การสนับสนุนทางสังคม ความรู้สึกมีคุณค่าในตนเอง ความแข็งแกร่งในชีวิต และความเสี่ยงต่อการฆ่าตัวตายซ้ำของผู้ป่วยโรคซึมเศร้า
Social Support, Self-Esteem, Resilience, and Repeated Suicidal Risk of Patients with Major Depressive Disorders

นิพนธ์ต้นฉบับ **Original Article**

อนุกูล หุ่นงาม[1], สมบัติ สกุลพรรณ์[2]* และ ภัทราภรณ์ ภทรสกุล[2]

[1] นักศึกษาหลักสูตรพยาบาลศาสตรมหาบัณฑิต สาขาวิชาการพยาบาลจิตเวชและสุขภาพจิต
[2] สาขาวิชาการพยาบาลจิตเวชและสุขภาพจิต
[1,2] คณะพยาบาลศาสตร์ มหาวิทยาลัยเชียงใหม่ อ.เมือง จ.เชียงใหม่ 50200

*** Corresponding author:** sombat.sk@cmu.ac.th

วารสารไทยเภสัชศาสตร์และวิทยาการสุขภาพ2566;18(3):244-252.

Anugool Hoonngarm[1], Sombat Skulphan[2]* and Patraporn Bhatarasakoon[2]

[1] Student in Master of Nursing Science Program in Psychiatric and Mental Health Nursing
[2] Department of Psychiatric and Mental Health Nursing
[1,2] Faculty of Nursing, Chiangmai University, Muang District, Chiangmai, Thailand, 50200

*** Corresponding author:** sombat.sk@cmu.ac.th

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บทคัดย่อ

วัตถุประสงค์: เพื่อศึกษาความสัมพันธ์ระหว่างการสนับสนุนทางสังคม ความรู้สึกมีคุณค่าในตนเอง ความแข็งแกร่งในชีวิต กับความเสี่ยงในการฆ่าตัวตายซ้ำของผู้ป่วยโรคซึมเศร้า **วิธีการศึกษา:** กลุ่มตัวอย่าง 108 คนจากการสุ่มตัวอย่างแบบเฉพาะเจาะจงเป็นผู้ป่วยโรคซึมเศร้าอายุ 20 - 59 ปี มีประวัติการพยายามฆ่าตัวตายมาแล้วอย่างน้อย 1 ครั้ง ที่รักษา ณ แผนกผู้ป่วยนอก โรงพยาบาลจิตเวชสังกัดกรมสุขภาพจิต จำนวน 4 แห่ง โดยใช้แบบสอบถามข้อมูลส่วนบุคคล แบบประเมินความเสี่ยงในการฆ่าตัวตาย แบบประเมินการสนับสนุนทางสังคม ความภาคภูมิใจในตนเองของโรเซนเบิร์กฉบับปรับปรุง และความแข็งแกร่งในชีวิต วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนา สถิติสัมประสิทธิ์สหพันธ์ของเพียรสัน (r_p) และสถิติสหสัมพันธ์สเปียร์แมน (r_{sp}) **ผลการศึกษา:** พบว่ากลุ่มตัวอย่างส่วนใหญ่มีความเสี่ยงต่อการฆ่าตัวตายซ้ำระดับสูง (ร้อยละ 46.3) การสนับสนุนทางสังคมระดับสูง (ร้อยละ 76.9) ความรู้สึกมีคุณค่าในตนเองระดับปานกลาง (ร้อยละ 56.5) และความแข็งแกร่งในชีวิตระดับสูง (ร้อยละ 56.5) พบว่าการสนับสนุนทางสังคม ความรู้สึกมีคุณค่าในตนเอง และความแข็งแกร่งในชีวิต มีความสัมพันธ์ทางลบกับความเสี่ยงต่อการฆ่าตัวตายซ้ำอย่างมีนัยสำคัญทางสถิติ (r_p = -0.353, r_{sp} = -0.269 และ r_{sp} = -0.546 ตามลำดับ P-value < 0.01 ทั้งหมด) **สรุป:** ความเสี่ยงต่อการฆ่าตัวตายซ้ำในผู้ป่วยโรคซึมเศร้ามีความสัมพันธ์ทางลบกับการสนับสนุนทางสังคม ความรู้สึกมีคุณค่าในตนเอง และความแข็งแกร่งในชีวิต ข้อค้นพบนี้สามารถเป็นแนวทางสำหรับการวางแผนเพื่อป้องกันการเกิดความเสี่ยงในการฆ่าตัวตายซ้ำและนำไปสู่การศึกษาถึงปัจจัยทำนายต่อไป

