Social Support in Depressed Patients Who Attempted Suicide

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Objectives : *To identify the level of perceived social support in depressed patients who attempted suicide and to determine whether perceived social support is associated with suicidal attempt in depressed patients*
Material and Method : *The sample consisted of 90 patients who presented with suicidal attempt and had clinical depression and 90 depressed patients who had never attempted suicide. The subjects were clinically assessed for depression,availability of social support and their satisfaction, number of friends and consultants and family history. Subjects were recruited at King Chulalongkorn Memorial Hospital from July 2000 to June 2002.*
Results : *The depressed patients who attempted suicide had lower mean scores in all areas of perceived social support and reported having fewer friends and consultants than those without suicidal attempt. They also had a higher rate of financial problems, substance abuse and family history of alcohol or substance use disorder. The scores for severity of depression and level of perceived social support were negatively correlated with statistical significance.*
Conclusion : *Depressed patients who attempted suicide were more likely to report fewer of friends and a lower levelof social support. Assessment of patient's support network as well as their perception of available social support should be included in the evaluation of depressed patients particularly in those with substance use disorder and intervention to prevent suicide should focus more on increasing their capacity to obtain social resources and modulating their perception.*

Keywords : *Social support, Suicidal attempt, Depressed patient*

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Depressive disorder or depression is one of the leading causes of worldwide disease burden [1]. It is a common psychiatric disorder that can disrupt a person's health, work and relationship, and lead to suicide in some cases. Psychological autopsy studies among suicides have consistently found a high prevalence of mental disorders in people who have committed suicide in both Eastern and Western countries [2-4]. The most common types of disorder have been depressive illness and alcoholism.

A variety of factors have been identified as being risk factors for suicidal behavior among persons with major depression. Prior attempted suicide and hopelessness are the most powerful clinical predictors of future completed suicide [5-9]. Although a substantial percentage of individuals will die on their initial suicide attempt [10], a past suicide attempt is one of the major factors for future suicide attempt [11,12] and for future suicide [5,6,10,13,14].

Recently, more attention has been paid to clinical features that may protect against the emergence of suicidal behavior during depression. The presence of a social support system is another factor that may reduce suicide risk. Some studies found that individuals who report having more friends and less subjective loneliness are less likely to have suicidal tendenay or engage in suicidal behavior [15].

The purpose of this study was to assess the level of perceived social support in depressed patients who attempted suicide and to determine whether there is a difference in the level of perceived social support between those who did and did not attempt suicide.

Material and Method

Ninety patients who presented with suicidal attempt and had clinical depression and 90 depressed patients who had never attempted suicide were recruited at King Chulalongkorn Memorial Hospital from July 2000 to June 2002. Of ninety patients with suicidal attempt, most of them (n = 84, 93.4%) attempted by ingestion of drugs or chemical agents, others by jumping, hanging and others. All the subjects, after providing informed consent, were evaluated for clinical symptoms, demographics,availability of social support and their satisfaction, number of friends and consul-

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tants and family history. The severity of depression was measured objectively with Hamilton Depression Rating Scale (HAM-D) [16]. A Thai version is available [17]. Cronbach's Alpha is 0.738. Social support [18] was assessed with personal resource questionnaire which contains 25 items that measure dimensions of intimacy, social integration, nurturance, worth and assistance. The items are rated from strongly agree to strongly disagree. Greater scores indicate increasingly favorable social support. The reliability coefficient (Cronbach's alpha) is 0.91.

The statistical analysis was performed using SPSS version 11.5 for windows (SPSS, Chicago). The two patient groups were compared by two-tailed student's t test for continuous variables and chi-square for categorical variables.

Results

The groups of subjects with and without suicidal attempt did not differ by age, marital status, religion, education level, occupation or income (Table 1). Financial problemd were more common in depressed patients who attempted suicide (27.8% versus 13.3%, $X^2 = 5.749$, df = 1, p = 0.016). Subjects with suicidal attempt had 34.4% rate of substance abuse compared to 12.2% of those without suicidal attempt ($X^2 = 12.42$, df = 1, $p < 0.0001$). The suicidal attempt patients were more depressed according to their scores on the Hamilton depression scale ($t = 6.385$, df = 1, $p < 0.0001$)

The rate of psychiatric illness, suicide and substance abuse/dependence in the families of depressed patients with suicidal attempt were higher compared with those without suicidal attempt but it

