Role of Stress Areas, Stress Severity, and Stressful Life Events on the Onset of Depressive Disorder: A Case-Control Study

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Background: *Although the stress and stressful life events are known as the precipitation of depressive disorder, the areas of stress and types of stressful life events found in depression are varied by different socio-cultural context.*

Objective: *Identify the stress areas, stress severity, and types of stressful life events associated with the onset of depressive disorder in Thai depressed patients.*

Material and Method: *Ninety depressed and ninety non-depressed subjects, aged above 18 years old, from the Department of Psychiatry, King Chulalongkorn Memorial Hospital, were recruited into the present study between July 2007 and January 2008. All subjects completed a demographic data form, and a 1-Year Life Stress Event Questionnaire. The association between the number of stressful life events, stress areas, stress severity, types of stressful life events, and the onset of depressive disorder were analyzed by independent t-test and chi-square test. Logistic regression was performed to identify the predictors of depressive disorder.*

Results: *Most of the subjects were young and middle-aged women, living in Bangkok and the central region. The depressed subjects experienced more stressful life events than the non-depressed subjects (5.81 ± 3.19 vs. 3.24 ± 2.80 events in one year) ($p < 0.01$). All stress areas (health-related, family-related, financial, occupational, and social stress), and overall stress were associated with the onset of depressive disorder ($p < 0.05$). Subjects with the moderate-to-severe stress in all areas were at the higher risk of depressive disorder than those with the mild stress ($p < 0.05$). Health-related stress was the stress area highest associated with the depressive disorder (OR = 5.93, 95% CI = 2.33-16.92, $p < 0.01$). The types of stressful life events associated with the onset of depressive disorder were the medical hospitalization, medical illness leading to missing work or disturbed daily routine, change in sleeping habits, absence of recreation, arguments with spouse, sexual difficulties with spouse, family financial problems, job loss, and trouble with boss ($p < 0.05$). The logistic regression showed that the moderate-to-severe stress was the significant predictor of depressive disorder (adjusted OR = 5.26, 95% CI = 1.85-14.92, $p < 0.01$).*

Conclusion: *Stress areas, stress severity, and stressful life events had the impact on the onset of depressive disorder in Thai depressed patients. The important stressful life events in Thai depressed patients included severe medical illness, job loss, financial distress, and relationship problems.*

Keywords: *Stress, Stressful life event, Depressive disorder, Case-control study*

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Depressive disorder is one of the most common psychiatric disorders, with the lifetime prevalence of about 15% for major depressive disorder and 3-6% for dysthymic disorder[1,2]. It was accounted as one of the leading causes of disease burden and disabilities worldwide, with the total disability-adjusted life-years (DALYs) of 4.46%, and the total years lived with disabilities (YLDs) of 12.1% in 2000[3]. Depressive disorder is more prevalent in women than in men. It is also commonly found in persons who are divorced or separated, those with low socioeconomic status, those with family or personal history of depression, and those

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who experience stressful life events[1,2,4]. While genetic factor plays the role as the vulnerability to depression, social factors also have the impact on the occurrence of depression[1,2]. It has been well established that stressful life events has the important role in provoking depressive disorder[5,6].

Previous studies consistently showed that stressful life events were associated with the onset of depressive disorder. Holmes and Rahe reported that the most severe life event associated to depression was the death of a spouse[7]. Other severe stressful life events were divorce, marital separation, detention in jail, death of a close family member, and major injury or illness[7]. Kendler reported that the stressful life events predicting the onset of major depression were death of a close relative, assault, serious marital problems, and divorce or breakup (odds ratio of more than 10)[8]. Hammen and Brennan found that the depressed women were exposed to stress, and stressful events such as marital problems or adverse interpersonal events more than the non-depressed women[9-11]. In Thailand, Sopin Sangon found that the depressed women had more stressful life events than the non-depressed women[12]. Thoranin Kongsuk, et al found that persons who were exposed to stressful life events personally (*i.e.* being unable to adjust to change, or serious injury), or in family or close relatives (*i.e.* departing from the loved person) were at higher risk of major depression than those without these experiences[13].