คำสำคัญ: การสนับสนุนทางสังคม, ความรู้สึกมีคุณค่าในตนเอง, ความแข็งแกร่งในชีวิต, ฆ่าตัวตายซ้ำ, โรคซึมเศร้า

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Abstract

Objective: To determine repeated suicidal risk and its association with social support, self-esteem, and resilience of patients with major depressive disorder. **Methods:** A sample of 108 patients was selected using purposive sampling. They were 20 – 59 years old, diagnosed with major depressive disorder, with a history of at least one suicide attempt receiving at outpatient department of 4 psychiatric hospitals under the Department of Mental Health. Research instruments consisted of Mini International Neuropsychiatric Structure Interview, the Personal Resource Questionnaire-85 Part II; revised version of the Thai Rosenberg Self Esteem Scale; the Revised Thai RSES and Resilience Innoventory. Descriptive statistics, Pearson's correlation (r_p) and Spearman's correlation (r_{sp}) analyses were used for data analysis. **Results:** The majority of patients had a high repeated suicidal risk (46.3%), a high lelvel of social support (76.9%), a moderate level fo self-esteem (56.5%), and a high level of resilience (56.5%). Repeated suicicde risk was significantly negatively correlated with social support, self-esteem and resilience (r_p = -0.353, r_{sp} = -0.269, r_{sp} = -0.546, respectively, P-value < 0.01 for all). **Conclusion:** Repeated suicidal risk in patients with major depressive disorders had negative relationships with social support, self-esteem and resilience. This could guide healthcare providers to plan preventing repeated suicide risk and future studies on predictive factors.

Keywords: social support, self-esteem, resilience, repeated suicidal, major depressive disorder

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Introduction

Suicide causes a major loss of human resource. There have been 800,000 successful suicide cases annually, or 1 in every 40 seconds.[1] The risk of suicidal attempts or repeated suicide has been increased by 100 folds and later 10% of these individuals succeeded in committing suicide. Individuals with a history of suicide attempt would repeat the attempt. In Thailand, in 2017 – 2020, the first suicide and repeated suicide rates had been increasing from 6.03, 6.32, 6.64, and 7.37 per 100,000 populations, respectively. Suicidal behavior among individuals 20 – 59 years old from 2015 to 2019 had increased from 75.77% to 76.69%, 88.14%, 74.71% and 76.51%, respectively. A study on persons with a history of suicide attempt with a follow-up of months to 10 years, 10-15% had repeated suicide attempts.[2] This fact is consistent

with Beck's theory of depression that depressed individuals who commit suicide feel bored, disheartened, dismal, and sleepless which could damage daily living. Individuals who committed suicide usually have repeated suicidal ideation until they feel no purpose to live and ultimately attempt a suicide.[3] About 60% of depressed person had suicidal ideation and 18% severely depressed persons committed suicide successfully.[4] Depression usually proceeds suicide ideation, and ultimately the suicide.[5] Therefore, depression is a major factor of suicide.

