

ปัจจัยที่ช่วยบ่งบอกการพยายามกระทำอัตวินิบาตกรรมในผู้ป่วยซึมเศร้า



นาง ศิริลักษณ์ ศุภปิติพร

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต

สาขาวิชาการพัฒนาสุขภาพ หลักสูตรการพัฒนาสุขภาพ


คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ปีการศึกษา 2545

ISBN 974-17-1587-8

ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

THE PREDICTORS OF SUICIDAL ATTEMPT IN DEPRESSED PATIENTS



Mrs.Siriluck Suppapitiporn

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Health Development

Health Development Programme

Faculty of Medicine

Chulalongkorn University

Academic Year 2002

ISBN 974-17-1587-8

Title : The Predictors of Suicidal Attempt in Depressed Patients
By : Mrs.Siriluck Suppaitiporn
Field of Study : Health Development
Thesis Advisor : Associate Professor Nuntika Thavichachart
Thesis Co-advisor : Ms. Venus Udomprasertgul

Accepted By the Faculty of Medicine, Chulalongkorn University in Partial
Fulfillment of the Requirement for Master's Degree

..... Dean of Faculty of Medicine
(Professor Pirom Kamol-ratanakul, M.D,M.Sc.)

Thesis Committee :

..... Chairman
(Associate Professor Bhirom Sughondhabiro, M.D.)

..... Thesis Advisor
(Associate Professor NuntikaThavichachart, M.D.,M.Sc.)

..... Thesis C0-advisor
(Ms. Venus Udomprasertgul, M.Sc)

..... Member
(Associate Professor Sompop Limpongsanurak, M.D.,M.P.H.)

ศิริลักษณ์ ศุภปิติพร : ปัจจัยที่บ่งบอกการพยายามกระทำอัตวินิบาตกรรมในผู้ป่วยซึมเศร้า (The Predictors of Suicidal Attempt in Depressed Patients) อาจารย์ที่ปรึกษา : รศ.พญ.นันทิกา ทวิชาชาติ, อาจารย์ที่ปรึกษา(ร่วม) วินัส อุดมประเสริฐกุล, 107 หน้า ISBN 974-171587-8

วัตถุประสงค์ของการศึกษา : เพื่อศึกษาความสัมพันธ์ระหว่างการพยายามกระทำอัตวินิบาตกรรมกับ ปัจจัยเครียดทางจิตสังคม ความรุนแรงของภาวะซึมเศร้า ความผิดปกติของบุคลิกภาพ และภาวะความผิดปกติอื่นที่เกิดขึ้นในผู้ป่วยซึมเศร้า และเพื่อค้นหาปัจจัยที่ช่วยบ่งบอกการพยายามกระทำอัตวินิบาตกรรม

สถานที่ทำการศึกษา : โรงพยาบาลจุฬาลงกรณ์

รูปแบบการทำวิจัย : เป็นการศึกษาย้อนหลังชนิดจับคู่

กลุ่มตัวอย่างและวิธีการ : ศึกษาผู้ป่วยซึมเศร้าอายุตั้งแต่ 15 ปีขึ้นไปที่มีการตรวจรักษาที่โรงพยาบาล-จุฬาลงกรณ์ด้วยสาเหตุพยายามฆ่าตัวตาย จำนวน 90 ราย และผู้ป่วยซึมเศร้าที่เข้าได้กับเกณฑ์การคัดเลือกเป็นกลุ่มควบคุมจำนวน 90 ราย ซึ่งจับคู่ได้กับผู้ป่วยที่ทำการศึกษาในด้านอายุ และเพศ ผู้ป่วยได้รับการสัมภาษณ์ทางคลินิกและวินิจฉัยโรคอิงตามเกณฑ์การวินิจฉัยความผิดปกติทางจิตของสมาคมจิตแพทย์อเมริกัน (DSM-IV) ประเมินเหตุการณ์ความเครียดในชีวิต ระดับความรุนแรงของภาวะซึมเศร้า รูปแบบความผิดปกติของบุคลิกภาพ และระดับความวิตกกังวล สถิติที่ใช้ในการวิเคราะห์ คือ ร้อยละ ไคสแควร์ (McNemar chi square) อัตราเสี่ยง (Odds Ratio) ช่วงความเชื่อมั่น 95 % และวิเคราะห์ความถดถอยเชิงพหุแบบมีเงื่อนไข (conditional logistic regression)

ผลการศึกษา : ผู้ป่วยส่วนใหญ่เป็นหญิง คิดเป็นร้อยละ 75.6 อายุเฉลี่ย 29 ปี (ส่วนเบี่ยงเบนมาตรฐาน = 10.75) วิธีการสำหรับการพยายามฆ่าตัวตายที่พบบ่อยที่สุดคือ การกินยาหรือสารคิดเป็นร้อยละ 93.4 พบปัจจัยต่อไปนี้ในกลุ่มผู้ป่วยซึมเศร้าซึ่งมาด้วยการพยายามฆ่าตัวตายสูงกว่ากลุ่มควบคุม ได้แก่ เหตุการณ์ความเครียดในช่วง 3 เดือนก่อน ความรุนแรงของภาวะซึมเศร้าและการเป็นซ้ำ ประวัติการใช้สารเสพติดของผู้ป่วยและครอบครัว ปัญหาการเงิน ระดับการศึกษาที่ต่ำกว่า และบุคลิกภาพที่บ่งถึงระดับสติปัญญาต่ำกว่าจากการวิเคราะห์เชิงพหุ พบว่า ปัจจัยที่มีความสัมพันธ์กับผู้ป่วยซึมเศร้าที่พยายามฆ่าตัวตาย คือ ประวัติการใช้สารเสพติด ระดับการศึกษาที่ต่ำกว่า และเหตุการณ์ความเครียดทางจิตสังคม

สรุปผลการศึกษา : ภาวะซึมเศร้าและการฆ่าตัวตาย เป็นปัญหาสาธารณสุขที่สำคัญ ปัจจัยเครียดทางจิตสังคมหรือเหตุการณ์ความเครียดในช่วง 3 เดือนที่ผ่านมา โดยเฉพาะอย่างยิ่งปัญหาครอบครัวหรือความสัมพันธ์ระหว่างบุคคล ประวัติการใช้สารเสพติด และระดับการศึกษาต่ำ มีความสัมพันธ์กับการพยายามฆ่าตัวตายในผู้ป่วยซึมเศร้า การตระหนักถึงปัจจัยเหล่านี้ในการประเมินผู้ป่วยและพัฒนาวิธีการช่วยเหลือป้องกัน คงจะมีส่วนช่วยในการลดอัตราการฆ่าตัวตายหรือพยายามฆ่าตัวตาย

ภาควิชา	การพัฒนาสุขภาพ	ลายมือชื่อนิสิต.....
สาขาวิชา	การพัฒนาสุขภาพ	ลายมือชื่ออาจารย์ที่ปรึกษา.....
ปีการศึกษา	2545	ลายมือชื่ออาจารย์ที่ปรึกษา(ร่วม)

##4275392730 : MAJOR HEALTH DEVELOPMENT

KEY WORD : SUICIDAL ATTEMPT, DEPRESSIVE DISORDER, PREDICTOR, PSYCHOSOCIAL STRESS

SIRILUCK SUPPAPITIPORN : THE PREDICTORS OF SUICIDAL ATTEMPT IN DEPRESSED PATIENTS. THESIS ADVISOR : ASSOC. PROF. NUNTIKA

THAVICHACHART, M.D., M.Sc. THESIS CO-ADVISOR : VENUS UDOMPRASERTGUL, M.Sc.
107 pp. ISBN 974-171587-8

Objectives : To examine the relationship between suicidal attempts and psychosocial stress, severity of depression, presence of personality pathology, comorbid conditions in depressed patients and identify the factors that can predict suicidal attempt

Setting : King Chulalongkorn Memorial Hospital

Design : Matched case-control study

Subjects and method : ninety patients with age above 15 years who presented with suicidal attempt and had clinical of depression and met the eligible criteria for case and ninety depressed patients who met the criteria for control that matched for age and gender were conducted clinical diagnostic interview. Psychiatric diagnosis using DSM-IV criteria, details of the self-harm act, psychosocial stressor, past history and family history of psychiatric illness were assessed. Hamilton rating scale for depression, life events in social readjustment rating scale, 16 PF for personality profile and Zung self-rating anxiety scale were performed. Data were analyzed using percentage, McNemar Chi square, Odds Ratio, 95% Confidence Interval of odds ratio and conditional logistic regression.

Results : Most cases of depressed patients were female (75.6%) and mean age 29 years (SD = 10.75). The method employed for suicidal attempt in cases was ingestion of drug or chemical agents (93.4%). Cases were more likely than controls to have current psychosocial stress, severe depression, recurrent depressive episode, history and family history of substance use, financial problem, lower level of education and personality profile that showed low intelligence. From conditional logistic regression analysis, the predictive factors to suicidal attempt in depressed patients were history of substance use, lower level of education and presence of stressful life event.

Conclusion : Presence of current stressful life event, particularly family or interpersonal relationship problems, as well as history of substance use and lower level of education appear to have an important role in suicidal attempt in depressed patients. These findings underline the importance of adequate assessment of these factors when evaluating suicidal risk in depressed patients and development of preventive strategies for those patients.

Department Health Development

Student's Signature.....

Field of study Health Development

Advisor's Signature.....

Academic year 2002

Co-advisor Signature.....

ACKNOWLEDGEMENT

I would like to express my gratitude to my advisor, Associate Professor Nuntika Thavichachart for her warm assistance, suggestions and encouragement. I wish to extend my sincere thanks to Ms. Venus Udomprasertgul my co-advisor and Assistant Professor Somrat Lertmaharit for their invaluable comments and suggestions in biostatistics. I am very much obliged to Associate Professor Bhirom Sughondhabhirom, Associate Professor Sompop Limpongsanurak, thesis committee and all the teachers for their suggestions and warm assistance.

I am grateful to faculty of medicine, Chulalongkorn University for giving an opportunity to study in this clinical epidemiology / health development program and providing Ratchadapiseksompotch fund. I also appreciate the staffs in Thai CERTC consortium office for their effective support. I would like to thanks staff and my colleague at King Chulalongkorn Memorial hospital especially the department of psychiatry for their help on data collection process.

Heartily thanks to my husband Dr.Suchat for his encouragement, support and help. Special thanks to my mother and my sisters for being very encouraging and concerning for my study. I appreciate my daughter and son for their understanding and patience during my study. I like to appreciate my fellow friends , whose friendship will be everlasting. My sincere thanks to everyone who made this study possible for me.

CONTENTS

	Page
ABSTRACT (THAI).....	IV
ABSTRACT (ENGLISH).....	V
ACKNOWLEDGEMENT.....	VI
CONTENTS	VII
LIST OF TABLES	X
CHAPTER 1.....	1
INTRODUCTION & BACKGROUND.....	1
1.1 INTRODUCTION AND BACKGROUND.....	1
1.2 RESEARCH QUESTIONS.....	3
1.3 RESEARCH OBJECTIVES.....	3
1.4 RESEARCH HYPOTHESIS.....	4
1.5 CONCEPTUAL FRAMEWORK.....	4
1.6 KEY WORDS.....	4
1.7 OPERATIONAL DEFINITION.....	5
1.8 ETHICAL CONSIDERATION.....	5
CHAPTER 2.....	6
REVIEW OF THE RELATED LITERATURE.....	6
2.1 DEPRESSION.....	6
2.1.1 EPIDEMIOLOGY.....	6
2.1.2 GENERAL CHARACTERISTICS.....	8
2.1.3 NOSOLOGY AND DIAGNOSIS.....	9
2.1.4 MEASURING OF THE CLINICAL STATUS.....	15
2.1.5 IMPACT.....	16
2.2 SUICIDE.....	16
2.2.1 EPIDEMIOLOGY.....	17
2.2.2 RISK FACTORS.....	17
2.3 RELATIONSHIP OF SUICIDE TO STRESSFUL LIFE EVENTS.....	23
2.4 STUDIES ABOUT SUICIDAL PATIENTS IN THAILAND.....	26

CONTENTS (Cont.)