Although the life adversities are known as the precipitations of depressive disorder, the characteristics of stress and stressful life events found in depressed patients are varied by the different socio-cultural context. The present study aimed to identify the stress areas, stress severity, and types of stressful life events associated with the onset of depressive disorder in Thai depressed patients. It will help to understand the mechanism of social triggers of depression in Thai depressed patients, and help in prevention and treatment of depression in Thailand.

Material and Method

Ninety depressed and ninety non-depressed subjects, above 18 years old, were recruited from the Department of Psychiatry, King Chulalongkorn Memorial Hospital, Bangkok during July 2007-January 2008. The approval for the present study was obtained from the Ethics Committee, the Institutional Review Board of Faculty of Medicine, Chulalongkorn University. All subjects gave written, informed consents. The inclusion criteria for the depressed subjects (cases) were new cases (within 6 months) of depressive disorder based on Diagnostic and Statistical Manual of Mental Disorders, 4th edition, Text Revision (DSM-IV-TR) criteria[14] and scores of at least 8 points of Thai Hamilton Rating Scale for Depression (Thai HRSD)[15]. The exclusion criteria were schizophrenia and other psychotic disorders, bipolar disorders, organic mental disorders, and mental retardation. The same hospital-based non-depressed subjects (controls) were recruited from the psychiatric patients' family members or caregivers who were not depressed by clinical interview and had the scores of less than 8 points of Thai HRSD. All subjects completed a demographic data form and a 1-Year Life Stress Event Questionnaire.

Thai HRSD is the Thai version of the Hamilton Rating Scale for Depression (HAM-D), the psychiatric rating scale widely used for evaluation of depression[16]. It showed good validity and reliability for measuring the severity of depression in Thai depressed patients[15] (Cronbach's alpha coefficient = 0.74). It is composed of 18 items and has the range of total scores from 0 to 53. The scores of 8 to 29 indicate mild to major depression; and scores of 30 or above indicate severe depression or psychotic symptoms. The 1-Year Life Stress Event Questionnaire, developed and adapted from Holmes and Rahe's Social Readjustment Rating Scale, was used for identifying stressful life events that a person experienced in the past one year[7,17]. This life event inventory showed good validity and reliability in a Thai socio-cultural context[17] (Cronbach's alpha coefficient = 0.99). It is composed of 43-item checklists of 1-year life events in five stress areas; 1) health-related (7 items), 2) family-related (12 items), 3) financial (6 items), 4) occupational (10 items), and 5) social (8 items). Each item contains its own weighted score indicating the severity of life event. The sums of scores in each stress area and in overall were categorized into three levels of stress severity (mild, moderate, and severe stress) by mean and standard deviation.

The statistical analysis was performed by using STATA for windows version 8.0 software. The baseline demographic characteristics of the depressed (cases) and the non-depressed subjects (controls) were presented in number and percentage. The stress areas, stress severity, and types of stressful life events associated with depressive disorder were identified by using independent t-test and Chi-Square test. The strength of association was presented by using odds ratio (OR) with 95% confidence interval (95% CI). The logistic regression was used to identify the life stress

as a predictor of depressive disorder. A p-value of less than 0.05 was considered statistically significant.

Results

There were 180 subjects in the present study: 90 depressed and 90 non-depressed subjects (Table 1). Most of the subjects were female (142 subjects, 78.9%), and aged 31-70 years (148 subjects, 82.2%). (mean age = 42.8, SD = 12.0). One hundred and eleven subjects were married (61.7%); 60 (33.3%) were single, and 9 (5%) were separated, widowed, or divorced. About half of them had bachelor's degree education or above (93 subjects). Nearly 70% of subjects were employed (125 subjects). Nearly half of them (86 subjects, 47.8%) had an income of 10,000 baht per month or above. Seventy-one subjects (39.4%) had at least one physical illness. Most of them lived in Bangkok and the central region (163 subjects, 90.6%).

The demographic characteristics of the depressed and the non-depressed subjects are shown in Table 1. The depressed subjects had lower education and income, but higher rate of unemployment than the non-depressed subjects. About the physical illness, the depressed subjects had more physical illness than the non-depressed subjects (Table 1).