Table 1. Characteristics of 180 depressed patients

Characteristics	Depressed patients			
	Attempted suicide		Never had suicidal attempt	
	N	%	N	%
Gender				
Male	22	24.4	24	26.7
Female	68	75.6	66	73.3
Marital status				
Single	44	48.9	47	52.2
Married	43	47.8	36	40.0
Other	3	3.3	7	7.8
Residence				
Bangkok	57	63.3	55	61.1
Other	33	36.7	35	38.9
Education				
No or primary school	39	43.3	18	20.0
Secondary school	21	23.3	24	26.7
University or graduated	30	33.3	48	53.3
Occupation				
Employee	38	42.2	30	33.3
Unemployed	16	17.8	11	12.2
Other	36	40.0	49	54.5
Income (bahts / month)				
None	25	27.8	37	41.1
5,000 or lower	33	36.7	15	16.7
More than 5,000	32	35.5	38	42.2
Financial problems	25[a]	27.8	12	13.3
History of physical illness	14	15.6	24	26.7
History of psychiatric illness	14	15.6	8	8.9
History of substance abuse/dependence	31[b]	34.4	11	12.2
	Mean	**SD**	**Mean**	**SD**
Age	27.65	10.57	30.21	10.84
HAM-D score[d]	16.69[c]	3.41	13.59	3.52

[a] Chi square test showed significant difference $p<0.05$, [b] Chi square test showed significant difference $p<0.001$, [c] t-test showed significant difference $p<0.001$, [d] HAM-D : Hamilton depression scale

Table 2. Relation of family history among depressed patients who did and did not attempt suicide

Family history variable	Suicidal attempt		Nonattempter		Analysis	
	N	%	N	%	X^2(df=1)	P
Psychiatric illness					1.089	0.297
Yes	16	17.8	11	12.2		
No	74	82.2	79	67.8		
Suicide					4	0.077
Yes	12	13.3	4	4.4		
No	78	86.7	86	95.6		
Substance abuse/dependence					5.76	0.016*
Yes	21	23.3	9	10.0		
No	69	76.7	81	90.0		
Family structure in childhood					2.16	0.14
Father and mother lived together	59	65.6	68	75.6		
Other	31	34.4	22	24.4		

was found to have statistically significant difference only for a family history of substance abuse/dependence ($X^2 = 5.76$, df = 1, p = 0.016) as shown in Table 2.

From Table 3 the results show that compared with depressed patients who had never attempted suicide, significantly more depressed patients who attempted suicide reported that they had no or a few friends, siblings as well as consultants.

Mean scores obtained from the personal resource questionnaire are displayed in Table 4. The depressed patients with suicidal attempt reported significantly lower mean total score of social support than those without suicidal attempt. Significant difference in all areas of perceived social support were found between both groups. Additionally, it was found that social support was significantly correlated with number of friends ($r = 0.339$, $p < 0.001$), number of consultants ($r = 0.335$, $p < 0.001$) and also found negatively correlated with severity of depression ($r = -0.53$, $p < 0.05$).

Table 3. Number of siblings, friends and consultants in both groups

Number of persons	Attempted suicide		No suicidal attempt		Analysis	
	N	%	N	%	X^2 (df=1)	P
Siblings					5.35	.021*
1 - 2	41	45.6	26	28.9		
> 2	49	54.4	64	71.1		
Friends					23.17	.000**
0 - 2	67	74.4	35	38.9		
> 2	23	25.6	55	61.1		
Consultants					19.29	.000**
0-2	73	81.1	45	50.0		
>2	17	18.9	45	50.0		

Discussion

In the present study it was found that depressed patients who attempted suicide were more depressed and had a higher rate of substance abuse and financial problems than those without suicidal attempt. These findings are in agreement with other studies that reported that suicidal risk is higher in major depressed than in minor depressed patients [19,20] and

Table 4. Perceived social support among depressed patients who attempted suicide and did not

Dimensional subscale	Depressed patients					
	Attempted suicide		No suicidal attempt		Analysis	
	Mean	SD	Mean	SD	T (df =178)	P
Intimacy	14.21	3.30	15.60	3.13	-2.90	.004**
Social integration	15.22	3.03	16.46	3.26	-2.63	.009**
Nurturance	14.18	4.00	15.50	3.94	-2.24	.027*
Worth	13.67	3.36	15.06	3.65	-2.66	.009**
Assistance	15.32	3.37	17.13	3.54	-3.52	.001**
Total score	72.60	14.90	79.74	15.33	-3.171	.002**

substance use disorder are also linked with suicide [21] and suicide attempt behavior [22-24]. A number of studies found higher rates of suicide among unemployed compared with employed subjects[25-26] but in contrast, controlled studies of attempted suicide have concluded that unemployment and suicide attempt risk are not significantly related after control for confounding factors [27,28]. In this present study the authors did not find significant difference of unemployment status between depressed patients who did or did not attempt suicide but it was found that financial problems were associated with suicidal attempt. These may reflect life stresses or adverse life events.