	Page
CHAPTER 3.....	28
RESEARCH METHODOLOGY.....	28
3.1 RESEARCH DESIGN.....	28
3.2 RESEARCH METHODOLOGY.....	28
3.2.1 POPULATION AND SAMPLE.....	28
3.2.2 SAMPLE SIZE DETERMINATION	30
3.2.3 SAMPLE SELECTION	30
CHAPTER 4.....	31
OUTCOME MEASUREMENT, DATA COLLECTION AND DATA ANALYSIS.....	31
4.1 OUTCOME MEASUREMENTS.....	31
4.2 DATA COLLECTION PROCEDURE.....	33
4.3 DATA COLLECTION.....	34
4.4 DATA ANALYSIS.....	34
CHAPTER 5.....	35
RESULTS.....	35
5.1 GENERAL CHARACTERISTICS OF THE SAMPLE.....	36
5.1.1 CHARACTERISTICS OF CASE AND CONTROL GROUP ON MATCHING VARIABLE.....	36
5.1.2 DEMOGRAPHIC CHARACTERISTICS OF THE PATIENTS.....	37
5.1.3 CLINICAL CHARACTERISTICS OF DEPRESSED PATIENTS IN BOTH GROUP	40
5.1.4 FAMILY ISSUE.....	42
5.1.5 CLINICAL DIAGNOSIS.....	43
5.1.6 SUICIDAL BEHAVIOR IN CASE GROUP.....	45
5.1.7 PSYCHOSOCIAL STRESSOR.....	46
5.1.8 SEVERITY OF DEPRESSION AND ANXIETY SYMPTOMS.....	47
5.1.9 PERSONALITY PROFILE.....	48

CONTENTS (Cont.)

	Page
5.2 RELATIONSHIP BETWEEN SUICIDAL ATTEMPT AND ASSOCIATED DICHOTOMOUS VARIABLES.....	50
5.2.1 RELATIONSHIP BETWEEN DEMOGRAPHIC DATA AND SUICIDAL ATTEMPT IN DEPRESSED PATIENTS.....	50
5.2.2 RELATIONSHIP BETWEEN CLINICAL CHARACTERISTICS AND SUICIDAL ATTEMPT IN DEPRESSED PATIENT.....	52
5.2.3 RELATIONSHIP BETWEEN FAMILY ISSUE AND SUICIDAL ATTEMPT IN DEPRESSED PATIENT	54
5.2.4 RELATIONSHIP BETWEEN PSYCHOSOCIAL STRESSOR AND SUICIDAL ATTEMPT IN DEPRESSED PATIENT	56
5.2.5 RELATIONSHIP BETWEEN SEVERITY OF DEPRESSION AND SUICIDAL ATTEMPT IN DEPRESSED PATIENT	60
5.2.6 RELATIONSHIP BETWEEN PERSONALITY FACTORS AND SUICIDAL ATTEMPT IN DEPRESSED PATIENT	61
5.2.7 RELATIONSHIP BETWEEN COMORBID ANXIETY DISORDER AND SUICIDAL ATTEMPT IN DEPRESSED PATIENT	63
5.3 MULTIVARIATE ANALYSIS.....	64
CHAPTER 6	65
SUMMARY, DISCUSSION, RECOMMENDATIONS	65
6.1 SUMMARY OF THE STUDY.....	65
6.2 DISCUSSION.....	66
6.3 CONCLUSION.....	79
6.4 IMPLICATION	79
6.5 LIMITATION	80
6.6 SUGGESTION FOR FURTHER STUDIES	80
REFERENCE.....	81
APPENDIX.....	92
VITAE.....	107

LIST OF TABLES

Table		Page
2.1	Prevalence of depressive disorder among people contacting general health services in 15 centers worldwide.....	7
5.1	Characteristics of depressed patients with suicidal attempt and never had suicidal attempt on matching variables : gender, age.....	36
5.2	Demographic characteristics of depressed patients with suicidal attempt and never had suicidal attempt.....	37
5.3	Clinical characteristics of depressed patients in case and control group.....	40
5.4	Data about family of depressed patients with suicidal attempt and without suicidal attempt	42
5.5	Principal DSM-IV diagnosis.....	43
5.6	Characteristics of suicidal attempts among cases.....	45
5.7	Number of suicidal attempt patients and control reporting current stressful life events.....	46
5.8	Score on severity of depression and comorbid anxiety level in both group.....	47
5.9	Show minimum, maximum and mean score on personality profile among depressed patients with suicidal attempt and never suicidal attempt.....	48
5.10	Result of a matched case control study for demographic Variables.....	50
5.11	Result of a matched case control study for clinical characteristics	52
5.12	Results of a matched case-control study for family issue.....	54

LIST OF TABLES (Cont.)

Table	Page
5.13 Outcome of suicidal attempt patients and matched control reporting current stressful life events.....	56
5.14 Stressful life events assessed by social readjustment rating scale among case and control group.....	57
5.15 Area of psychosocial problem from clinical interview among case and control group	58
5.16 Result of a matched case-control study on severity of depression	60
5.17 Crude odds ratio of each personality profile.....	61
5.18 Number of pairs and result of personality profile B.....	62
5.19 Number of pairs and result of personality profile H.....	62
5.20 Number of pairs and result of personality profile M.....	62
5.21 Result of a matched case control study on comorbid anxiety disorder.....	63
5.22 Conditional maximum likelihood estimation of an appropriate logistic model for analyzing the relationship between variables and suicidal attempt in depressed patients	64

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION AND BACKGROUND

Depressive disorder or depression is the fourth leading cause of worldwide disease burden, according to a recent study of premature mortality and disability around the world.¹ The World Health Organization (WHO) researchers predicted that, by the year 2020, depression will be second rank among disease burden after heart disease. The lifetime prevalence is 10-25% for women and 5-12% for men². Although culture can influence the experience and communication of depressive illness, an annual prevalence of major depression occurs about 1-6% in all part of the world. The rate is typically higher for women than men³. Patients with major depression have persistent depressed mood or loss of interest and pleasure accompanied by change in appetite, weight, sleep, feeling of guilt, difficulty in concentration and recurrent thoughts of death or suicide thoughts, plans or attempts.

Depressive disorders meet all criterias that are necessary to consider as a priority of a major public health problem⁴: they are frequent, they cause significant suffering and incapacity, effective and acceptable interventions are available to treat them and their prevalence is likely to rise. The WHO and the World Bank have calculated how many life years will be lost due to disability related to depression and reported that taking the whole as a world, the disability associated with depressive illness results in the loss of almost 13 million years of life each year⁵. This can easily be translated in term of economic loss and human loss and suffering.

Depressed patients are at high risk for suicidal behavior. There is some evidence that the majority of completed suicidal are committed by patients suffering from a psychiatric illness, depression being the most common diagnosis. A review of follow-up studies show a lifetime incidence of suicide among depressed patients of 15%⁶. The suicidal risk in patients with depression is 3.5 to 4.5 fold higher than that in individual suffering from other psychiatric disorder, and 22 to 36 times higher than that in members of general population⁷. On the basis of psychological autopsy studies it has been concluded that 30-70% of suicide victims are depressed⁸. The reported prevalence of depression among suicide attempts ranges from 30% to 66%⁹. There are eight to ten times the number of suicidal attempts as that of committed suicide¹⁰. It has been estimated that 9-43% of the suicidal attempts will eventually die by committing suicide¹¹. Approximately 1% of persons who attempt suicide will commit suicide during the following year. These findings show that the relationship between depression and suicidal acts is a robust one, although not all depressed patients make a suicidal attempt.

Suicide prevention through early detection and effective treatment of severe mental disorder (notably depression) has been emphasized^{12,13}. Depression alone, however, does not sufficiently explain why suicide attempts occur. There exist, to date, only few studies which have tried to compare depressed patients with suicide attempts to depressed patients without suicide attempt¹⁴⁻¹⁸. Some studies have raised the possibility that various forms of comorbidity increase the risk of suicide¹⁹⁻²². Some findings suggest that the effectiveness of this strategy may be further improved if more attention could be paid to severe depressives, substance misusers²³ with comorbid impulsive personality disorder and stressful life events. Mental disorder alone is a necessary but not sufficient cause for suicide, and the link between mental disorder and social factors contributing suicide is a complex issue²⁴. It is therefore a great importance to study the clinical,

sociodemographic and psychosocial predictors of suicidal attempts in depressed subjects.

The aim of this study is to examine suicidal attempt in depressive patients in relation to psychosocial stress, severity of depression, the presence of personality disorders, comorbid conditions and sociodemographic factors.

1.2 RESEARCH QUESTIONS

1. Primary research question :

Are there the relationship between suicidal attempt and current psychosocial stress in depressed patients ?

2. Secondary research question :

Are there any relationship between suicidal attempt and severity of depression, presence of personality disorder or comorbid conditions in depressed patients ?

What is / are the factor(s) to predict suicidal attempt in patients with depressive disorder ?

1.3 RESEARCH OBJECTIVES

1. General objective

To identify the factor(s) that can predict suicidal attempt in patients with depressive disorder

To determine the high-risk subgroups among this depressive patient population who need more suicidal precaution.

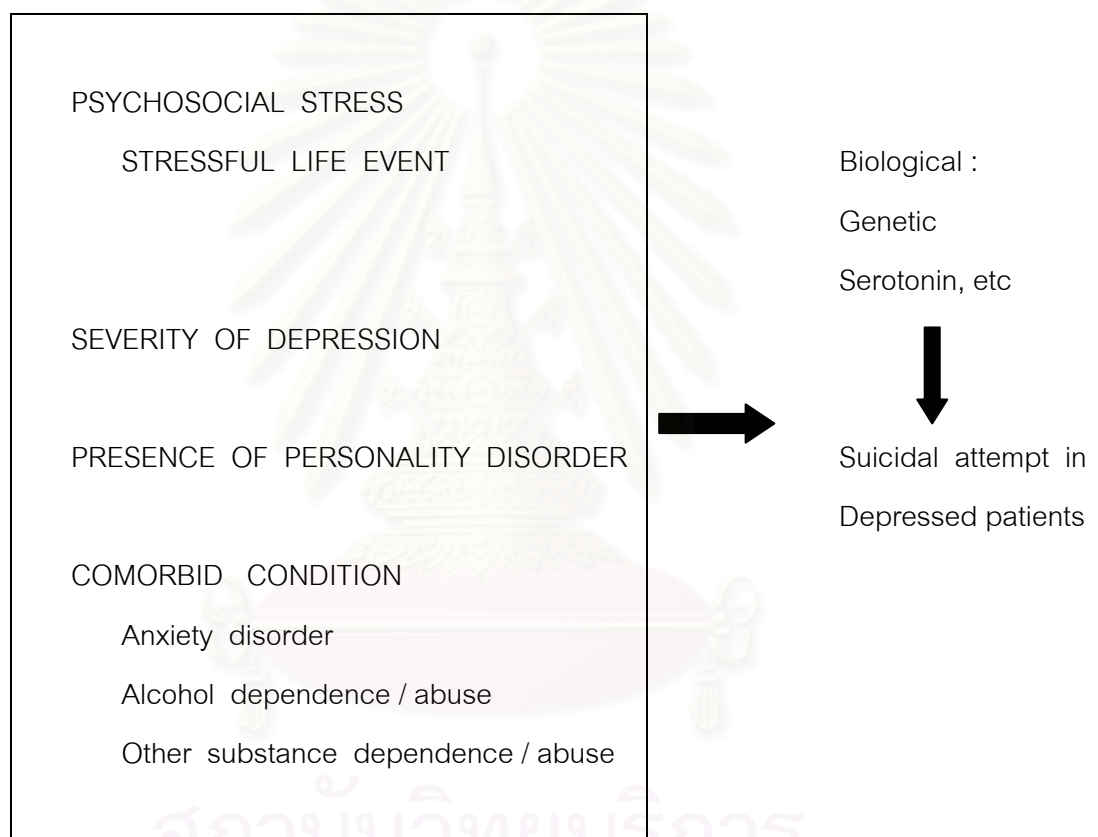
2. Specific objective

To examine the relationship between suicidal attempt and psychosocial stress, severity of depression, presence of personality disorder, comorbid conditions in depressed patient

1.4 RESEARCH HYPOTHESIS

There are relationship between suicidal attempt and psychosocial stress or some associated factors in depressed patients.