Repeated suicide attempts affect the persons who attempted, their family, society and economics. Persons with repeated suicide attempts have a risk of repeated suicide attempts of 4.36 folds of those with no attempts.[6] Suicide attempts could be jumping off the building, overdosing medications, and hanging. Unsuccessful suicide could cause lifelong disability, anxiety, guilt, shame, despair, low self-esteem, and loss of life meaning. If left untreated, not cared or not supported, a chronic mental health problem persists, and they are more likely to repeat suicide. Every one person who attempted suicide and succeeded, at least 6 close individuals were affected as long as 4 years.[7] The problem of suicide is of great concern because of its high prevalence and affect individuals, family, and society. Despite helps at national and international levels, repeated suicide remains a major public health problem.

Various preventive factors have been studied. Based on the International Association for Suicide Prevention there are three high-level protective factors to prevent suicide. First factors are sociocultural factors such as support from family members, close individuals, and society, and healthcare access. These factors were found to be associated with a decreased risk of suicide attempts and repeated suicides. The second factors include self-esteem and self-confidence which allow individuals adjust themselves toward pressure associated with stressful circumstances and prevent suicide. The third factor was resilience which allows individuals manage to handle difficulties and recover which could prevent suicide.[8] Factors were of importance for investigation on the association with repeated suicide in patents with depression were social support, self-esteem, and resilience.

The risk of repeated suicide among depressed patients is the first attempt to commit suicide with no success and the attempt or repeated suicide happen again within 2 months up to 2 years.[9] Other factors prompting suicide could be a history of suicide attempt, psychiatric illnesses, and physical illnesses. Psychiatric illnesses increased the risk of suicide by 20 folds.[10] Depressed patients with a history of hospitalization have 18.47-fold risk of committing suicide compared with those depressed patents with no such history.[11] Depressed patients always have negative view toward environments, thought, and decision which could lead to suicide ideation.

Social support is an interaction of support in various aspects from members of society. The person receiving social support could perceive such support which allows him/her to feel as a part of society.[12] Social support affects repeated suicide positively. Since social support enhances the person's self-esteem and being a part of society, the person could be curd from depression.[13] Social separation causes a lack of social support, isolation, mental instability, depression, and changes in fighting mechanism which could lead to suicide.[14] A study of Kotler showed that in hospitalized patients with a history of suicide attempt showed that repeated suicide was negatively associated with social support ($r = -0.30$, P-value < 0.05) among hospitalized psychiatric patients patient a history of suicide attempt.[15] A study of Lin and colleagues showed that perceived stress affects subjective social impact, social support, and negative problem-solving strategies toward the risk of suicide among Chinese patients with depression. They found that social support had a negative relation with suicide risk ($r = -0.13$, P-value < 0.001).[16]

Self-esteem is comprehensive assessment on worthiness by the person and the society to form a self-confidence.[17] For self-esteem in relation with repeated suicide, depressed persons usually have low self-esteem which diminishes learning and adjusting to the circumstance. They therefore have poor relationships with others and feel worthless and hopeless. Ultimately depressed persons end up committing suicide.[18] A study of Perrot and co-workers revealed that self-esteem was negatively associated with repeated suicide ($r = -0.22$, P-value $= 0.009$).[19] A study in Thailand also showed that self-esteem was negatively associated with repeated suicide ($r = -0.26$, P-value < 0.001) among HIV patients with suicide ideation in Phayao province.[20]

Resilience is a person's capability to withstand or recover from critical situations so that loss prevented, severity alleviated, and obstacles overcome.[21] In association with repeated suicide risk, resilience helps depressed patients rely

and be self-confident so they could control things in their own hands which could further alleviate depression and ultimately prevent suicide.[22] A longitudinal study of Elbogen and colleagues revealed resilience was negatively associated with suicide ideation (r = -0.32, P-value < 0.0001) among veterans.[23] Another study of Youssef and co-workers also revealed resilience was negatively associated with suicide ideation (r = -0.34, P-value = 0.0001) among veterans after wars in Iraq and Afghanistan.[24]