Regarding family history, family issues may be related to suicide in several ways: such as familial environmental factors (including early parental deprivation), family functioning, family history of psychopathology[29-31] (depressive disorder, substance use disorder, suicidal behavior), etc. In the present study it was found that depressed patients with suicidal attempt were more likely to have a family history the genetic association, family stress, impaired family structure or supporting system. Although social supports typically include family members or friends, individuals may also receive support from other sources.

Social support has been described in various ways. Some studies associate support with availability of a spouse or confidant, close ties with friends and the nearness of relatives. In the present study the authors found that depressed patients with suicidal attempts reported having fewer friends and consultants than those without suicidal attempt. Stravynski et al[15] also noted that individuals who report having more friends and less subjective loneliness are less likely to have suicidal ideation or engage in suicidal behaviors. Cobb[32] defined support as information that leads persons to believe they are loved, esteemed, and a member of a network of mutual obligation. Weiss [33] suggested that social relations have multiple functions including sharing of concerns, intimacy, opportunity for nurturance, reassurance of worth, and assistance/guidance. So, in addition to determining whether a support system is present, assessment of the patient's perception of available social supports is important. The authors also found that depressed patients who attempted suicide had lower mean score in all areas of perceived social support than those without suicidal attempt including intimacy, social integration, nurturance, worth and assistance, these findings are consistent with other studies [34,35] that noted that ineffective social support and high depression were significantly associated with suicidal ideation. Stice et al [36] reported that deficits in parental support but no peer support predicted future increases in depressive symptoms and onset of major depression particularly during early adolescence. Some studies found that depressed in patients who attempted suicide perceived their family functioning to be worse than their families did. Suicidal patients also viewed their families more negatively than did depressed nonsuicidal inpatients [37]. Absence of help seeking behavior when having distress was related with suicidal attempt [38]. During a depressive episode, the subjective perception of stressful life events may be more germane to suicidal expression than the objective quantity of such events [39] as well as of social support. These senses led the suicidal patients to believe suicide was the only feasible way to deal with their seemingly insoluble problems [40,41]. Thus, in assessing depressed patients and suicidal risk clinicians should include patient's support network as well as their perception of available social support.

There were some limitations to the present study. First, this study focuses on the perceptions of patients themselves as a reflection of family functioning or social support. The authors did not observe depressed patients in their own environment or interview family members, so it is difficult to separate the actual number of friends or consultants or family dysfunction from potential negative biases on the part of depressed patients. Second, most cases in the present study attempted suicide by ingestion of drugs or agents so it may or may not represent the perceived social support among those who attempted suicide by other lethal methods. Some depressed patients may coexist with a variety of other axis I or II disorder as well. These may also have a major impact on a family's response to depressive illness and on the patient's perception or coping. Nevertheless, their perceptions or subjective feelings are important because they have psychological meaning that influence behaviors including suicidal attempt. In conclusion, depressed patients who attempted suicide had a lower mean score in all areas of perceived social support, reflecting their subjective feelings of deficit in intimacy, social integration, nurturance, worth and assistance. So intervention to prevent suicide in depressed patients should focus more on increasing their capacity to obtain social resources and modulating their perception.

References

1. Murray CJL, Lopez AD. Global mortality, disability and the contribution of risk factors: Global burden of disease study. Lancet 1997; 349: 1436-42.