1.5 CONCEPTUAL FRAMEWORK



1.6 KEY WORDS

Suicidal attempt, depressive disorder, predictor, psychosocial stress

1.7 OPERATIONAL DEFINITION

Suicidal attempt²⁵

A self – destructive act that was sufficiently serious to require medical evaluation and carried out with the intent to end one's life.

Depression or depressive disorder²

Patient exhibits depressive symptoms as the major feature such as either depressed mood or loss of interest, and also experience some symptoms that included change in appetite and weight, change in sleep and activity, lack of energy, feeling of guilt, problem in thinking and making decision and recurring thought of death or suicide.

Psychosocial stress

The psychosocial and environmental problems that significantly contribute to the development or exacerbation of the current disorder.

#current psychosocial stress

The psychosocial and environmental problems that have been presented during 3 months preceding the current disorder.

#past psychosocial stress

The psychosocial and environmental problems that occurred in the past or more than 3 months before the current disorder.

Comorbidity

The presence of more than one specific disorder in person in a defined period of time

1.8 ETHICAL CONSIDERATION

The study objectives and protocol must be thoroughly explained to the subjects before enrolling in the study. Consent were obtained from each patient both in case and control group who participated in the study.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Depressive disorder are considered to be a major public health problem. In order to be considered of public health importance, a condition must meet certain criteria. These include frequency, severity (in terms of suffering and capacity), temporal trends (stability or growth of a condition), and the existence of effective intervention that are acceptable to patient and to the community. Depressive disorders occur frequently and produce severe suffering for those affected and for their families. The consequences of depressive disorder in terms of excessive mortality, disability and secondary morbidity are grave. There are indications that the frequency of depressive disorders will increase in the years to come, for a variety of reasons, including demographic changes, extended life expectancy of people suffering from chronic physical disorders and other. Additionally, there are the existence of effective interventions that are acceptable to the patient and to the community.

2.1 DEPRESSION

2.1.1 EPIDEMIOLOGY

Depression is extremely common. Surveys show that up to 25% of the population may suffer from this disorder at some time in their lives²⁶. Most cases of depression are mild but one person in twenty will have a moderate or severe episode.

Table 2.1 shows the results of a recent study involving more than 25,000 people who attended general health care service in 15 different centers world wide. The proportion of patients who were actually suffering from depressive

disorders when they contacted the general health service was high (mean value of 10.4%). However, there was a wide span ranging from approximately 30% in Santiago , Chile to as low as 2.6% in Japan²⁷

Table 2.1 Prevalence of Depressive Disorder Among People Contacting General Health Services in 15 centers Worldwide.

Place	Prevalence (%)
Santiago, Chile	29.5
Manchester, United Kingdom	16.9
Groningen, The Netherlands	15.9
Rio, Brazil	15.8
Paris, France	13.7
Ankara, Turkey	11.6
Mainz, Germany	11.2
Bangalore, India	9.1
Athens, Greece	6.4
Seattle, United States	6.3
Berlin, Germany	6.1
Verona, Italy	4.7
Ibadan, Nigeria	4.2
Shanghai, China	4.0
Nagasaki, Japan	2.6
Mean worldwide prevalence	10.4

There were some epidemiological studies carried out in Thailand. For example ;

Sitasuwan J²⁸ used Feighner criteria for a psychiatric epidemiological survey among subjects age 31-50 years in community in Bangkok and found that 47.5% had a psychiatric problem.

The survey of Otrakul A et al²⁹ for the year 1993 showed that the prevalence of elderly depression in Din-Daeng area was 38%

Jaisin S³⁰ used SCL-90 in a survey in community and found that 30% of the sample had a mental health problem.

Trankasombat U et al³¹ studied by using the Children's Depression Inventory, Thai version and revealed 40.8% of 1264 students aged 10-17 years with the mean age of 14 years in Bangkok as having significant depressive symptoms (total CDI score greater than 15) and 13.3% as having marked depressive symptoms (total CDI score greater than 21)

Thavichachart N et al³² studied 711 elderly people aged over 60 from Bangkok and Uthaithani province representing urban and rural areas and found that the prevalence of depression was 82.28 percent among the Thai studied population, 80.3 percent in Bangkok and 84.8 percent in Uthaithani province

Thavichachart N et al³³ reported the lifetime prevalence of depression is about 19.9% according to epidemiological survey of mental disorders and knowledge attitude practice upon mental health among people in Bangkok metropolis.

2.1.2 GENERAL CHARACTERISTICS

Depression is a mood state that is characterized by significantly lowered mood and a loss of interest or pleasure in activities that are normally enjoyable. Depression is actually a syndrome that has clusters of symptoms.

The clinical features of depression fall into four broad categories :

1. mood (affect) : sad, blue, unhappy, depressed, down-in-the dumps, empty , worried, irritable
2. cognition : loss of interest, difficulty concentrating, low self esteem, negative thoughts, indecisiveness , guilt, suicidal ideation, delusion
3. behavior : psychomotor retardation or agitation, crying dependency, social withdrawal, suicide

4. somatic (physical including vegetative features) : sleep disturbance (insomnia or hypersomnia), decreased or increased appetite, weight loss or gain, fatigue, pain, headache, muscle tension, decreased libido.

2.1.3 NOSOLOGY AND DIAGNOSIS

Patients with depressive symptoms are considered to suffer from numerous different depressive disorders with clear diagnostic boundaries. Categorical approach using standardized diagnostic criteria of mental disorders not only assist in the detection and recognition of disorders but also provide estimation of their prevalence. Moreover reliable diagnostic criteria can be used to systematically evaluate treatment modalities, understand the etiology of the illness, establish patient prognosis and plan preventive measures.

The fourth edition of Diagnostic and Statistical Manual of Mental disorder (DSM-IV), published in 1994 by the American Psychiatric Association (APA), is the official psychiatric nosology. Specified diagnostic criteria are provided for each specific mental disorder. These criteria include a list of feature that must be present for the diagnosis to be made. Such criteria increase the reliability of clinicians' process of diagnosis

Depression is syndrome, if the symptoms are not due to the direct physiological effects of a substance or a general medical condition, it may be categorized into.

- Major depressive disorder
- Dysthymia or dysthymic disorder
- Depressive disorder not otherwise specified
- Adjustment disorder with depressed mood

The diagnostic criteria for each depressive disorder specify a certain level of severity and certain duration of symptom as minimum requirement to meet the diagnosis

MAJOR DEPRESSIVE DISORDER

DIAGNOSIS

Major depressive disorder is identified by the presence of one or more depressive episodes in the absence of a history of mania or hypomania

The DSM-IV diagnostic criteria for a major depressive episode are

- A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms in either (1) depressed mood or (2) loss of interest or pleasure.

Note : Do not include symptoms that are clearly due to a general medical condition, or mood-incongruent delusions or hallucinations.

- (1) depressed mood most of the day, nearly every day, as indicated by either subjective report (eg., feels sad or empty) or observation made by others (eg., appears tearful). Note : in children and adolescent, can be irritable mood.
- (1) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated either by subjective account or observation made by others)
- (3) significant weight loss when not dieting or weight gain (eg., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. Note: in children, consider failure to make expected weight gains
- (4) insomnia or hypersomnia nearly every day
- (5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
- (6) fatigue or loss of energy nearly every day

- (7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
 - (8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
 - (9) recurrent thoughts of death (not just fear of dying), recent current suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
- B. The symptoms do not meet criteria for a mixed episode.
 - C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
 - D. The symptoms are not due to the direct physiological effects of a substance (eg., a drug of abuse, a medication) or a general medical condition (eg. hypothyroidism)
 - E. The symptoms are not better accounted for by bereavement, ie, after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

DYSTHYMIA OR DYSTHYMIC DISORDER

According to DSM-IV, the essential feature of dysthymic disorder is a chronic disturbance of mood involving depressed mood (or possible an irritable mood in children and adolescents) for most of the day more days than not, for at least two years (one year for children and adolescents). In addition to depression, two or more of the following are necessary: decrease appetite or overeating, hypersomnia or insomnia, fatigue, poor self-esteem, impaired concentration or difficulty with decision making and feeling of hopelessness.

Diagnostic criteria for dysthymic disorder

- A. Depressed mood for most of the day, for more days than not, as indicated either by subjective account or observation by others, for at least 2 years.
Note : In children and adolescents, mood can be irritable and duration must be at least 1 year.
Note : Do not include symptoms that are clearly due to a general medical condition, or mood-incongruent delusions or hallucinations.
- B. Presence, while depressed, of two (or more) of the following :
- (1) poor appetite or overeating
 - (2) insomnia or hypersomnia
 - (3) low energy or fatigue
 - (4) low self-esteem
 - (5) poor concentration or difficulty making decisions
 - (6) feelings of hopelessness
- C. During the 2-year period (1 year for children or adolescents) of the disturbance, the person has never been without the symptoms in criteria A and B for more than 2 months at a time.
- D. No major depressive episode had been present during the first 2 years of the disturbance (1 year for children and adolescents) ; ie, the disturbance is not better accounted for by chronic major depressive disorder, or major depressive disorder, in partial remission.
Note : There may have been a previous major depressive episode provide there was a full remission (no significant signs or symptoms for 2 month) before development of the dysthymic disorder. In addition, after the initial 2 years (1 year in children or adolescents) of dysthymic disorder, there may be superimposed episodes of major depressive disorder, in which case both diagnoses may be given when the criteria are met for a major depressive episode.

- E. There has never been a manic episode, a mixed episode, or a hypomanic episode, and criteria have never been met for cyclothymic disorder.
- F. The disturbance does not occur exclusively during the course of a chronic psychotic disorder, such as schizophrenia or delusion disorder.
- G. The symptoms are not due to the direct physiological effects of a substance (eg, a drug of abuse, a medication) or a general medical condition (eg, hypothyroidism)
- H. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

DEPRESSIVE DISORDER NOT OTHERWISE SPECIFIED

The depressive disorder not otherwise specified category includes disorders with depressive feature that do not meet the criteria for Major depressive disorder, Dysthymic disorder, Adjustment disorder with depressed mood or Adjustment disorder with mixed anxiety and depressed mood. Sometimes depressive symptoms can present as part of an Anxiety disorder not otherwise specified. Example of Depressive disorder NOS include.

- Premenstrual dysphoric disorder : in most menstrual cycle during the past year, symptoms (eg. markedly depressed mood, marked anxiety, marked affective lability, decreased interest in activities) regularly occurred during the last week of the luteal phase (and remitted within a few days of the onset of menses). These symptoms must be severe enough to markedly interfere with work, school or usually activities and be entirely absent for at least, week postmenses.
- Minor depressive disorder : episodes of at least 2 weeks of depressive symptoms but with fewer than the five items required for major depressive disorder.

- Recurrent brief depressive disorder : depressive episodes lasting from 2 days up to 2 weeks, occurring at least once a month for 12 months (not associated with the menstrual cycle).
- Post psychotic depressive disorder of schizophrenia : a major depressive episode that occurs during the residual phase of schizophrenia.
- A major depressive episode superimposed on delusional disorder, psychotic disorder not otherwise specified or the active phase of schizophrenia
- Situations in which the clinician has concluded that a depressive disorder is present but is unable to determine whether it is primary, due to a general medical condition or substance induced.

ADJUSTMENT DISORDER

According to DSM-IV, adjustment disorders are defined as “clinically significant emotional or behavioral symptoms “ that develop in response to an identifiable psychosocial stressor or stressors.

Diagnostic criteria for adjustment disorder

- A The development of emotional or behavioral symptoms in response to an identifiable stressor(s) occurring within 3 months of the onset the stressor(s)
- B These symptoms or behaviors are clinically significant as evidenced by either of the following :
 - (1) marked distress that is in excess of what would be expected to the stressor
 - (2) significant impairment in social or occupational (academic) functioning
- C The stress-related disturbance does not meet the criteria for another specific Axis I disorder and is not merely an exacerbation of a preexisting disorder
- D The symptoms do not represent bereavement
- E Once the stressor (or its consequences) has terminated, the symptoms do not persist for more than an additional 6 months

The clinical presentation of adjustment disorder can vary widely and can be specified on subtype such as with depressed mood, with anxiety, with mixed anxiety and depressed mood, etc.

