may have some influence on characteristics of patients who attempted suicide. In conclusion, comorbidity of alcohol use disorder is common among depressed patients who attempted suicide. Awareness of this comorbidity particularly in those with associated characteristics as well as giving appropriate treatment for such comorbidity may help to prevent suicide in depressed patients.

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ความผิดปกติร่วมเกี่ยวกับการติดสุราในผู้ป่วยซึมเศร้าซึ่งพยายามฆ่าตัวตาย

ศิริลักษณ์ ศุภปีติพร

วัตถุประสงค์: เพื่อศึกษาลักษณะทางคลินิกของผู้ป่วยซึมเศร้าที่มีพฤติกรรมพยายามฆ่าตัวตาย และเพื่อประเมินความผิดปกติร่วมเกี่ยวกับการติดสุรา และปัจจัยที่เกี่ยวข้องในผู้ป่วยดังกล่าว

วัสดุและวิธีการ: ศึกษาผู้ป่วยอายุตั้งแต่ 18 ปีขึ้นไป ที่ส่งปรึกษาแผนกจิตเวชด้วยเรื่องการพยายามฆ่าตัวตาย และมีภาวะซึมเศร้า จำนวน 110 ราย ผู้ป่วยได้รับการสัมภาษณ์ ประเมินสภาพจิต เก็บข้อมูลเกี่ยวกับวิธีการพยายามฆ่าตัวตาย ประวัติการดื่มสุรา ประวัติครอบครัวเกี่ยวกับการใช้สารหรือฆ่าตัวตาย รวมถึงประเมินความรุนแรงของอาการซึมเศร้าด้วยแบบวัดแฮมิลตัน

ผลการศึกษา: ผู้ป่วยเป็นหญิง 81 ราย มีคะแนนเฉลี่ยของภาวะซึมเศร้าอยู่ในระดับปานกลาง คือ 16.2 วิธีการพยายามฆ่าตัวตายที่พบบ่อย คือ การกินยาหรือสารเคมี ประมาณร้อยละ 33 มีปัญหาการดื่มสุรา และร้อยละ 12.7 เข้าได้กับเกณฑ์วินิจฉัยความผิดปกติแบบติดสุรา ปัจจัยที่สัมพันธ์กับปัญหาการดื่มสุราในผู้ป่วย ซึมเศร้าที่มีพฤติกรรมพยายามฆ่าตัวตาย ได้แก่ เพศชาย อายุมากกว่า 30 ปี ระดับการศึกษาไม่สูงและในกลุ่มที่พบ ความผิดปกติร่วมแบบติดสุราเกี่ยวข้องกับปัจจัยเครียดเรื่องการเงิน และมักพยายามฆ่าตัวตายโดยใช้วิธีอื่น มากกว่ากินยาแก้ปวด

สรุป: ความผิดปกติของการดื่มสุราหรือติดสุราพบร่วมได้บ่อยในผู้ป่วยซึมเศร้าที่พยายามฆ่าตัวตาย การให้ความสำคัญในการค้นหาความผิดปกติร่วมนี้ โดยเฉพาะในผู้ที่มีปัจจัยสัมพันธ์ดังกล่าว และให้การรักษาที่เหมาะสมคงมีส่วนช่วยลดปัญหาการฆ่าตัวตาย