The relationship between number of stressful life events, stress areas and the onset of depressive disorder is shown in Table 2. The scores of Thai HRSD which indicate the severity of depression ranged from 0-43 (the depressed: 8-43 vs. the non-depressed: 0-7). The mean Thai HRSD score of the depressed subjects was 25.34 $\pm$ 8.58; the non-depressed subjects: 3.29 $\pm$ 2.67. From 1-Year Life Stress Questionnaire, the depressed subjects experienced more stressful life events than the non-depressed subjects (5.81 $\pm$ 3.19 vs. 3.24 $\pm$ 2.80 events in one year, $p < 0.01$). About the

Table 1. Demographic characteristics of the depressed and the non-depressed subjects

Demographic characteristics	The depressed (n = 90) n (%)	The non-depressed (n = 90) n (%)	Total (n = 180) n (%)
Gender			
Female	71 (78.9)	71 (78.9)	142 (78.9)
Male	19 (21.1)	19 (21.1)	38 (21.1)
Age			
18-30 years	16 (17.8)	16 (17.8)	32 (17.8)
31-40 years	17 (18.9)	21 (23.3)	38 (21.1)
41-50 years	32 (35.6)	26 (28.9)	58 (32.2)
51-70 years	25 (27.8)	27 (30.0)	52 (28.9)
Mean $\pm$ SD	42.7 $\pm$ 11.9	43.0 $\pm$ 12.1	42.8 $\pm$ 12.0
Min, Max	18, 66	18, 68	18, 68
Marital status			
Married	59 (65.6)	52 (57.8)	111 (61.7)
Others	31 (34.4)	38 (42.2)	69 (38.3)
Educational level			
Secondary school and lower	52 (57.8)	35 (38.9)	87 (48.3)
Bachelor's degree and higher	38 (42.2)	55 (61.1)	93 (51.7)
Occupation			
Employed	51 (56.7)	74 (82.2)	125 (69.4)
Unemployed	39 (43.3)	16 (17.8)	55 (30.6)
Incomes (baht/month)			
Lower than 10,000	56 (62.2)	38 (42.2)	94 (52.2)
10,000 and above	34 (37.8)	52 (57.8)	86 (47.8)
Having a physical illness			
Presence	43 (47.8)	28 (31.1)	71 (39.4)
Absence	47 (52.2)	62 (68.9)	109 (60.6)
Residence			
Bangkok and central region	78 (86.7)	85 (94.4)	163 (90.6)
Others	12 (13.3)	5 (5.6)	17 (9.4)

Table 2. Relationship between number of stressful life events, stress areas and the onset of depressive disorder in the depressed subjects

Scores	The depressed (n = 90) Mean ± SD	The non-depressed (n = 90) Mean ± SD	p-value
Thai HRSD (0-53)	25.34 ± 8.58	3.29 ± 2.67	
1-Year Life Event Questionnaire			
Number of 1-year stressful life events (0-43)	5.81 ± 3.19	3.24 ± 2.80	<0.001**
Areas of stress			
1. Health-related (0-41.17)	14.37 ± 7.96	7.29 ± 6.78	<0.001**
2. Family-related (0-106.12)	10.29 ± 11.94	6.35 ± 9.19	0.007**
3. Financial (0-49.51)	8.02 ± 9.40	5.16 ± 7.45	0.012*
4. Occupational (0-76.66)	5.46 ± 8.05	2.86 ± 5.80	0.007**
5. Social (0-68.53)	3.10 ± 5.58	1.36 ± 3.81	0.008**
Overall stress (0-341.99)	41.24 ± 24.50	23.03 ± 20.91	<0.001**

*p < 0.05, **p < 0.01

Table 3. Relationship between stress severity in all areas and the onset of depressive disorder in the depressed subjects