2.1.4 MEASURING OF THE CLINICAL STATUS

The coexistence of many measurement scales reflects the divergence of conceptual approaches to depression and also the fact that depression is a syndrome rather than a single entity. No one symptom is diagnostic of depression, and different people exhibit widely different symptoms. Hence a measurement scale has to cover several dimensions, and it is the choice of coverage that distinguishes most rival scales³⁴

For the clinical status assessment in depression I adopt Hamilton rating scale for depression (HAM-D) Thai version³⁵. With the property of the psychometrics : the Kappa value of the scale was 0.87. The Spearman's correlation coefficient which indicated the validity was- 0.8239 ($p < .001$). The internal consistency was good (standardized Cronbach's alpha coefficient equal 0.74). HAM-D was an acceptable and widely used measurement for clinical assessment in depression.

The HAM-D is designed to measure severity of illness in patients already diagnosed with depression. For some symptoms it is difficult to elicit enough information from the patient to permit full quantification . In such cases if a symptom is present, score 2 ; if absent, score 0 ; and if doubtful or trivial, score 1. For those symptoms where more detailed information can be obtained, the score is expanded ; 2 indicated mild symptoms, 3 moderate symptoms and 4 severe symptoms. Therefore, the higher the score, the more severe the depression. For 17-item HAM-D, It is generally agreed that the scores lower than 7 indicate an absence of depression ; score of 7 to 12 represent mild ; 13 to 17 represent moderate depression ; 18 to 29 represent major depression and ; 30 or above represent severe depression with psychotic

2.1.5 IMPACT

The most serious complications of a major depressive episode are suicide and other violent acts. Other complications include marital, parental, social and vocational difficulties³⁶. The illness, especially in its recurrent and chronic forms, may cause distress for other individuals in the patient's social network, e.g., children, spouse and significant others. If the patient is parent this disorder may affect his or her ability to fulfill parental role expectations³⁷. Depressive illness are associated with occupational dysfunction, including unemployment, absenteeism, and decrease work productivity³⁸. Depression may also complicate recovery from other medical illnesses. According to the medical outcome study depression had a greater adverse impact on individuals than did other chronic conditions such as hypertension, diabetes, arthritis and lung disease, as measured across the dimensions of physical functioning, role functioning, social functioning, number of days in bed due to poor health perceived current health and bodily pain³⁹ and some evidences suggest that many depressed patients have a concomitant physical conditions such as hypertension, backache, heart problem⁴⁰. This results in a worse prognosis for both the depression and the physical illness and is continuing to worsen quality of life of the patients. The economic impact of depression includes the cost of treatment and the cost of lost productivity due to illness or death.

2.2 SUICIDE

Suicide is derived from the Latin word for "self murder". If successful it is a fatal act that represents the person's wish to die and often called committed suicide or completed suicide. There is a range, however, between thinking about suicide and acting it out. The Edinburg group introduced the term parasuicide to signify that suicide attempt are not just failed suicide but are a very different behavior. According to Mann JJ et²⁵ and in this study, suicide attempt mean a self destructive act that was sufficiently serious to require medical evaluation and carried out with the intent to end one's life.

2.2.1 EPIDEMIOLOGY

Each year more than 30,000 persons die by suicide in the United States. The number of attempted suicides is estimated to be 650,000. The suicide rate in the United States has averaged 12.5 per 100,000 in the 20th century, the overall suicide rate remained relatively stable, whereas the rate for 15 to 24 years old has increased two to threefold.

Internationally, suicide rate range from high of more than 25 per 100,000 persons in Scandinavia, Switzerland, Germany, Australia, the Eastern European countries (the so-called suicide belt), and Japan, to fewer than 10 per 100,000 in Spain, Italy, Ireland, Egypt and the Netherlands⁴².

In Thailand, Lotrakul M⁴³ examined suicide trend during the past two decades and reported that the mean suicide rates for 1977-86 and 1987-96 were 6.4 and 6.7 per 100,000 respectively. In 1996 the highest rates occurs in male age 20 through 24 years (21.7 per 100,000) and in female aged 15 through 19 years (6.6 per 100,000). Bundichate A et al⁴⁴ survey mental disorders among Thai people and found that the lifetime prevalence of suicidal attempts is about 1%.

2.2.2 RISK FACTORS

Suicide is usually most accurately viewed as a multidetermined act. Risk factors for suicide include psychiatric disorder, social factors, psychological factors, biological genetic factor and physical disorder.

PSYCHIATRIC DISORDERS

Highly significant psychiatric factors in suicide include depressive disorder, substance abuse, schizophrenia and other mental disorders. Almost 95% of all persons who commit or attempt suicide have a diagnosed mental disorder. Depressive disorders account for 80% of this figure, schizophrenia accounts for 10 percent and dementia or delirium for 5%. Among all persons with mental disorder, 25% are also alcohol dependent and have dual diagnosis. The suicide risk in persons with depressive disorder about 15 percent. Depression is associated not only with completed suicide but also with serious attempt at suicide.

Depressed patients who seriously attempt suicide more closely resemble suicide victims than they do suicide attempters. Alcoholic person have an increased risk of suicide, with a lifetime suicide risk 2.2 to 3.4 percent.

Depression is probably the most important risk factor for suicide, two thirds of all suicide are committed by people suffering from depressive disorder. Around 21% of patients with recurrent depressive disorders will attempt suicide and, unfortunately, many will die. Other forms of depressive disorder such as dysthymia are associated with only a slightly lower risk of attempted suicide (18%), whereas approximately 11% of patients with mixed anxiety depression disorder, A condition in which the depressive symptoms are not sufficiently distinct to rate a specific diagnosis of depression, will also attempt suicide⁴⁵.

COMORBIDITY

Psychiatric comorbidity is defined as the presence of more than one specific disorder in an individual within a specified period. Comorbidity is substantial in the general population. The Epidemiologic Catchment Area study and the National Comorbidity Study, both in the United States, found that 54% and 56% respectively, of respondents with a life time history of at least one DSM-III-R disorder also met criteria for some others mental disorder. In the National Comorbidity Study more than half (59%) of all 12-month disorders occurred in the 14% of the population with a history of three or more disorders. These subjects were more likely to be female, 15-24 years old, and residents of major metropolitan areas and to have lower income and education attainment levels, compared with subjects without a history of three or more disorders. Comorbidity has major higher service utilization rates than those with pure disorders. Comorbidity has also been linked to more severe symptoms, greater functional disability and longer illness course. In primary health care, comorbidity increases the chances that mental disorders will be recognized and increases the likelihood of receiving treatment.

ALCOHOL USE DISORDER

Comorbidity plays an important role ; person with alcoholism who have comorbid depressive disorder are at particularly high risk. Workers in St Louis examined the relation of alcoholic suicide to specific life events. Among 31 alcoholic suicides, 48% had lost a loved one during the year before they committed suicide and 32% had experienced such a loss during their last 6 weeks. In this study, loss of a close relationship was the most frequently cited precipitating event ; other events include job trouble, financial difficulties, an being trouble with the law⁴².

ANXIETY DISORDER

Increased risk of suicide and suicidal attempt have been reported for young people with anxiety disorder.^{23,46} Panic disorder complicates in 15-30% of case.⁴⁷ Individual with symptoms of both disorders manifest greater degrees of impairment than do patient with major and risk of suicidal behavior has been controlled for mood disorder, anxiety disorders have not made significant contribution to suicidal risk, suggesting that the observed association between anxiety disorders and suicidal behavior may reflect mood disorder that are frequently comorbid with anxiety disorder.⁴⁶

PERSONALITY FACTOR

Personality disorders are conceptualized as the presence of enduring personality traits that are inflexible and maladaptive and cause significant functional impairment or subjective distress.

Studies have generally reported that a very high proportion of individuals diagnosed with major depression also meet criteria for at least one axis II personality disorder. Estimates have ranged from 18% to 95%, although prevalence rate usually fall between 35% and 65%.

Most studies have reported that personality pathology appears to be very common in patients with depression. This suggests that there may be potentially significant treatment implications for these patients nevertheless recently Mudler RT⁴⁸ reviewed personality pathology and treatment outcome in major depression and concluded that the presence of a comorbid personality disorder does not appear to worsen outcome for patients with major depression provided that the patients receive good standard treatment for their mood disorder.

It is recognized that patients with borderline and antisocial personality disorders have an increased risk of suicide. Recently the Finnish group reported a psychological autopsy study of suicide victims with personality disorders and found that they were almost always (95 percent) associated with current axis I depressive disorders, substance use disorders, or both. They also reported that 67 of a random sample of 229 suicide victims had an Axis II personality disorder. About one fifth had a cluster B diagnosis (dramatic, emotional or erratic) , compared to the estimated prevalence of 4 to 5% in the general population. Ten percent had a cluster C diagnosis (anxious or fearful) and only 1 percent had a cluster A diagnosis (odd or eccentric)⁶.

Dissocial, borderline disorder or higher level of impulsivity in particular are more prevalent in younger suicide victims. In older people the rate of personality disorder is about 15%^{49,50} with anankastic or anxious traits the most frequent. It is plausible that older people who are less adaptable will cope poorly with the inevitable changes that ageing brings, and may be at increased risk of suicide.

SOCIAL FACTORS

The first major contribution to the study of the social and cultural influences on suicide was made at the end of the 19th century by the French

sociologist E'mile Durkheim. Durkheim devided suicides into three social categories : egoistic, altruistic and anomic. Egoistic suicide applies to those who are not strongly integrated into any social group. The lack of family integration explains why unmarried persons are more vulnerable to suicide than married ones and why couples with children are the best protected group. Altruistic suicide applies to those prone to suicide stemming from their excessive integration into a group, with suicide being the outgrowth of the integration. Anomic suicide applies to persons whose integration into society is disturbed so that they cannot follow customary norms of behavior.

PSYCHOLOGICAL FACTORS

Freud's Theory

Sigmund Freud stated that suicide represent aggression turned inward against an introjected, ambivalently cathected love object.

Menninger's Theory

Karl Menninger conceived of suicide as inverted homicide because of a patient's anger toward another person. This retroflexed murder is either turned inward or used as an excuse for punishment. He also described a self-directed death instinct plus three components of hostility in suicide : the wish to kill, the wish to be killed, and the wish to die.

Recent Thories

Contemporary suicidologists are not persuaded that a specific psychodynamic or personality structure is associated with suicide. They believe that much can be learned about the psychodynamics of suicidal patients from their families about what would happen and what the consequences would be if they commit suicide. Such fantasies often include wishes for revenge, power, control, or punishment, atonement, sacrifice or restitution ; escape or sleep ; rescue,

rebirth, reunion with dead ; or a new life. The suicidal patients most likely to act out suicidal fantasies may have lost a love object or received a narcissistic injury, may experience overwhelming affects like rage and guilt , or may identify with a suicide victim.

Depressed persons may attempt suicide just as they appear to be recovering from their depression. A suicide attempt can cause a long-standing depression to disappear, especially if it fulfills a patient's need for punishment . Of equal relevance, many suicide patients use a preoccupation with suicide as a way of fighting off intolerable depression and a sense of hopelessness.

BIOLOGICAL FACTORS

Diminished central serotonin plays a role in suicidal behavior. A group at the Karolinska Institute were the first to note that low concentrations of the serotonin metabolite 5-hydroxy – indoleacetic acid (5-HIAA) in the lumbar cerebrospinal fluid (CSF) were associated with suicidal behavior and concluded that low CSF-5-HIAA concentration predict short - range suicide risk in the high – risk group of depressed patients who have attempted suicide. Recent studies also report some changes in the noradrenergic system of suicide victims.

Suicidal behavior, like other psychiatric disorders tend to run in families. In psychiatric patients a family history of suicide increases the risk both of attempted suicide and of completed suicide in most diagnostic groups. Results from twin studies show that monozygotic twin pairs have significantly greater concordance for both suicide and attempted suicide, which suggest that genetic factors may play a role in suicidal behavior .