In Thailand, studies about repeated suicide have been scarce. Most studies were about first suicide attempt, and some studies were older than 10 years. Most studies were about incidents and characteristics of suicide such as suicide ideation and suicide attempt. Despite these studies, repeated suicide and the attempts have been prevalent. This indicates that true factors influencing repeated suicide might not be fully understood. Studies from other countries could not be adequately applied to Thai society. With the concern for the need to adequate understanding repeated suicide in associated with potential factors, this study aimed to examine relationships between repeated suicide and its modifiable protective factors which could be applied in psychiatric nursing for Thai people. Specifically, we aimed to determine levels of repeated suicide, social support, self-esteem and resilience, and examine relationships between repeated suicide and social support, self-esteem and resilience among depressed patients.

Conceptually, repeated suicide attempt in this study was based its definition and associated protective factors on the International Association for Suicide Prevention. [8] We proposed that social support based on the concept of Brandt and Weinert[25], self-esteem of Rosenberg[17], and resilience of Grotberg[21] independently, negatively affected repeated suicide.

Methods

In this correlational, cross-sectional survey research, study population was Thai patients with diagnosed depression regardless of sex, aged 20 – 59 years old, and with a history of at least one suicide attempt. The study sample was those in the study population of the out-patient department of Psychiatric Hospital, Department of Mental Health, Ministry of Public Health, Thailand.

The sample size was estimated based on the formula of Thorndike for correlation analysis where n = 10k+50.[26] With three independent variables, a samples size of 90 participants was required. To compensate for incomplete data, a 20% compensation rate resulted in a total of 108 participants.

To be eligible, the patients had to be 20 – 59 years old and diagnosed with depression according to diagnosis criteria of the American Psychiatric Association recorded with the World Health Organization (WHO) ICD-10 code of F32. They had to be registered with at least one suicide attempt, excluding para-suicidal behavior such as non-suicidal self-injury. They had to have an intact conscience according to the test of time, place, person, and appropriate interaction. They had to be able to read, write and communicate in Thai language, and willing to participate in the study. Patients with other psychiatric disorders such as schizophrenia and others, or impending suicidal attempt were excluded.

Research instruments

The self-administered questionnaire consisted of 5 parts. The first part asked about demographic characteristics of the participant including sex, age, marital status, history of suicide attempts, history of suicide in the family, and history of use of alcohol and substance.

The second part assessed the risk of suicide using the Mini International Neuropsychiatric Structure Interview (M.I.N.I.)[27] which was translated to Thai by Kittirattanapaiboon and colleagues.[28] With 9 questions of dichotomous responses of yes or no. Levels of suicide risk were categorized as low, moderate and high (1 – 8, 9 – 16, and at least 17 points, respectively).

The third part assess social support using the Personal Resource Questionnaire – Part II (PRQ-85 Part II)[25] which was translated to Thai by Wannapornsiri.[29] The questionnaire consisted of 5 aspects of social support including close connection, being a part of society, self-esteem, acceptance, and helps and advice. The response was a 7-point rating scale ranging from 7-most agree, to 6-agree, 5-somewhat agree, 4-uncertain, 3-somewhat disagree, 2-disagree, and 1-most disagree. With a total of 25 questions and a total score of 25 – 175 points, social support levels could be categorized as low/bad and high/good (25 - 100 and 101-175 points, respectively).

The fourth part assessed self-esteem using the Revised version of Thai Rosenberg Self Esteem Scale (Revised Thai RSES)[17] which was further developed by Wongpakaran and Wongpakaran.[30] The response was a 4-point rating scale ranging from 4-most agree, to 3-agree, 2-disagree, and 1-most disagree. With 10 items and a possible total score of 10 – 40 points, levels of self-esteem were categorized by maximum possible minus minimum possible divided by three intervals resulting in low, moderate, and high self-esteem (10.00 - 20.00, 20.01 - 30.01, and 30.02 - 40.00 points, respectively).