Stress severity	Numbers (n = 180)			Odds ratio (OR)	95% CI of OR	X^2	p-value
	Depressed (n = 90)	Non-depressed (n = 90)	Total (n = 180)				
Health-related							
Moderate to severe	83	60	143	5.93	2.33-16.92	18.00	<0.001**
Mild	7	30	37				
Total	90	90	180				
Family-related							
Moderate to severe	54	38	92	2.05	1.09-3.88	5.69	0.017*
Mild	36	52	79				
Total	90	90	180				
Financial							
Moderate to severe	42	26	112	2.15	1.11-4.19	6.05	0.014*
Mild	48	64	68				
Total	90	90	180				
Occupational							
Moderate to severe	40	25	65	2.08	1.07-4.07	5.42	0.020*
Mild	50	65	115				
Total	90	90	180				
Social							
Moderate to severe	26	13	39	2.41	1.08-5.52	5.53	0.019*
Mild	64	77	141				
Total	90	90	180				
Overall stress severity							
Moderate to severe	85	64	149	6.91	2.41-24.07	17.19	<0.001**
Mild	5	26	31				
Total	90	90	180				

* p < 0.05, ** p < 0.01

stress areas, all stress areas (health-related, family-related, financial, occupational, and social), and overall stress were associated with the onset of depressive disorder ($p < 0.05$). Health-related stress has the greatest impact on the onset of depressive disorder than other areas (mean difference = 7.08, $p < 0.001$).

The relationship between stress severity and the onset of depressive disorder is shown in Table 3. Subjects with the moderate-to-severe stress in all areas were at the higher risk of depressive disorder than those with the mild stress (health-related: OR = 5.93, 95% CI = 2.33-16.92, $p < 0.01$; family-related: OR = 2.05, 95% CI = 1.09-3.88, $p < 0.05$; financial: OR = 2.15, 95% CI = 1.11-4.19, $p < 0.05$; occupational: OR = 2.08, 95% CI = 1.07-4.07, $p < 0.05$; social: OR = 2.41, 95% = 1.08-5.52, $p < 0.05$; and overall: OR = 6.91,

Table 4. Relationship between types of stressful life events and the onset of depressive disorder in the depressed subjects

Types of stressful life events	Numbers (n = 180)			Odds ratio (OR)	95% CI of OR	X^2	p-value
	Depressed (n = 90)	Non-depressed (n = 90)	Total (n = 180)				
Medical hospitalization							
Exposed	35	13	48	3.77	1.74-8.46	13.75	<0.001**
Unexposed	55	77	132				
Total	90	90	180				
Medical illness leading to missing work or disturbed daily routine							
Exposed	43	20	63	3.20	1.60-6.47	12.92	<0.001**
Unexposed	47	70	117				
Total	90	90	180				
Change in sleeping habits							
Exposed	71	30	101	7.47	3.65-15.49	37.92	<0.001**
Unexposed	19	60	79				
Total	90	90	180				
Absence of recreation							
Exposed	24	3	27	10.55	2.98-56.37	19.22	<0.001**
Unexposed	66	87	153				
Total	90	90	180				
Arguments with spouse							
Exposed	24	7	31	4.31	1.66-12.51	11.26	<0.001**
Unexposed	66	83	149				
Total	90	90	180				
Sexual difficulties with spouse							
Exposed	18	1	19	22.25	3.31-937.02	17.01	<0.001**
Unexposed	72	89	161				
Total	90	90	180				
Family financial problems							
Exposed	30	17	47	2.15	1.03-4.56	4.87	0.027*
Unexposed	60	73	133				
Total	90	90	180				
Job loss							
Exposed	14	1	15	16.39	2.36-700.71	12.29	<0.001**
Unexposed	76	89	165				
Total	90	90	180				
Trouble with boss							
Exposed	11	2	13	6.72	1.27-58.05	6.13	0.010*
Unexposed	79	88	167				
Total	90	90	180				

95% CI = 2.41-24.07, p < 0.01). In the moderate-to-severe stress level, health-related stress had the highest strength of association with the onset of depressive disorder than others (OR = 5.93, 95% CI = 2.33-16.92, p < 0.01).