Molecular genetic studies : Tryptophan hydroxylase (TPH) is an enzyme in the biosynthesis of serotonin. A polymorphism in the human TPH gene with two alleles – U and L has been identified. As low concentrations of 5-HIAA in CSF are associated with suicidal behavior, it was hypothesized that such

individuals may have alterations in genes controlling serotonin synthesis and metabolism. It was found that 34 of the 36 violent subjects who attempted suicide had either the UL or LL genotype. Thus, it was concluded that the presence of the L allele was associated with an increased risk of suicide attempts.

PHYSICAL DISORDERS

Postmortem studies show that a physical illness is present in 25 to 75% of all suicide victims ; a physical illness is estimated to be an important contributing factor in 11 to 51% of suicides. In each instance, the percentage increases with age.

Factors associated with illness and contributing to both suicide and suicidal attempts are loss of mobility especially when physical activity is important to occupation or recreation disfigurement, particularly among women ; an chronic intractable pain. In addition to the direct effect of illness, the secondary effects – for example, disruption of relationship and loss of occupational status are prognostic factors.

2.3 RELATIONSHIP OF SUICIDE TO STRESSFUL LIFE EVENTS

Since first studied over 30 years ago by Holmes and Rahe⁵¹ stressful life events have been a major focus of psychiatric epidemiology.⁵²⁻⁵⁵ Holmes and Rahe measure the adjustment time needed for 43 life events and major empirical conclusion was that the greater the summed score of life changes or adaptive requirement, the greater the individual's vulnerability or lowering of resistant to disease (here to suicide attempts or completions) and the more serious the diseases that will develop. Note that the Holmes and Rahe's stress test include both positive and negative life events and both socially isolating and socially involving life events.

Recent, severe, stressful life events, for example, the death of a spouse, other profound interpersonal loss or rejection, loss employment, being jailed, or being diagnosed with a terminal illness, may be associated with suicide in vulnerable individuals. The most frequently identified stressors in young suicides are interpersonal loss or conflict, economic problems, legal problems and moving.⁵⁶⁻⁵⁸ Some investigators have suggested that the number of recent stressors, rather than their specific nature, may increase the likelihood of suicide.⁵⁶⁻⁵⁷

Stater J & Depue RA¹⁷ have revealed that suicidal attempt experience significantly more loss events immediately before index admission with an increasing frequency of such events during the last month before index admission when compared to non-suicidal attempt.

Paykel ES et al⁵⁹ have found that suicidal attempt patients report four times as many events as do subjects from the general population and 1.5 times as many as have been reported by depressed patients during 6 month interval prior to depressive onset. A substantial peak of events occurs within 1 month prior to a suicide attempt. Occurrence of life event such as serious arguments with spouse was reported 19 subjects in suicidal attempter and 8 subjects in depressive controls when 53 suicidal attempt patients age 18 years and over matched with each of 53 depressive controls on age, sex, marital status, social class and race.

Crook Tet al¹⁵ report more chronic interpersonal maladjustment with partner and friends and Sonneck G et al¹⁶ find more marital discord in the history of suicidal attempt compared to non suicidal attempt. Birtchnell J⁶⁰ have reported a poorer quality of marriage of suicidal attempt compared to a match control group.

Exposure to the suicidal behavior of others may lead to suicidal behavior in a vulnerable individual. Exposure may include behaviors of family members or peer⁶¹⁻⁶³ or through the media although the effect of media exposure as a vehicle of

suicide contagion is controversial.⁶²⁻⁶⁴ Young people may be at much greater risk from exposure effects than are adult.⁶⁵⁻⁶⁶

Beautrais AL et al⁶⁷ studied precipitating factors and life events associated with suicide attempts in 129 young people making serious suicide attempts and 153 control subjects using a case-control design and found individual who made serious suicide attempts had elevated rates of life events which were associated principally with interpersonal difficulties, work issues, financial difficulties and legal problem.

Kendler KS et al⁶⁸ studied stressful life events interact in the etiology of major depression and noted that the odds ratio for major depression was significantly increased in the month of occurrence of life events such as assault, serious marital problems, divorce, job loss, serious illness, major financial problem. The odds ratio ranged from 2.4 to 20.5. For severe events the odd ratio was 12.2. The odds ratio for job loss was 6.

Interpersonal conflict was noted to be a precipitant in at least 70% of both suicide victims and suicide inpatient.⁶⁹

Motto JA et al⁷⁰ found that some predictors of suicide risk in adult hospitalized due to a depressive or suicidal state are threatened financial loss and stress with coefficients 0.674 and 0.676 respectively. Walton HS⁷¹ studied suicidal behavior in depressive illness using case-control design and found that 76.7% of suicidal attempt depressed patients report separation in comparison to 19.6% of non suicidal depression.

Mann JJ et al²⁵ found that comorbid borderline personality disorder, smoking, past substance use disorder or alcoholism, family of suicidal acts, head injury and childhood abuse history were more frequent in suicide attempters.

Bronisch T et al¹⁸ studied 48 depressive inpatients who had attempted suicide just before admission comparing to 24 depressive inpatients but no history of previous suicide attempt and revealed that alcoholism, suicide attempt in first degree relatives and divorce or separation of patients' parents predispose for a

depressive reaction associated suicidal behavior. No differences between two groups were found for personality factors, number and quality of life events in the year before index admission. However they concluded that due to the small number of patients in both groups the conclusion drawn are preliminary.

2.4 STUDIES ABOUT SUICIDAL PATIENTS IN THAILAND

Lotrakul M⁴³ examined suicide trend during the past two decades and reported that the mean suicide rate for 1977-86 and 1987-96 were 6.4 and 6.7 per 100,000 respectively. Hanging was the method most chosen by men whereas women preferred self-intoxicating.

Chinapatanapongsa E⁷² studied suicidal attempt in age group 15-30 years at Chulalongkorn hospital during 1985 to 1986 and found that most of suicidal attempt patient were female (75%), method used for attempted suicide were drug ingestion 90%. The commonest precipitating cause were marital problem familial problem and love problem. Factors related to attempted suicide were drug addiction (OR = 9.7) previous history of attempts suicide (OR = 7.4) poor familial warmth in childhood marital problem (OR = 26.3) withdrawal habit (OR = 2.3) emotional (OR = 2.1) disport (OR = 2.4) feel hurt (OR = 3.7) and preoccupation (OR = 4.5).

Palitpongpanim P et al⁷³ studied characteristics of suicidal patients admitted at Chiangrai Regional hospital, northern Thailand during January 1994 to June 1997 and found that suicide attempt ratio between female and male are 1.06 : 1 and there are differences of suicidal attempt behavior between sex, age group, and patients with adjustment disorder and non-adjustment group.

Serisathien P et al⁷⁴ studied suicide attempters in governmental hospitals at Rayong province during March – August 1997 using case –control method and found that most of the attempters were 21-45 years old, finished primary

education, married and were employed. Female were more prevalent with female to male ratio of 2.58 :1. The demographic factors related to suicide attempts were educational level, total family income and its sufficiency. Factors related suicide attempts were psychiatric illness, drinking, smoking and drinking, smoking when having distress and absence of help-seeking behavior when having distress.

Nilchaikovit T et al⁷⁵ surveyed suicidal ideation of 826 adults in Bangkok and found that one month prevalence was 5.3%. Factors found to be correlated with increased suicidal ideation were being female (OR = 2.05), mental disorder (OR = 14.2) , low income group (OR = 2.83), family conflict (OR = 3.54) health problems, negative life events in the past year such as : having family member who is psychiatrically ill, who has serious physical illness, death of family member, and other current life stress such as : marital conflict, conflicts with others.

Trangkasombat U et al⁷⁶ studies in the sample of 257 students in grade 7-9 found one-year prevalence of suicidal behavior to be 34.2% (suicidal ideation 24.1% and suicidal attempt 10.1%). The most frequent method was toxic substance ingestion and drug overdose. Depression and some psychosocial stressors are significant risk factors.

Lotrakul M et al⁷⁷ studied the nature of stressor, coping pattern and suicidal behavior in twenty patients who attempted suicide at Chiang Rai general hospital in 1999 and found that female subjects' stressors mostly resulted from extramarital affairs of their husband which made them insecure, while male subjects faced with conflict or dispute with their spouse or close relatives.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

A matched Case – control study design

To know the relationship between suicidal and some associated factors as predictor in depressed patients is important and useful for preventive strategies and interventions in clinical practice. Although experimental study is the most strongest design in clinical research, it is not ethical to do such design in this issue. And it may be difficult and take a long time in cohort study. Therefore this study will be carried out as case-control study that has advantage on practical, relative simple and cheaper, however the disadvantages of this design that related to possible biases in the comparison of case and controls are aware and considered to minimize. One way to make the cases and controls more comparable is to match for some variable that might confuse the comparison. Matching means that each case is individually paired with a control subject. This study matches case and control for age and gender that are related to both the exposure and the outcome of interest. To minimize the effect of recall bias due to some retrospective information obtained by interviewing the subjects, the sample in this study are patients with first depressive episode (new cases) or recurrent episode if have not received treatment within previous 6 months.

3.2 RESEARCH METHODOLOGY

3.2.1 Population and sample

3.2.1.1 Target population :

patients with depressive disorder

3.2.1.2 Sample population :

patients with depressive disorder at King Chulalongkorn Memorial hospital who fit to the eligibility criteria

3.2.1.3 Eligibility criteria for the sample to study

Inclusion criteria for case :

1. Male or female patients aged over 15 years.
2. Presenting with suicidal attempt.
3. First (single) depressive episode or recurrent depressive episode if have not received treatment within the previous 6 months, with at least 7 scores on Hamilton rating scale for depression

Exclusion criteria

1. Patients with Schizophrenia
2. Patients with Mental retardation
3. Patients with Known Organic brain disorder
4. Patients who were not cooperated

Inclusion criteria for control

1. Male or female patients aged over 15 years
2. No history of previous suicidal attempt
3. First (single) depressive episode or recurrent depressive episode if have not received treatment within the previous 6 months, with at least 7 scores on Hamilton rating scale for depression
4. Match with case for age group (15-25, over 25-50, over 50 years old) and gender

Exclusion criteria for control the same as case

3.2.1.4 Sample

Patients with depressive disorder at King Chulalongkorn Memorial hospital in the year 2000 and afterward who fit to the eligible criteria for case and control for the total number of 90 pairs

3.2.2 Sample size determination

This is a case-control design which matches case with control for age and gender. The suitable formula for sample size calculation is

$$N \text{ pair} = \left(Z_{\alpha} \sqrt{\psi + 1} + Z_{\beta} \sqrt{\psi + 1 - (\psi - 1)^2 \Pi_{01}} \right)^2 / (\psi - 1)^2 \Pi_{01}$$

$$\psi = \Pi_{10} / \Pi_{01} \text{ (the odds ratio)} = 2.4^{59}$$

$$\Pi_{01} = \text{number of pairs that control exposure and case no exposure} / \text{total number of pairs in the study} = 8 / 35 = 0.15$$

$$\text{specify } \alpha = 0.05$$

$$Z_{\alpha} = 1.96$$

$$\beta = 0.20$$

$$Z_{\beta} = 0.84$$

$$N / \text{pair} = 87.7$$

So that sample size for this study should be about 88 cases matched with 88 controls

3.2.3 Sample selection

This study will include all the patients who are eligible cases and control within the period of study. No sampling technique was used.

CHAPTER 4

OUTCOME MEASUREMENT, DATA COLLECTION AND DATA ANALYSIS

4.1 OUTCOME MEASUREMENTS

The psychiatric rating scale for primary outcome measurement

4.1.1 STRESSFUL LIFE EVENT IN SOCIAL READJUSTMENT RATING SCALE

Information about psychosocial stress were assessed by identifying stressful life events preceding suicidal attempt or depressive episode. Thomas Holmes and Richard Rahe listed 43 life events associated with varying amounts of disruption and stress in average people's lives for example, the death of spouse, divorce, personal injury or illness, retirement, pregnancy, argument with spouse, mortgage, change in school, violation of the law, etc. Holmes and Rahe's stress test include both positive and negative life events and both socially isolation and socially involving life events. It has been translated and modified to 42 life events for appropriateness with Thai culture. The result of validity and reliability testings are in acceptable level (The coefficient alpha = 0.7). The patient's reporting of stressful life event during 3 months preceding the current suicidal attempt or depressive episode represent presence of current psychosocial stress.