2. Cheng ATA. Mental illness and suicide: a case-control study in East Taiwan. Arch Gen Psychiatry 1995;52: 594-603.
3. Foster T, Gillespie K, McClelland R, Patterson C. Risk factors for suicide independent of DSM-III-R axis I disorder: case control psychological autopsy study in Northern Ireland. Br J Psychiatry 1999;175:175-9.
4. Shaffer D, Gould MS, Fisher P, Trautman P, Mareau D, Kleiman M, Flory M. Psychiatric diagnosis in child and adolescent suicide. Arch Gen Psychiatry 1996; 53: 339-48.
5. Brown GK, Beck AT, Steer RA, Grishman JR. Risk factors for suicide in psychiatric outpatients: a 20-year prospective study. J Consult Clin Psychol 2000 ;68:371-7.
6. Fawcett J, Scheftner WA, Fogg L, Clark DC, Young MA, Hedeker D, Gibbons R. Time-related predictors of suicide in major affective disorder. Am J Psychiatry 1990;147: 1189-94.
7. Beck AT, Brown G, Berchick RJ, Stewart BL, Steer RA. Relationship between hopelessnessand ultimate suicide: a replication with psychiatric outpatients. Am J Psychiatry 1990;147:190-5.
8. Mann JJ, Waternaux C, Haas GL, Malone KM. Toward a clinical model of suicidal behavior in psychiatric patients. Am J Psychiatry 1999;156:181-9.
9. Roy A. Features associated with suicide attempts in depression: a partial replication. J Affect Disord 1993;27: 35-8.
10. Isometsa ET, Lonnqvist JK. Suicide attempts preceding completed suicide. Br J Psychiatry 1998;173: 531-5.
11. Hjelmeland H. Repetition of parasuicide: a predictive study. Suicide Life Threat Behav 1996 ; 26: 395-404.
12. Oquendo MA, Kamali M, Ellis SP, Grunebaum MF, Malone KM, Brodsky BS, Sackeim HA,Mann JJ. Adequacy of antidepressant treatment after discharge and the occurrence of suicidal acts in major depression: a prospective study. Am J Psychiatry 2002;159:1746-51.
13. Harris EC, Barraclough B. Suicide as an outcome for mental disorder: a metaanalysis. Br J Psychiatry 1997; 170:205-28.
14. Suokas J, Suominen K, Isometsa E, Ostamo A, Lonngvist J. Long-term risk factors for suicide mortality after attempted suicide-findings of a 14-year follow-up study. Acta Psychiatr Scand 1999;100:205-11.
15. Stravynski A, Boyer R. Loneliness in relation to suicide ideation and parasuicide: a population-wide study. Suicide Life Threat Behav 2001 ; 31:32-40.
16. Hamilton M. A rating scale for depression. J Neurol Neurosurg Psychiatry 1960 ; 23:56-62.
17. Lortrakul M, Sukanich P, Sukying C. The reliability and validity of Thai version of Hamilton rating scale for depression. J Psychiatr Assoc Thailand 1996;41:235-46.
18. Brandt P, Weinert C. The PRQ-a social support measure. Nursing Res 1981;30:277-80.
19. VanGastel A. Schotte C, Maes M. The prediction of suicidal intent in depressed patients. Acta Psychiatr Scand 1997;96:254-9.
20. O'Brien G, Holton AR, Hurren K, Watt L, Hassanayen F. Deliberate self-harm: correlates of suicidal intent ant severity of depression. Acta Psychiatr Scand 1987:75:474-7.
21. Hawton K, Fagg J, Platt S, Hawkins M. Factor associated with suicide after parasuicide in young people. BMJ 1993; 306:1641-4.
22. Beautrais AL, Joyce PR, Mulder RT. Psychiatric illnes in a New Zealand sample of young people making serious suicide attempt. New Zealand Med J 1998;111:44-8.
23. Andrews JA, Lewinsohn PM. Suicidal attemptsamong older adolescents: prevalence and co-occurrence with psychiatric disorder. J Am Acad Child Adoles Psychiatry 1992,31:655-62.
24. Beautrais AL. Risk factors for suicide and attempted suicide among young people. Aust NZ J Psychiatry 2000; 34:420-36.
25. Shepherd DM, Barraclough BM. Work and suicide: an empirical investigation. Br J Psychiatry 1980;36:469-78.
26. Lewis G, Sloggett A. Suicide, deprivation and unemployment: record linkage study. BMJ 1998;137:1283-6.
27. Fergusson DM, Horwood LJ, Lynsky MT. The effects of unemployment on psychiatric illness during young adulthood. Psychol Med 1997;27:371-81.
28. Jones SC, Forster DP, Hassanyeh F. The role of unemployment in parasuicide. Psychol Med 1991;21:169-76.
29. Gould MS, Fisher R, Parides M, Flory M, Shaffer D. Psychosocial risk factors for child and adolescent completed suicide. Arch Gen Psychiatry 1996;53:1155-62.
30. Brent DA, Perper JA, Moritz G, Liotus L, Schweers J, Balach L, Roth C. Familial risk factors for adolescent suicide: a case-control study. Acta Psychiatrica Scandinavica 1994;89:52-8.
31. Brent DA. Risk factors for adolescent suicide and suicideal behavior: mental and substance abuse disorder, family environmental factors, and life stress. Suicide Life Threat Behav 1995;25:52-63.
32. Cobb S. Social support as a moderator of life stress. Psychosom Med 1976;38:300-14.
33. Weiss R. The provision of social relationship. In: Rubin K, ed. Doing onto others. Englewood Cliffs N. J. Hall, 1974:17-26.
34. Hovey JD. Moderating influence of social support on suicidal ideation in a sample of Mexican immigrants. Psychol Rep 1999;85:78-9.
35. Esposito CL, Clum GA. The relative contribution of diagnostic and psychosocial factors in the prediction of adolescent suicidal ideation. J Clin child Adoles Psychol 2003;32:386-95.
36. Stice E, Ragan J, Randall P. Prospective relations between social support and depression: differential direction of effects for parent and peer support. J Abnorm Psychol 2004;113:155-9.
37. Keitner GI, Miller IW, Fruzzetti AE, Epstein NB, Bishop DS, Norman WH. Family functioning and suicidal behavior in psychiatric inpatients with major depression. Psychiatry 1987;50:242-55.
38. Serisathien P, Ucharatana W, Boonchome R. An epidemiological study of suicide attempter patients attending governmental hospitals at Rayong province. J Psychiatr Assoc Thailand 1998;43:14-21.
39. Malone KM, Oquendo M, Hass G, Eills S, LI S, Mann JJ. Protective factors against suicidal act in major depression: reasons for living. Am J Psychiatry 2000;157:1084-8.
40. Litman RE. Suicides: what do they have in mind? In: Jacob D, Brown HN, eds. Suicide: understanding and responding, Madison CT: International universities press, 1989:143-54.
41. Bostwick JM. Suicidality. In: Wise MG, Rundell JR, eds. The American Psychiatric publishing textbook of consultation-liaison psychiatry: psychiatry in the medically ill. 2nd ed. Washington DC: American Psychiatric Publishing, Inc, 2002:136-9.