About the types of stressful life events, the life events associated with the onset of depressive disorder were medical hospitalization (OR = 3.77, 95% CI = 1.74-8.46, p < 0.01), medical illness leading to missing work or disturbed daily routine (OR = 3.20, 95% CI = 1.60-6.47, p < 0.01), change in sleeping habits (OR = 7.47, 95% CI = 3.65-15.49, p < 0.01), absence of recreation (OR = 10.55, 95% CI = 2.98-56.37, p < 0.01), arguments with spouse (OR = 4.31, 95% CI = 1.66-12.51, p < 0.01), sexual difficulties with spouse (OR = 22.25, 95% CI = 3.31-937.02, p < 0.01), family financial problems (OR = 2.15, 95% CI = 1.03-4.56, p < 0.05), job loss (OR = 16.39, 95% CI = 2.36-700.71, p < 0.01), and trouble with boss (OR = 6.72, 95% CI = 1.27-58.05, p < 0.05) (Table 4).

The logistic regression showed that the moderate-to-severe stress was the significant predictor of depressive disorder (adjusted OR = 5.26, 95% CI = 1.85-14.92, p < 0.01). The demographic variables (low education, low income, and presence of physical illness) were dropped from the model (Table 5).

Discussion

Most of the depressed subjects in the present study were young-to-middle-aged women. The depressed subjects had lower education and income, but higher rate of unemployment than the non-depressed subjects. Regarding the number of stressful life events, the depressed subjects experienced more life events than the non-depressed subjects (5.81 $\pm$ 3.19 vs. 3.24 $\pm$ 2.80 events in one year). From the majority of previous studies, depressed patients experienced more stressful life events in 6-12 months prior to the onset of depression than did normal controls[18-23]. One study in Finland found that 91% of depressed patients reported life events on average 4.1 $\pm$ 3.0 events per year[22]. In Uganda, the number of stressful life events of the depressed patients was about 6.49 events per year, while that of the general population was about 4.39 events per year[23]. Caspi, et al found that among patients with genetic predisposition for depression, those who had four or more stressful life events were at excess risk of depression, compared with those with less than four stressful life events[24]. Besides affecting the onset of depressive disorder, the number of stressful life events was also associated with the course of depressive disorder. From the study of Amital, the treatment-resistant depressed patients experienced more stressful life events than the treatment responders[25].

Regarding the stress areas, all areas of life stress (health-related, family-related, financial, occupational, and social) and overall stress were associated with the onset of depressive disorder. Health-related stress was the highest associated with the onset of depressive disorder than other areas of stress. This is similar to the studies of Kohn, et al, and Brilman and Ormel who found that health-related life stress such as severe medical illness, major disability, and hospitalization, was the highest associated with the onset of depressive disorder[19,26].

Besides the stress areas, the stress severity also had the impact on the occurrence of depression. The moderate-to-severe stress had a higher risk of depression than the mild stress (p < 0.05), especially on the area of health-related stress (OR = 5.93, 95% CI = 2.33-16.92, p < 0.01). From previous studies, the stress and stressful life events had the impact on provoking the depressive disorder, and had the dose-response

Table 5. Predictors of depressive disorder in the depressed subjects

Variables	Coefficient (β)	Adjusted odds ratio (OR)	95% CI of adjusted OR	p-value
Moderate-to-severe stress	1.66	5.26	1.85-14.92	0.002**
Demographic variables				
Low education	0.31	1.36	0.69-2.69	0.371
Low income	0.55	1.73	0.88-3.39	0.111
Presence of physical illness	0.41	1.51	0.79-2.90	0.211

* p < 0.05, ** p < 0.01

relationship with the onset of depressive disorder[26,27]. The impact of severe stressful life events was more clearly evident on the first episode than the later or recurrent episodes of depressive disorder[5,6,26,28-33]. The later or recurrent depressive episodes may independently occur by the neurobiological kindling or sensitization from repeated stressors and repeated depressive episodes[4,5,34].