The psychiatric rating scales of secondary outcome measurement

4.1.2 HAMILTON RATING SCALE FOR DEPRESSION (HAM-D)

Severity of depression was measured by using Hamilton rating scale for depression. HAM-D is a widely used depression scale. It has been translated and tested in numerous languages including Thai. The validity and

reliability are in acceptable level. Seventeen items Hamilton depression score are measured on three (0 to 2) or five (0 to 4) point scales and are used in scoring with a total score ranges from 0 to 52 points with rising severity of depression. For HAM-D Thai version, scoring for severity of depression are as follow :

score 7 to 12	represent	mild depression
score 13 to 17	represent	moderate depression
score 18 to 29	represent	major depression
score 30 or above	represent	more than major depression, psychotic

4.1.3 SIXTEEN PERSONALITY PROLIFE (16-PF)

This self-report inventory is widely used and thoroughly researched objective personality assessment instrument. The 16-PF questionnaires provide detailed information on 16 primary personality traits to assist professionals in mental health in a wide range of situation. The reliability coefficient was between 0.61 – 0.88, average 0.7. It has been translated and tested in Thai language. Results are interpreted by psychologist. Scores that considered extreme deviant from average score indicate presence of pathology or disorder on that personality profile. The 16 personality profiles are as follow

Profile A	:	Reserved - out going
Profile B	:	Low – high intelligence
Profile C	:	Emotionally instability - stability
Profile E	:	Submissive – assertive, aggressive
Profile F	:	Serious – happy
Profile G	:	Disregards rules – conscientious
Profile H	:	Shy - venturesome, bold
Profile I	:	Tough - tender minded
Profile L	:	Trust - suspicious
Profile M	:	Practical - imaginative

Profile N	:	Genuine - astute
Profile O	:	Self assured – apprehensive
Profile Q1	:	Conservative – experimenting
Profile Q2	:	Group dependent – self sufficient
Profile Q3	:	Undisciplined – self control
Profile Q4	:	Relaxed - tense

4.1.4 ZUNG SELF-RATING ANXIETY SCALE (ZAS)

The psychiatric rating scale for measuring severity of anxiety. The ZAS is a 20-item rating list that make quantitative assessment of anxiety. The somatic aspects of anxiety are well represented in this scale and the item are assessed in terms of occurrence. Scoring 1 to 4 for frequency of symptom occur in each item. Total score ranges from 20 to 80 points with rising severity of anxiety. In this study the score above 46 points (75th percentile) are classified as presence of comorbid anxiety disorder. The coefficient reliability = 0.82.

4.2 DATA COLLECTION PROCEDURE

The patients who presented with suicidal attempt and had clinical of depression and met the eligible criteria for case were conducted clinical diagnostic interview as soon as possible after admission or consultation when consciousness regained. The investigator built good rapport and completed DSM-IV criteria to determine mood syndromes, anxiety disorder, alcohol dependence/abuse, substance dependence/abuse, personality disorder as well as psychosocial stress. Details of their self-harming past psychiatric illnesses and family history were assessed.

The Hamilton rating scale for depression were performed for measuring the severity of depression. The social readjustment rating scale were performed by patients for assessment presence of stressful life event. The sixteen personality

profile and Zung self-rating anxiety scale were also performed by patients and interpreted their results by psychologist.

The depressed patients who met the criteria for control that matched for age and gender were conducted interview, rated HAM-D and evaluated to get information the same as the investigator performed in cases.

Consents were obtained from each patient both in case and control group

4.3 DATA COLLECTION

Patients' baseline data : age, sex, marital status, education level, employment status, history of physical and psychiatric illness, history of substance use, family data, detail of self harming in case group, clinical diagnosis (Appendix)

Stressful life events from social readjustment rating scale (Appendix)

Score from Hamilton rating scale for depression (Appendix)

Score from Sixteen personality profile (Appendix)

Score from Zung self-rating anxiety scale (Appendix)

4.4 DATA ANALYSIS

All test were two-tailed : statistical significance was set at $\alpha = 0.05$. Descriptive statistics present in proportion with the categorical data and mean with SD for continuous data.

Odds ratio, 95% confidence interval (OR_{HM} , Mc Nemar test) were determined to show the strength of relationship between suicidal attempt and psychosocial or other associated dichotomous variable.

Regression analysis : conditional logistic regression were used to study the multivariate relationship of potential predictors with suicidal attempt and their relative importance by using computer STATA program.

CHAPTER 5

RESULTS

This study was conducted at King Chulalongkorn Memorial Hospital during June 2000 to March 2002. The sample consisted of 90 cases of depression with suicidal attempt who met the eligibility criteria and 90 depressed patients who never had suicidal attempt and met the criteria for control that matched to cases by age and gender.

PRESENTATION OF THE RESULTS

Part 1 To present general characteristics of depressed patients in case and control group about demographic, history of physical and psychiatric illness, clinical diagnosis, detail of self harming in case group, family data, psychosocial stressor, severity of depression, and anxiety level, and personality profile.

Part 2 To present the result of analysis on factors associated with suicidal attempt in depressed patients by determining the number of pairs where the exposures differ in case and control group and calculating odds ratio, confidence interval, Mc Nemar's chi-squared and P-value

Part 3 To present the result of multivariate analysis using conditional logistic regression

5.1 GENERAL CHARACTERISTICS OF THE SAMPLE

5.1.1 Characteristics of case and control group on matching variable

The basic patient characteristics about gender and age are shown in table 5.1. The sample consisted of female 75.6% (n = 136) and male 24.4% (n = 44). Eighty patients (44.4%) were in age group of 15 to 25 years, 53.3% (n = 96) in above 25 to 50 years. The mean age were 27.65 years (SD. = 10.57) in cases, 30.12 years (SD. = 10.84) in controls and mean age for total was 28.93 years (SD. = 10.75).

Table 5.1 Characteristics of depressed patients with suicidal attempt (N = 90) and never had suicidal attempt (N = 90) on matching variable : gender and age

Characteristics	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Gender						
Male	22	(24.4)	22	(24.4)	44	(24.4)
Female	68	(75.6)	68	(75.6)	136	(75.6)
Age						
15 – 25 years	40	(44.4)	40	(44.4)	80	(44.4)
25 – 50 years	48	(53.3)	48	(53.3)	96	(53.3)
Over 50 years	2	(2.2)	2	(2.2)	4	2.2
Mean (yrs) ± SD *	27.65	±10.57	30.21	±10.84	28.93	±10.75

*SD = Standard Deviation

5.1.2 Demographic Characteristics of the patients

Table 5.2 Demographic Characteristics of depressed patients with suicidal attempt (N = 90) and never had suicidal attempt (N = 90)

Demographic Characteristics	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Marital status						
Single	44	(48.9)	47	(52.2)	91	(50.6)
Married	41	(45.6)	35	(38.9)	76	(42.2)
Widow	1	(1.1)	1	(1.1)	2	(1.1)
Divorce	2	(2.2)	6	(6.7)	8	(4.4)
Other	2	(2.2)	1	(1.1)	3	(1.7)
Religion						
Buddhism	88	(97.8)	90	(100)	178	(98.9)
Christ	1	(1.1)	-	-	1	(0.6)
Islam	1	(1.1)	-	-	1	(0.6)
Residence						
Bangkok	57	(63.5)	55	(61.1)	112	(62.2)
Central	18	(20.0)	14	(15.6)	32	(17.8)
North – east	9	(10.0)	10	(11.1)	19	(10.6)
Other	6	(6.7)	11	(12.2)	17	(9.4)
Education						
No school	4	(4.4)	2	(2.2)	6	(3.3)
Primary school	35	(38.9)	16	(17.8)	51	(28.3)
Secondary school	21	(23.3)	24	(26.7)	45	(25.0)
University or graduated	30	(33.3)	48	(53.3)	78	(43.3)

Table 5.2 Demographic Characteristics of depressed patients with suicidal attempt
(N = 90) and never had suicidal attempt (N = 90) (continues)

Demographic Characteristics	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Occupation						
Employee	38	(42.2)	30	(33.3)	68	(37.8)
Student	20	(22.2)	24	(26.7)	44	(24.4)
Housewife	10	(11.1)	13	(14.4)	23	(12.8)
Unemployed	16	(17.8)	11	(12.2)	27	(15.0)
Other	6	(6.7)	12	(13.3)	18	(10.1)
Income (bahts per month)						
None	25	(27.8)	37	(41.1)	62	(34.4)
5,000 or lower	33	(36.7)	15	(16.7)	48	(26.6)
5,001 – 10,000	29	(32.3)	24	(26.7)	53	(29.4)
More than 10,000	3	(3.3)	14	(15.6)	17	(9.4)
Financial problem or debt						
Yes	25	(27.8)	12	(13.3)	37	(20.6)
No	65	(72.2)	78	(86.7)	143	(79.4)

The characteristics of depressed patients who presented with suicidal attempt and control group who never had suicidal attempt about demographic data such as marital status, religion, residence, level of education, occupation, income and financial problem are summarized in table 5.2. We found that about half of the subjects was single (n = 91, 50.6 %). Most of the subjects were Buddhism (n = 178, 98.9%) residence in Bangkok (n = 112, 62.2%). Nearly half of the subjects (n = 78, 43.3%) were graduated or in university level however there was higher level of education in controls more than in cases. Sixty eight patients (37.8%) were employees and 24.4% (n = 44) were students. With the economic status 34.4% of sample (n = 62) had no income, for cases most of them (n = 62, 68.9%) had income less than 10,000 baht per month but for controls 43.4% (n = 39) had income less than 10,000 baht per month and 41.1% (n = 37) had no income. Considering financial problem or debt we found 20.6% (n = 37) in total sample ; 27.8% (n = 25) in cases and 13.3% (n = 12) in controls.

5.1.3 Clinical Characteristics of depressed patients in both group

Table 5.3 Clinical Characteristics of depressed patients in case and control group

Clinical Characteristics	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
History of physical illness						
Yes	14	(15.6)	24	(26.7)	38	(21.1)
No	76	(84.4)	66	(73.3)	142	(78.9)
History of psychiatric illness						
Yes	14	(15.6)	8	(8.9)	22	(12.2)
No	76	(84.4)	82	(91.1)	158	(87.8)
History of substance use						
Yes	31	(34.4)	11	(12.2)	42	(23.3)
Alcohol	26	(28.9)	7	(7.8)	33	(18.3)
Amphetamine	8	(8.9)	2	(2.2)	10	(5.6)
Other ; hypnotic, heroin	2	(2.2)	2	(2.2)	4	(2.2)
No	59	(65.6)	79	(87.8)	138	(76.7)
Current substance use						
Always	7	(7.8)	-	-	7	(3.9)
Seldom	17	(18.9)	4	(4.4)	21	(11.7)
No	66	(73.3)	86	(95.6)	152	(84.4)

Table 5.3 Clinical Characteristics of depressed patients in case and control group (continues)

Clinical Characteristics	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Duration of current depressive episode						
Less than 2 weeks	25	(27.8)	5	(5.6)	30	(16.6)
2 – 4 weeks	19	(21.1)	6	(6.7)	25	(13.9)
4 – 8 weeks	17	(18.9)	7	(7.8)	24	(13.3)
8 – 12 weeks	9	(10.0)	6	(6.7)	15	(8.3)
More than 12 weeks	20	(22.2)	66	(73.3)	86	(47.8)
Current depressive episode						
First	63	(70.0)	79	(87.8)	142	(78.9)
Second	19	(21.1)	11	(12.2)	30	(16.7)
Third or more than	8	(8.9)	-	-	8	(4.5)

About twenty-one% of the patients (n = 38) had history of physical illness such as peptic ulcer, allergy, cardiovascular disease ; 15.6% (n = 14) in cases and 26.7% (n = 24) in controls. 12.2 % (n = 22) had history of psychiatric illness, commonly depression ; 15.6%. (n = 14) in case and 8.9% (n = 8) in controls. Most of the patients (n = 138, 76.7%) denied for history of substance use however we found that 34.4% (n = 31) in cases and 12.2% (n = 11) in controls had ever used substance commonly alcohol and still continued using in one fourth of the cases (n = 24, 26.7%). Additionally, some patients used more than one substance.