แรงสนับสนุนทางสังคมของผู้ป่วยซึมเศร้าที่พยายามฆ่าตัวตาย

ศิริลักษณ์ ศุภปีติพร, นันทิกา ทวิชาชาติ, สุชาติ ศุภปีติพร

วัตถุประสงค์ *: เพื่อประเมินระดับแรงสนับสนุนทางสังคมในผู้ป่วยซึมเศร้าที่พยายามฆ่าตัวตาย และศึกษาถึงความสัมพันธ์ของแรงสนับสนุนดังกล่าวกับการพยายามฆ่าตัวตาย*

วัสดุและวิธีการ *: กลุ่มตัวอย่างคือ ผู้ป่วยซึ่งมารับการรักษาเนื่องจากการพยายามฆ่าตัวตายและมีภาวะซึมเศร้า จำนวน 90 คน และผู้ป่วยซึมเศร้าซึ่งไม่เคยมีพฤติกรรมฆ่าตัวตาย จำนวน 90 คน ในช่วงเดือนกรกฎาคม 2543 ถึง มิถุนายน 2545 ผู้ป่วยได้รับการประเมินระดับภาวะซึมเศร้า ความพร้อมของแรงสนับสนุนทางสังคมและความพึงพอใจ จำนวนเพื่อน และผู้ที่ให้การปรึกษา และประวัติครอบครัว*

ผลการศึกษา *: ผู้ป่วยซึมเศร้าที่พยายามฆ่าตัวตายมีคะแนนเฉลี่ยของแรงสนับสนุนทางสังคมในทุกด้านต่ำกว่าผู้ที่ไม่เคยฆ่าตัวตาย และมีจำนวนเพื่อนหรือผู้ที่ให้การปรึกษาได้น้อยกว่า พบอัตราของปัญหาการเงิน การใช้สารเสพติด และประวัติครอบครัวของการใช้สารหรือสุราสูงกว่า นอกจากนี้ยังพบว่า ระดับอาการซึมเศร้าและแรงสนับสนุนทางสังคมมีความสัมพันธ์กันในเชิงลบ*

สรุปผลการศึกษา *: การพยายามฆ่าตัวตายในผู้ป่วยซึมเศร้ามีส่วนสัมพันธ์กับการมีเพื่อนน้อยและแรงสนับสนุนทางสังคมต่ำ ดังนั้นในการดูแลผู้ป่วยซึมเศร้าควรประเมินแหล่งให้การช่วยเหลือและการรับรู้ถึงแรงสนับสนุนทางสังคมของผู้ป่วยโดยเฉพาะอย่างยิ่งในผู้ที่มีการใช้สารหรือสุราร่วมด้วย และการเพิ่มความสามารถที่จะเข้าถึงแหล่งช่วยเหลือ และปรับการรับรู้ให้เหมาะสมคงมีส่วนช่วยในการป้องกันปัญหาการฆ่าตัวตาย*