The fifth part assessed resilience using the Resilience Inventory[21] developed by Ninthachan and colleagues.[31] 28 questions were grouped as 1) "I have ….," 2) "I am …," and "I can …" Response was a 5-point rating scale of 5-most agree, to 4-agree, 3-neutral, 2-disagree, and 1-most disagree. With a possible total score of 28 – 140 points, resilience levels were categorized as low, moderate and high (28 - 65.3, 65.4 - 102.7, and 102.8 – 140 points, respectively).

Instrument quality assurance

Since all parts of the questionnaire were from the developed questionnaires with no modification in our study, content validity was tested. For reliability, questions on suicide risk and social support were tested in our study in individuals with characteristics comparable with study participants at Nakhonracthasima Rachanagarindra Psychiatric Hospital. For suicide risk, Thai version of the Mini International Neuropsychiatric Structure Interview (M.I.N.I) was tested for interrater reliability by two investigators on 5 individuals. The questionnaire was found to have acceptable interrater reliability with a Cohen's Kappa coefficient of 1.0.[32]

For internal consistency reliability, questions for social support, self-esteem, and resilience tested for internal consistency reliability with 10 individuals. It was found that social support, self-esteem, and resilience had acceptable internal consistency reliability with Cronbach's alpha coefficients of 0.81, 0.81 and 0.97, respectively.[33]

Ethical considerations for human protection

This study was approved by the Ethics Committee for Human Study of Faculty of Nursing, Chiangmai University (approval number: 016/2565) and of Department of Mental Health, Ministry of Public Health (approval number: 021/2565).

Data collection procedure

The research assistant approached URI patients in the medical record registry for eligibility screening. Prospective participants who met the eligibility criteria were informed about objectives, process and voluntary nature of the study. They could withdraw from the study at any time. Once a written informed consent form was obtained, the research asked the participants to complete the questionnaire in a private area. The self-administered questionnaire took about 10 minutes to complete.

The participants were selected using purposive sampling. Research assistant for each hospital was trained by the researcher. To be eligible, these research assistants had to be either professional nurses with 2 or more years of psychiatric nursing experience, or professional nurses with special training in psychiatric nursing of 4 months or longer accredited by the Department of Mental Health, or professional nurses with Master degree in psychiatric nurse. Research assistants coordinated and prepared study participants. Research assistants introduced themselves and provided objectives, steps, and voluntary nature of the study. Participants could withdraw from participation at any time with no consequence on the care they received. Once the written informed consent form was obtained, the research assistant asked the participants to complete the questionnaire which took about 30 – 45 minutes.

Data analysis

Descriptive statistics including mean with standard deviation and frequency with percentage were used to summarize demographic characteristics and study factors. Normal distribution assumptions of scores of suicide risk and social support were met, while those of scores of self-esteem and resilience were not. Therefore, Pearson's product moment correlation (r_s) analysis was used to test associations between suicide risk score and scores of social support; while Spearman's rank order correlation (r_{sp}) analysis was used for score of suicide risk and scores of self-esteem and resilience.[34] Levels of correlation were categorized as perfect, high, moderate, low, and none (r = 1, 0.70 – 0.99, 0.30 – 0.69, 0.01 – 0.29, and 0, respectively). Statistical significance was set at a type I error of 5% (P-value < 0.05). All statistical analyses were performed using SPSS software program version 20.0.

Results

Of the 108 participants, the majority was women (77.8%), 20 – 30 years old (50.0%), single (54.6%), with no history of alcohol or substance abuse (61.1%), with a history alcohol consumption (66.2%), and with a history of only 1 suicide attempt (37.0%) followed by 4 or more attempts (30.6%), 2 attempts (18.5%). For history of suicide in family members, most had no such history (90.7%); while the rest 10 participants (9.3%) did not. Of those 10 participants with a history of suicide in family members, 6 of them were their father and mother (60.0%) (Table 1).

Table 1 Demographic characteristics of the participants (N = 108).