Most of the patients (n = 142 , 78.9%) had the first depressive episode with duration more than 12 weeks in controls (n = 66, 73.3%) and less than 12 weeks in cases (n = 70 , 78.8%). More detailed data concerning their current depressive episode are shown in table 5.3.

5.1.4 Family issue

Table 5.4 contains data about family of depressed patients. About 30% of the study group (n = 53) had problems in their families during childhood such as father and mother divorced or separated or died. We found that father and mother lived together 65.6% in cases (n = 59) and 75.6 % in controls (n = 68). Family history of psychiatric illness, alcohol or substance use and suicide were found in 18.9%, 23.3% and 13.3% respectively for cases and in 13.3% , 10% and 4.4% respectively for controls.

Table 5.4 Data about family of depressed patients with suicidal attempt (case , N = 90) and without suicidal attempt (control, N = 90)

Family Data	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Family structure in childhood						
Father and mother lived together	59	(65.6)	68	(75.6)	127	(70.6)
Father and mother divorced or separated	16	(17.8)	13	(14.4)	29	(16.1)
Father died	9	(10.0)	8	(8.9)	17	(9.7)
Mother died	5	(5.6)	1	(1.1)	6	(3.3)
Father and mother died	1	(1.1)	-	-	1	(0.6)
Family history of psychiatric illness						
Yes	17	(18.9)	12	(13.3)	29	(16.1)
No	73	(81.1)	78	(86.7)	151	(83.9)
Family history of alcohol or substance use						
Yes	21	(23.3)	9	(10.0)	31	(17.2)
No	69	(76.7)	81	(90.0)	149	(82.8)

Table 5.4 Data about family of depressed patients with suicidal attempt (case , N = 90) and without suicidal attempt (control, N = 90) (continues)

Family Data	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Family history of suicide						
Yes	12	(13.3)	4	(4.4)	16	(8.9)
Relation as parent	2	(2.2)	1	(1.1)	3	(1.7)
Relation as sibling	10	(11.1)	3	(3.3)	13	(7.2)
No	78	(86.7)	86	(95.6)	167	(91.1)

5.1.5 Clinical diagnosis

Table 5.5 Principal DSM-IV Diagnosis

Clinical diagnosis	Case (N=90)		Control (N=90)		Total (N=180)	
	N	percent	N	percent	N	percent
Major depressive disorder	15	(16.7)	15	(16.7)	30	(16.7)
Depressive disorder NOS*	11	(12.2)	31	(39.4)	42	(23.3)
Dysthymia	1	(1.1)	11	(12.2)	12	(6.7)
Mixed anxiety depression	4	(4.4)	19	(21.1)	23	(12.8)
Adjustment disorder with depressed mood or mixed emotion	59	(65.6)	14	(15.6)	73	(40.5)

*NOS : Not Otherwise Specified

As shown in table 5.5 Psychiatric interview and assessment revealed that 40.5% of the study group (n = 73) met the DSM-IV criteria for diagnosis adjustment disorder with depressed mood or mixed emotions, 23.3% (n = 42) for depressive disorder not otherwise specified and 16.7% (n = 30) for major depressive disorder. For cases most of them had adjustment disorder, for controls most of them had depressive disorder NOS.



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

5.1.6 Suicidal behavior in case group

Characteristics of suicidal attempts are shown in table 5.6. Most of the cases (n = 84, 93.4%) attempted suicidal by ingestion of drugs or chemical agents. The type of drug used were, namely : paracetamol (n = 34, 37.8%), combined drugs (n= 17, 18.9%), anxiolytics (n = 6, 6.7%). Cleansing agents such as Vim, Vixol, Hiter, detergents were reported by patients for suicidal attempt up to 20% ; one third of the subjects (n = 27, 30%) had earlier episode of suicidal attempts.

Table 5.6 Characteristics of suicidal attempts among cases (n = 90)

Characteristics	Cases (N = 90)	Percent
Method of presenting attempt		
- Drug or agent ingestion	84	93.4
- paracetamol	34	37.8
- drug combination	17	18.9
- Anxiolytics	6	6.7
- Other drugs	5	5.6
- Cleansing agent	18	20.0
- Insecticide	4	4.4
- Stab wound	2	2.2
- Jumping	2	2.2
- Hanging	1	1.1
- Oil injection	1	1.1
Previous suicidal attempt		
- one times	20	22.2
- two times or above	7	7.8

5.1.7 Psychosocial stressor

Table 5.7 Numbers of suicidal attempt patients and controls reporting current stressful life events

Stressful life event	Case (N=90)		Control (N=90)		Total (N=180)	
Absence	28	(31.1%)	48	(53.3%)	76	(42.2%)
Presence	62	(68.9%)	42	(46.7%)	104	(57.8%)
Area of life event						
Work	11	(12.2%)	15	(16.7%)	26	(14.4%)
Family	44	(48.8%)	21	(23.3%)	65	(36.1%)
Relationship	49	(54.4%)	28	(31.1%)	77	(42.8%)
Health	6	(6.7%)	11	(12.2%)	17	(9.4%)
Financial	18	(20.0%)	5	(5.6%)	23	(12.8%)
Other	4	(4.4%)	8	(8.9%)	12	(6.7%)

Information about current psychosocial stressor was collected from patients self reporting stressful life events in social readjustment rating scale. 68.9% in case group (n = 62) and 46.7% in control group (n = 42) reported current stressful life events. It was found that stressors about their families and personal relationships were common. However, some patients had problems in more than one areas. More detail are presented in table 5.7.

5.1.8 Severity of depression and anxiety symptoms

Table 5.8 Score on severity of depression and comorbid anxiety level in both group

Type of measurement	Case		Control		Total	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
HAM – D	16.69	(3.41)	13.59	(3.52)	15.14	(3.79)
(min/max)	9, 27		8, 22		8, 27	
ZAS	40.71	(6.52)	42.57	(7.40)	41.64	(7.02)
(min/max)	25, 56		26, 65		25, 65	
75 th percentile					46	

HAM-D ; Hamilton depression scale score, ZAS ; Zung self-rating anxiety scale

The mean score of clinical status from HAM-D scale were 16.69 (SD = 3.41) in cases and 13.59 (S.D. 3.52) in controls. The mean score of anxiety from Zung self-rating anxiety scale were 40.71 (S.D. = 6.52) in cases and 42.57 (S.D = 7.40) in controls, the score of 75th percentile among total group was 46 as shown in table 5.8. There were statistical difference between fair samples for score on severity of depression ($t = 6.385$, $df = 89$, $p < .0001$) however it was not found statistical difference for score on anxiety ($t = -1.661$, $df = 89$, $p = .1$)

5.1.9 Personality profile

Table 5.9 Show minimum, maximum and mean score of personality profile among depressed patients with suicidal attempt and never had suicidal attempt

Personality profile	Case	Control	Total
	min-max (Mean \pm S.D)	min-max (Mean \pm S.D)	min-max (Mean \pm S.D)
A reserved – outgoing	1-8 5.53 \pm 1.57	3-9 5.77 \pm 1.58	1-9 5.65 \pm 1.57
B low-high intelligence	1-8 4.44 \pm 2.01	1-9 5.82 \pm 1.47	1-9 5.13 \pm 1.88
C emotionally instability – stability	1-9 3.99 \pm 1.63	1-9 4.44 \pm 1.82	1-9 4.22 \pm 1.73
E submissive–assertive, aggressive	1-9 4.72 \pm 1.85	1-10 4.52 \pm 2.00	1-9 4.62 \pm 1.93
F serious – happy	1-8 3.86 \pm 1.62	1-9 4.12 \pm 2.35	1-9 3.99 \pm 2.02
G disregards rules – conscientious	2-8 4.81 \pm 1.48	1-9 4.68 \pm 1.84	1-9 4.74 \pm 1.67
H shy – venturesome, bold	1-7 4.89 \pm 1.36	1-9 4.27 \pm 1.84	1-9 4.58 \pm 1.64
I tough – tender minded	2-9 5.40 \pm 1.76	1-8 5.39 \pm 1.61	1-9 5.39 \pm 1.68
L trust – suspicious	2-10 6.69 \pm 1.98	1-10 6.35 \pm 2.42	1-10 6.52 \pm 2.21
M practical – imaginative	1-8 4.3 \pm 1.63	1-7 3.62 \pm 1.43	1-8 3.96 \pm 1.57

Table 5.9 Show minimum, maximum and mean score of personality profile among depressed patients with suicidal attempt and never had suicidal attempt (continues)

Personality profile	Case	Control	Total
	min-max (Mean \pm S.D)	min-max (Mean \pm S.D)	min-max (Mean \pm S.D)
N genuine – astute	3-10 7.28 \pm 1.54	3-10 6.82 \pm 1.61	3-10 7.05 \pm 1.59
O self assured – apprehensive	3-10 7.23 \pm 1.52	2-10 7.23 \pm 1.69	2-10 7.23 \pm 1.60
Q1 conservative – experimenting	2-9 5.95 \pm 1.57	1-10 5.89 \pm 1.66	1-10 5.92 \pm 1.62
Q2 group dependent – self sufficient	3-10 6.50 \pm 1.62	1-10 6.22 \pm 1.67	1-10 6.36 \pm 1.65
Q3 undiscipline – self control	1-8 4.94 \pm 1.62	1-10 4.81 \pm 1.98	1-10 4.88 \pm 1.80
Q4 relaxed – tense	4-10 6.69 \pm 1.34	3-10 6.86 \pm 1.45	3-10 6.78 \pm 1.40

From table 5.9 found that in each personality profile, the mean score in both case and control group were not considered extreme deviant from average scores

5.2 Relationship between suicidal attempt and associated dichotomous variables

This section is to determine the effect of each factor on suicidal attempt. The independent factors including marital status, level of education, occupation, income, financial debt, history of physical and psychiatric illness, history of substance use, presence of psychosocial stressor, severity of depression categorized by HAM-D score, presence of anxiety disorder, presence of personality pathology were separately test for their association. For dichotomous predictor, odds ratio is an appropriate measure of association. The factor shown associated with suicidal attempt were later included in a multivariate analysis.

5.2.1 Relationship between demographic data and suicidal attempt in depressed patients.

Table 5.10 Results of a matched case-control study for demographic variables

Variable	Number of pairs		Crude odds ratio	95% CI	McNemar's χ^2	P-value
	Case	Control				
Marital status						
	Married	Other				
Control						
Married	23	12	1.5	.68 - 3.41	1.2	.27
Other	18	37				
Total	41	49				

Table 5.10 Results of a matched case-control study for demographic variables
(continues)

Variable	Number of pairs		Total	Crude odds ratio	95% CI	McNemar's χ^2	P-value
	Case	Control					
Education							
	No or primary school	secondary school or above					
Control	Primary School	School or above					
No or primary school	12	6	18	4.5	1.82-	13.36	.0003*
Secondary school or above	27	45	72		13.33		
Total	39	51	90				
Occupation							
	Unem- ployed	Other					
Control							
Unemployed	4	7	11				
Other	12	67	79	1.71	.62 -	1.32	.36
Total	16	74	90		5.14		
Income							
	5000 or Lower	Above 5000					
Control							
5000 bahts or lower	37	15	52	1.4	.69 -	1	.32
Above 5000 bahts	21	17	38		2.92		
Total	58	32	90				
Financial debt							
	Yes	No					
control							
Yes	5	7	12				
No	20	58	78	2.86	1.16 – 8	6.26	.019*
Total	25	65	90				

From table 5.10 Among a total of 90 pairs of depressed patient, number of pairs that case had low level of education but control did not have ($n = 27$) when compared with number of pairs that control had but case did not have ($n = 6$), so the odds ratio is simply $27/6 = 4.5$. Case were 4.5 times more likely to have low level of education than control (95% confidence interval 1.82 to 13.33) and this is statistically significant (p – value = 0.0003). Additionally we found that case were 2.86 times more likely to have financial debt than control (95% CI : 1.16 to 8, $p = .019$). However, we did not find statistically significant between suicidal attempt and marital status, occupation or patient's income

5.2.2 Relationship between clinical characteristics and suicidal attempt in depressed patients

Table 5.11 Results of a matched case-control study for clinical characteristics

Clinical characteristics	Number of pairs			Crude odds ratio	95% CI	McNemar's χ^2	P-value
	Case	Control	Total				
History of physical illness							
	Have	No	Total				
Control							
Have	7	17	24	.41	.14 –	4.17	.06
No	7	59	66		1.04		
Total	14	76	90				
History of psychiatric illness							
	Have	No	Total				
Control							
Have	1	7	8	1.86	.69-5.5	1.8	.26
No	13	69	82				
Total	14	76	90				

Table 5.11 Results of a matched case-control study for clinical characteristics
(continues)

Clinical characteristics	Number of pairs			Crude odds ratio	95% CI	McNemar's χ^2	P-value
	Case		Total				
History substance use	Case		Total				
Control	Have	No					
Have	5	6	11	4.33	1.74 -	12.5	.0005*
No	26	53	79		12.87		
Total	31	59	90				
History alcohol use	Case		Total				
Control	Have	No					
Have	2	5	7	4.8	1.8 -	12.45	.0005*
No	24	59	83		16.1		
Total	26	64	90				
Current depressive episode	Case		Total				
Control	recurrent	first					
Recurrent	7	4	11	5	1.68-	10.67	.001*
First	20	59	79		20.12		
Total	27	63	90				

From table 5.11 depressed patients with suicidal attempt were 4.33 times more likely to have history of substance use than control (95% CI ; 1.74 to 12.87, p-value = .0005) and 4.8 times more likely to have comorbid alcohol use disorder than depressed patients who never had suicidal attempt (95% CI ; 1.8 to 16.1 , p-value = .0005). Regarding current depressive episode, it was found that depressed patients with suicidal attempt were 5 times more likely to have recurrent depressive episode than control (95% CI ; 1.68 to 20.12 , p-value = .001).