Concerning the types of stressful life events, the stressful life events associated with the onset of depressive disorder were the medical hospitalization, the medical illness leading to missing work or disturbed daily routine, change in sleeping habits, absence of recreation, arguments with spouse, sexual difficulties with spouse, family financial problems, job loss, and trouble with boss. Many studies consistently showed that the severe medical events or severe health conditions, job loss, financial distress, unfavorable working conditions, and personal relationship problems were life events strongly associated with the depressive disorder[19,23,25,35]. The study in Thai depressed patients of Thoranin Kongsuk, et al. also found that the personal stressful life events (being unable to adjust to change, and serious injury) had the greatest impact on the occurrence of depression[13]. As the former discussed, severe medical events such as severe medical illness, major disability, and hospitalization, were strongly associated with the onset of depressive disorder. About job loss and financial distress, persons who experience job loss are also at the higher risk of financial distress. Job loss and financial distress were the two common socio-economic precipitations of depression in the low-income societies[23]. Besides affecting the onset of depressive disorder, both of them were also found to predict the treatment-resistant depressive disorder[25]. Common personal relationship problems in depressed patients included marital problems, child-rearing or parenting problems, relationship problems with family members, and social or interpersonal dysfunction[10]. Previous studies showed the depressed women were exposed to the marital difficulties or divorce, and problematic relationship with other family members or their children, than the non-depressed women[29,36,37]. Sexual difficulties with a spouse also indicate the spousal relationship problem. Unfavorable working conditions such as job loss or change, disagreements with boss or co-workers, were also commonly found in the depressed patients[19,23]. About the change in sleeping habits and the absence of recreation, many depressed patients usually report sleep disturbances and decreased pleasurable activities as parts of their symptoms; however, these problems, especially insomnia, are also commonly found prior to the onset of depression as the trigger of depression[38]. Longitudinal studies consistently showed that insomnia was the risk factor for development of new-onset or recurrent depressive episodes[38].

From the present study, depressed subjects experienced more stress and stressful life events than the non-depressed subjects. The stress and stressful life events had the precipitating role on the onset of depressive disorder. Moreover, depressed patients usually get into the maladaptive interpersonal circumstances created by their depressive symptoms, called stress generation[9,10,36,39]. The interpersonal troubles and life difficulties created by the depressed patients may contribute to the recurrence or chronicity of depressive disorder[9,39].

As the above, stress areas, stress severity, numbers and types of stressful life events had the impact on the onset of depressive disorder in Thai depressed patients. Early identification of persons who are at social risk of depression and providing prompt intervention will lessen the onset or the symptoms of depression. Previous studies consistently showed that adaptive problem solving and strong social support help to modify and buffer the effects of stressful life events[40-43]. Therefore, helping these persons to be able to adjust themselves and connect themselves to their social network will help to reduce the onset or the symptoms of depression.

This present study tried to reduce the confounding factors by using the same hospital-based controls; however, there were some limitations that should be concerned. The present study was conducted in the clinical setting and most of the subjects were young-to-middle-aged women. The characteristics of depressed subjects in the present study may affect the life stress the subjects experienced. Therefore, the findings should be appropriately interpreted in the context of young-to-middle-aged depressed women in the clinical setting.

Conclusion

The present study showed the impact of stress areas, stress severity, and stressful life events on the onset of the depressive disorder. The important life stress in Thai depressed patients included severe medical events, job loss, financial distress, marital and other relationship problems. Helping the persons who experience these stressful events to be able to adjust

themselves and connect themselves to their social network will help to reduce the onset or the symptoms of depression.

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บทบาทของด้านความเครียด ความรุนแรงของความเครียด และเหตุการณ์ความเครียดในชีวิตที่มีต่อการเกิดโรคซึมเศร้า: การศึกษาโดยมีกลุ่มควบคุม

พีรพนธ์ ลือบุญธวัชชัย

ภูมิหลัง: *ถึงแม้จะเป็นที่ทราบว่า ความเครียดและเหตุการณ์ความเครียดในชีวิตเป็นปัจจัยกระตุ้นให้เกิดโรคซึมเศร้า ก็ตาม ก็ยังพบว่า ด้านความเครียดและชนิดของเหตุการณ์ความเครียดในชีวิตที่พบในผู้ป่วยโรคซึมเศร้าก็ยังมีความแตกต่างกันตามบริบทของสังคมวัฒนธรรมที่ต่างกัน*

วัตถุประสงค์: *เพื่อค้นหาด้านความเครียด ความรุนแรงของความเครียด และชนิดของเหตุการณ์ความเครียดที่เกี่ยวข้องกับการเกิดโรคซึมเศร้าในผู้ป่วยโรคซึมเศร้าไทย*