Characteristics	N	%
Sex		
Men	24	22.2
Women	84	77.8
Age (years), mean = 33.41, S.D = 11.8, rang 20 – 59.		
20 – 30	54	50.0
31 – 40	28	25.9
41 – 50	12	11.1
51 – 59	14	13.0
Marital status		
Single	59	54.6
Married	30	27.8
Living together with no marriage	12	11.1
Widowed/divorced	7	6.5
History of alcohol or substance abuse		
No	66	61.1
Yes	42	38.9
Alcohol	43	66.2
Smoking	15	10.7
Substance (marijuana, krathom, methamphetamine)	7	23.1
History of suicide attempt, mean = 3.90, S.D = 4.42, range 1 – 20.		
1	40	37.0
2	20	18.5
3	15	13.9
4 or more	33	30.6
History of suicide in family members		
No	98	90.7
Yes	10	9.3
Father, mother	6	60.0
Uncle, aunt	3	30.0
Sibling	1	10.0

The majority of participants had a severe risk of repeated suicide risk (46.3%), followed by low level (40.7%), and moderate level (13.0%). Most had a high/good social support (76.9%), and moderate self-esteem (56.5%) followed high level (31.5%). For resilience, more than half had a high level (56.5%), followed by moderate level (38.9%) (Table 2).

Table 2 Levels of repeated suicide risk, social support, self-esteem and resilience of the participants (N = 108).

Variables	Mean	S.D.	N	%
Repeated suicide risk				
Low	4.11	.38	44	40.7
Moderate	12.00	1.79	14	13.0
Severe	32.34	17.71	50	46.3
Social support				
Low/bad	85.80	12.61	25	23.1
High/good	124.16	14.93	83	76.9
Self-esteem				
Low	18.84	1.14	13	12.0
Moderate	26.93	2.30	61	56.5
High	32.73	2.12	34	31.5
Resilience				
Low	57.00	8.12	5	4.6
Moderate	88.00	9.31	42	38.9
High	126.78	25.53	61	56.5

Repeated suicide risk was significantly, negatively correlated with social support, self-esteem, and resilience (r_p = -0.353, r_{sp} = -0.269, and r_{sp} = -0.546, respectively, P-value < 0.01 for all).

Table 3 Correlations between repeated suicide score and independent variables (N = 108).

Independent variables	Correlation coefficients	P-value	Level
Social support	-0.353*	< 0.01	Moderate
Self-esteem	-0.269†	< 0.01	Low
Resilience	-0.546†	< 0.01	Moderate

* Pearson's product moment correleation coefficient.

† Spearnan's rank order correlation coefficient.

Discussions and Conclusion

In this correlational, cross-sectional survey study, depressed patients had at least one suicide attempt as mandated in inclusion criteria. Most had no history of family member committing suicide. Most were single which could contribute to loneliness and no support from close individuals. When facing difficulties, they were not able to turn to for help or advice. With a large proportion of women (77.8%), they could be even more vulnerable and susceptible for deeper depression and suicide ideation. With depression, these patients had deviation in thought, perception, behavior and motivation which could affect their physical and mental health such as sadness, self-blaming, despair, worthlessness, and decreased self-concept.[3] These deteriorations could lead to more chance of repeated suicide.

These participants had a moderate level of self-esteem which indicates that internal protective factor could affect the

risk of repeated suicide. However, most had a high social support and resilience which could allow them to access externa protective factors such as closeness with family members, close individuals, and society. In addition, resilience could help them manage problems or crisis to bounce back to normal life. These individuals could develop resilience by learning, building and training.[36] Even though participants in this study were mostly single, they might receive social support and resilience from external factors. However, the pathophysiology and emotional manifestations of depression could diminish self-esteem which was presented as a high proportion of participants with a severe risk of repeated suicide.