วัสดุและวิธีการ: *ศึกษาในผู้ป่วยโรคซึมเศร้า 90 ราย และผู้ที่ไม่ได้ซึมเศร้า 90 ราย อายุตั้งแต่ 18 ปีขึ้นไป ในแผนกจิตเวชศาสตร์ โรงพยาบาลจุฬาลงกรณ์ ตั้งแต่เดือนกรกฎาคม พ.ศ. 2550 – มกราคม พ.ศ. 2551 โดยผู้เข้าร่วมการศึกษาทุกคนตอบแบบสอบถามข้อมูลส่วนบุคคล และแบบสอบถามเหตุการณ์ความเครียดในชีวิต ในช่วง 1 ปีที่ผ่านมาวิเคราะห์ความสัมพันธ์ระหว่างจำนวนเหตุการณ์ความเครียดในชีวิต ด้านความเครียด ความรุนแรงของความเครียด ชนิดของเหตุการณ์ความเครียดในชีวิต กับการเกิดโรคซึมเศร้าโดยใช้ independent t-test และ Chi-Square test และวิเคราะห์ความถดถอยลอจิสติคเพื่อหาปัจจัยทำนายการเกิดโรคซึมเศร้า*

ผลการศึกษา: *ผู้เข้าร่วมการศึกษาส่วนใหญ่เป็นหญิงวัยผู้ใหญ่ตอนต้นและตอนกลาง อาศัยอยู่ในกรุงเทพมหานครและปริมณฑล พบว่าผู้ที่ซึมเศร้าประสบกับเหตุการณ์ความเครียดในชีวิตมากกว่าผู้ที่ไม่ซึมเศร้า (5.81 ± 3.19 และ 3.24 ± 2.80 เหตุการณ์ใน 1 ปี) ($p < 0.01$) ด้านความเครียดทุกด้าน (ทั้งด้านสุขภาพ ครอบครัว การเงิน การงานและสังคม) รวมถึงความเครียดโดยรวม มีความเกี่ยวข้องกับการเกิดโรคซึมเศร้า ($p < 0.05$) ผู้ที่ประสบความเครียดในระดับปานกลางถึงรุนแรงในทุกด้านมีความเสี่ยงต่อการเกิดโรคซึมเศร้าสูงกว่าผู้ที่ประสบความเครียดในระดับต่ำ ($p < 0.05$) โดยความเครียดด้านสุขภาพมีระดับความสัมพันธ์กับการเกิดโรคซึมเศร้าสูงสุด (OR = 5.93, 95%CI = 2.33 – 16.92, $p < 0.01$) ชนิดของเหตุการณ์ความเครียดที่เกี่ยวข้องกับการเกิดโรคซึมเศร้า ได้แก่ การเข้ารักษาตัวในโรงพยาบาล การเจ็บป่วยที่ต้องหยุดงานหรือรบกวนกิจกรรมปกติ การเปลี่ยนแปลงการนอน การขาดการผ่อนคลายอารมณ์ ความขัดแย้งกับคู่สมรส ปัญหาเพศสัมพันธ์กับคู่สมรส ปัญหาการเงินของครอบครัว การตกงาน ปัญหากับนายจ้างหรือผู้บังคับบัญชา ($p < 0.05$) ผลการวิเคราะห์ความถดถอยลอจิสติค พบว่า ความเครียดในระดับปานกลางถึงรุนแรง เป็นปัจจัยทำนายที่สำคัญของโรคซึมเศร้า (adjusted OR = 5.26, 95%CI = 1.85 – 14.92, $p < 0.01$)*

สรุป: *ด้านความเครียด ความรุนแรงของความเครียด และเหตุการณ์ความเครียดในชีวิตมีบทบาทสำคัญต่อการเกิดโรคซึมเศร้าในผู้ป่วยซึมเศร้าไทย เหตุการณ์ความเครียดในชีวิตที่สำคัญของผู้ป่วยซึมเศร้าไทย ได้แก่ การเจ็บป่วยที่รุนแรง การตกงาน ปัญหาการเงิน และปัญหาความสัมพันธ์*