A large proportion of the participants had a severe risk of repeated suicide (46.3%), followed by low risk (40.7%). This finding is consistent with the work of Petpornprapas revealing that about half of depressed patients (51.0%) hospitalized in Bangplee Hospital, Samutprakarn province, had a severe risk of suicide[37] and a study of Jarassaeng and colleagues showing that in the out-patient department of Srinakharin Hospital, 5.1% of depressed patients with a life-long history of suicide attempt had a severe risk of repeated suicide.[38]

Patients with depression usually had more risk of repeated suicide than patients with other psychiatric disorders. This is because depressed patients face desperation which put more pressure and damage their adjustment ability. With a social, attitude and cultural context of limited openness and acceptance on this illness, a risk of repeated suicide in depressed patients is higher than those with other psychiatric disorders.[1] It has been known that psychiatric disorders increased the risk of suicide by 20 folds compared with those without ones and depressed patients with a history of hospitalization for depression had a 18.47-fold risk of suicide than those with no such history.[11]

Most participants had a high social support level (76.9%). Social support is an interaction of the person with others in society such as parents, offsprings, spouse, friends, neighbors, co-workers, monks or priests, healthcare providers, and community service settings.[25] The interaction with each entity cold help reduce the risk of repeated suicide. Our finding is consistent with a study of Kamwongpin revealing that 55.0% of the persons with a history of suicide attempt had a high social support level.[39] A study of Seubjun also showed that individuals in Sukhothai province with a history of suicide attempt had a highsocial support level.[40] However, a few studies showed individuals with a history of suicide attempt (52.3 – 53.3%) had a low social support level.[41,42,43] However, a high proportion of low social support in these studies could be due to a large proportion of teenager participants. These teenagers usually seek very low social support; hence they reported a low social support.[43] Participants in our study were mostly adults which are interacting with family members and society members. This allows them to adjust well with their workplace and society.[44] These adults could bond with individuals around them and hence a higher social support.

Most self-esteem in our participants was at a moderate level (56.5%). Self-esteem is self-respect and self-acceptance on their own mistakes. Self-esteem consists of self-love, self-acceptance, and self-capability.[17] Self-esteem is a major factor to alleviate depression and hopelessness. Individuals with no interpersonal relationship such as not being accepted from family members, friends, or close individuals. Especially individuals with depression, perceiving themselves as useless, worthless, and desperate could harm themselves immensely.[18] Our finding is consistent with a study of Juntharangsi 53% of psychiatric patients at Suanprung Psychiatic Hospital felt low self-esteem[45] and a study revealing 1st and 6th year Thai pharmacy students had depression and suicide ideation at moderate level.[46] A study in Thai family revealed that self-esteem was at a low level among individuals with depression in Nakhonsawan province.[42] In our present study, most participants had a moderate level of self-esteem while 12.0% had a low level. Close care should be provided in this group of patients. Regarding age, our participants were in their 20 – 59 years of age which was the adult age; while in other studies, participants were in their 18 – 25 years which is the transitional age between childhood and adulthood. Persons in this transitional age is obsessed with finding oneself, having free thinking and decision-making, trying new ideas such as starting new job, marrying, or entering new founded family. Such new life endeavors lead them to conflicts with others and damaged self-esteem. Accumulation of such negative psychological states leads to anxiety, despair, hopelessness, and depression which could further lead to suicide.[47] Therefore, participants with repeated suicide risk at moderate and low level could have a high risk of suicide and deserve promoting self-esteem and ultimately repeated suicide.

More than half of participants in our study had resilience at a high level (56.5%). Resilience is a capability to overcome crisis.[21] Our finding is consistent with a study of Phuvaprapachat revealing that resilience among the elderly with a risk of suicide in Sawankhalok Hospial, Nakhonsawan, was at high level (56.5%). Another study showed that 83.85 of university students had capability to manage face and manage obstacles.[49] This indicates that patients with resilience could be motivated to face difficulties and set their own life goals. The most critical reason for individuals to live and not harm themselves is confidence that they could overcome problems.[50]

Our study found that the risk of repeated suicide was significantly negatively correlated with social support, self-esteem, and resilience among depressed patients (r_p = -0.390, r_{sp} = -0.269, and r_{sp} = -0.546, respectively, P-value < 0.01 for all). Social support is an indicator of social acceptance.[51] In depressed patients with a risk of repeated suicide, social support helps build closeness with family, close individuals, and society. This allows these individuals to perceive themselves as a part of the society, self-esteem, and helps from others in the society, which ultimately helps prevent or reduce the chance of suicide.[25] Our finding is consistent with a study of Kotler revealing that the risk of repeated suicide was negatively associated with social support among hospitalized patients with a history of suicide attempt (r = -0.30, P-value < 0.05).[15] It is also consistent with a study of Lin and colleagues demonstrating that social support was negatively correlated with the risk of repeated suicide among depressed Chineses (r = -0.13, P-value < 0.001).[16] Social support is a major factor to prevent the risk of repeated suicide in depressed patients. Therefore, family, society and responsible authorities are subject to providing cares, comfort, advice, and encouragement to motivate these patients to face the problems and adjust themselves appropriately.[25] In short, social support is proved again to be a protective factor of repeated suicide among individuals with depression.

For self-esteem, a low negative correlation with repeated suicide risk was found among depressed patients (r_{sp} = -0.269, P-value < 0.01). Depressed patients usually view themselves and useless and feel hopeless which enhances the chance of repeated suicide.[18] Our finding is consistent with a study of Perrot and co-workers revealing that suicide attempt was negatively correlated with self-esteem among suicide-attempting patients (r = -0.22, P-value = 0.009).[19] A study in Thailand also showed that repeated suicide was negatively correlated with self-esteem among high school students with depression (r = -0.44, P-value < 0.001).[20] A study of Sharaf and colleagues revealed that self-esteem was negatively associated with suicide risk among (r = -0.47, P-value < 0.001).[52] All of these evidences indicate that self-esteem helps prevent repeated suicide among individuals with depression. Self-esteem is built upon self-respect, self-worth, and acceptance from others. When individuals feel positive about themselves and are not afraid to think and make decision with their best judgement, self-confidence could be enhanced to learn and overcome the problem and ultimately depression could be alleviated.[53]

Resilience was found to have a moderate, negative correlation with repeated suicide risk (r_{sp} = -0.546, P-value < 0.01). This could be because resilience helps the individuals recuperate themselves from crisis, reduce severity and damage, prevent loss, and face the crisis.[31] These positive attributes alleviate the chance of depression, suicide, and repeated suicide.[3] Our finding is consistent with the work of Elbogen and colleagues revealing that resilience was negatively correlated with suicide ideation among veterans (r = -0.32, P-value < 0.01).[54] A study of Youssef and colleagues also showed that resilience was negatively correlated with suicide (r = -0.34, P-value < 0.0001) among veterans of Iraqi and Afghanistan wars in a 3-year cohort study.[24] Resilience is the individuals' ability to manage or face and recuperate from the crisis which could be developed and strengthened.[36] In short, resilience could help prevent suicide and repeated suicide.

Our findings could be useful in guiding nursing practice. Healthcare providers in psychiatric patients could develop activities to enhance social support, self-esteem and resilience. In nursing administration, human resource training for nurses with psychiatric competencies to take care of depressed patients with a risk of suicide should planned. For nursing research, more protective factors and in-depth qualitative studies of repeated suicide could be studied. For nursing education, students should be taught and trained to take care of depressed patients with a risk of repeated suicide by the use of protective factors under the supervision of well-experienced nurses.

In conclusion, depressed patients with a history of suicide attempt in out-patient department of psychiatric hospitals a severe-level of repeated suicide risk, a high-level social support, a moderate-level self-esteem, and a high-level resilience. Risk of repeated suicide was significantly negatively associated with social support, self-esteem, and resilience at a moderate, low, and moderate level, respectively (P-value < 0.01, for all). These three protective factors could be enhanced to help alleviate depression and ultimately the risk of repeated suicide among depressed patients with a history of suicide attempt.

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