5.2.3 Relationship between family issue and suicidal attempt in depressed patients

In this study, we did not find statistically significant association between suicidal attempt and family history of psychiatric illness or suicide. We also did not find in association with family structure in childhood including early parental death before patient's age of 5 years. However it was found that depressed patients with suicidal attempt were 2.5 times more likely to have family history of alcohol or substance use than control (95% CI ; 1.05 to 6.56 , p-value = .036) as shown in table 5.12.

Table 5.12 Results of a matched case-control study for family issue

Family issue	Number of pairs			Crude odds ratio	95% CI	McNemar's χ^2	P-value
Family structure in childhood ; father and mothers did not live together							
	Case		Total				
Control	Yes	No					
Yes	7	15	22	1.6	.81 -	2.08	.2
No	24	44	68		3.28		
Total	31	59	90				
Family history of psychiatric illness							
	Case		Total				
Control	Yes	No					
Yes	4	8	12	1.625	.624 -	1.19	.383
No	13	65	78		4.52		
Total	17	73	90				

Table 5.12 Results of a matched case-control study for family issue

Family issue	Number of pairs			Crude odds ratio	95% CI	McNemar's χ^2	P-value
Family history of alcohol or substance use							
	Case		Total				
Control	Yes	No					
Yes	1	8	9	2.5	1.05-	5.14	.036*
No	20	61	81		6.56		
Total	21	69	90				
Family history of suicide							
	Case		Total				
Control	Yes	No					
Yes	0	4	4	3	.9-	4	.077
No	12	74	86		12.76		
Total	12	78	90				

5.2.4 Relationship between psychosocial stressor and suicidal attempt in depressed patients

Table 5.13 Outcome of suicidal attempt patients and matched control reporting current stressful life event

Presence of stressful life event	Number of pairs			Crude odds ratio	95% CI	McNemar's χ^2	P-value
	Case	Exposed	No				
Control							
Exposed	32	10	42	3	1.43-	10	.0016*
No	30	18	48	6.88			
Total	62	28	90				

From table 5.13, among a total of 90 pairs of depressed patients, 30 pairs that cases exposed to stressful life event but control did not when compared to 10 pairs that control exposed but case did not. Cases were 3 times more likely to exposure to current stressful life event than control (95% CI:1.43 to 6.88, p-value = .0016). Regarding the type of stressful life events, we found that there were statistically significant between suicidal attempt and argument with spouse (odds ratio = 11.33, 95% CI : 3.56 to 57.67, p-value < .0001) and small mortgage (odds ratio = 5.5, 95% CI : 1.2 to 51.08, p-value = .023) as shown in table 5.14. These findings from measurement with life events in social readjustment rating scale are corresponded to findings about area of psychosocial problem from interview, that are, there were statistically significant on family problem (odds ratio = 2.07, 95% CI : 1.08 to 4.12, p-value = .0183), relationship problem (odds ratio = 12.67, 95% CI : 4.02 to 64.15 p-value < .0001) and financial problem (odds ratio = 3.25, 95% CI : 1.0041 to 13.68, p-value = .049) as shown in table 5.15

Table 5.14 Stressful life events assessed by social readjustment rating scale among case and control group

Life events	Number of pairs			Odds ratio	95% CI	McNemar's χ^2	P-value
	Case	Exposed	No				
Argument with spouse							
Control	Exposed	No					
Exposed	5	3	8	11.33	3.56-	25.97	<.0001*
No	34	48	82		57.67		
Total	39	51	90				
Small mortgage							
Control	Exposed	No					
Exposed	1	2	3	5.5	1.20-	6.23	0.023
No	11	76	87		51.08		
Total	12	78	90				

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

Table 5.15 Area of psychosocial problem from clinical interview among case and control group

Area of psychosocial Problem	Number of pairs			Odds ratio	95% CI	McNemar's χ^2	P-value
	Case	No	Total				
Work							
Control	Yes	No	Total				
Yes	1	10	11	.9	.32-	.05	.82
No	9	70	79		2.46		
Total	10	80	90				
Family							
Control	Yes	No	Total				
Yes	9	15	24	2.07	1.08-	5.57	.0183*
No	31	35	66		4.12		
Total	40	50	90				
Social							
Control	Yes	No	Total				
Yes	0	1	1	1	.01-	.00	1
No	1	88	89		78.49		
Total	1	89	90				
Relationship							
Control	Yes	No	Total				
Yes	7	3	10	12.67	4.02	29.88	<.0001*
No	38	42	80		64.15		
Total	45	45	90				

Table 5.15 Area of psychosocial problem from clinical interview among case and control group (continues)

Area of psychosocial Problem	Number of pairs			Odds ratio	95% CI	McNemar's χ^2	P-value
	Case	No	Total				
Health							
	Case	No	Total				
Control	Yes	No					
Yes	1	5	6	.6	.09-	.5	.73
No	3	81	84		3.08		
Total	4	86	90				
Financial							
	Case	No	Total				
Control	Yes	No					
Yes	0	4	4	3.25	1.004-	4.76	.049*
No	13	73	86		13.68		
Total	13	77	90				
Learning							
	Case	No	Total				
Control	Yes	No					
Yes	0	5	5	.6	.09-3.08	.5	.73
No	3	82	85				
Total	3	87	90				

5.2.5 Relationship between severity of depression and suicidal attempt in depressed patients

Table 5.16 Result of a matched case-control study on severity of depression

Severity of depression	Number of pairs		Odds ratio	95% CI	McNemar's χ^2	P-value
	Case	Total				
	Severe	Mild to moderate				
Control						
Severe	8	7	3.14	1.3 - 8.7	7.76	.0081*
Mild to moderate	22	53				
Total	30	60				

For the clinical status assessment in severity of depression, Hamilton depression scale (HAM-D) was used. We found that 33.3%(n= 30) in case group and 16.7%(n = 15) in control group had HAM-D score in severe level. Among a total of 90 pairs of depressed patients, 22 pairs that cases had severe depression but control did not whereas 7 pairs that control had but cases did not. Cases were 3.14 times more likely to have depression in severe score than control (95% CI : 1.3 to 8.7, p value = .0081) as shown in table 5.16.

5.2.6 Relationship between personality factors and suicidal attempt

Table 5.17 Crude odds ratio of each personality profile

Personality profile	Odds ratio	95% CI	McNemar's Chi 2	p-value
A reserved – outgoing	1	.23-4.35	0.00	1.0
B low-high intelligence	9.33	2.88-47.97	20.16	<.0001*
C emotionally instability – stability	1.69	.82-3.66	2.31	.13
E submissive–assertive, aggressive	0.8	.39-1.62	0.44	0.5
F serious – happy	0.96	.51-1.79	0.02	0.88
G disregards rules – conscientious	0.71	.34-1.45	1.00	0.32
H shy – venturesome, bold	0.36	.15-.8	7.5	.006*
I tough – tender minded	1.71	.62-5.14	1.32	.25
L trust – suspicious	4	.80-38.67	3.6	.058
M practical – imaginative	.37	.18-.72	10.08	.0015*
N genuine – astute	.33	.01-4.15	1	.32
O self assured – apprehensive	.25	.01-2.53	1.8	.18
Q1 conservative – experimenting	.33	.03-1.86	2	.16
Q2 group dependent – self sufficient	.5	.01-9.6	.33	.56
Q3 undiscipline – self control	.77	.30-1.9	.39	.53
Q4 relaxed – tense	0	0-2.42	3	.08

Personality factor were measured with sixteen personality profile and interpreted the results by psychologist. In this study we found that most of personality profile were not statistically significant in association with suicidal attempt in depressed patients except less intelligent (odds ratio = 9.33, 95% IC : 2.88-47.97, p-value < .0001) however cases less likely than controls to be personality as shy (OR = 0.36 95% CI = 0.15-0.8 p-value = .006) or practical (OR = 0.37 95% CI : 0.18- to .72 p-value = .0015). More details are shown in table 5.17 – 5.20.

Table 5.18 Number of pairs and result of personality factor B : less intelligence

Control	Case		Total	Odds Ratio	95% CI	P-value
	Exposed	unexposed				
Exposed	3	3	6	9.33	2.88-47.97	<.0001*
Unexposed	28	56	84			
Total	31	59	90			

Table 5.19 Number of pairs and result of personality factor H : shy

Control	Case		Total	Odds Ratio	95% CI	P-value
	Exposed	unexposed				
Exposed	7	25	32	.36	.15 - .8	.006*
Unexposed	9	49	58			
Total	16	74	90			

Table 5.20 Number of pairs and result of personality factor M : practical

Control	Case		Total	Odds Ratio	95% CI	P-value
	Exposed	unexposed				
Exposed	11	35	46	.37	.18-.72	.0015*
Unexposed	13	31	44			
Total	24	66	90			

5.2.7 Relationship between comorbid anxiety disorder and suicidal attempt in depressed patients

Table 5.21 Result of a matched-case-control study on comorbid anxiety disorder

Comorbid anxiety disorder	Number of pairs			Odds ratio	95% CI	McNemar's χ^2	P-value
	Case	No	Total				
Control	Yes	No					
Yes	2	25	27	.56	.27-1.12	3.10	.07
No	14	49	63				
Total	16	74	90				

Zung self-rating anxiety scale was used to measure anxiety level. The score above 75 percentile represent presence of comorbid anxiety disorder

From table 5.21 among a total of 90 pairs of depressed patient, 14 pairs that cases had comorbid anxiety disorder but control did not whereas 25 pairs that control had but cases did not. We did not find statistically significant in relationship between comorbid anxiety disorder and suicidal attempt ($p = .07$)

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

5.3 MULTIVARIATE ANALYSIS

A conditional logistic regression analysis was performed to derive a best-fitting model to predict the suicidal attempt from the sociodemographic and clinical variable included in table 5.10 to 5.21.

Using conditional maximum likelihood estimation to fit a logistic model that contains main effect when the data were matched on gender and age group, several possible exposures and variables that shown the crude odds ratio from univariate analysis are considered.

I try to test the multi conditional logistic regression by using the backward stepwise method to give the fit model then come to enter method to have the final model. Interaction effect was considered and adjusted. The result was shown in table 5.22.

Table 5.22 Conditional maximum likelihood estimation of an appropriate logistic model for analyzing the relationship between variable and suicidal attempt in depressed patients

Variable	Coefficient (β)	P-value	Odds ratio	95% CI
History of substance use	1.15	.019	3.17	1.21 to 8.32
Educational level	1.1	.025	3.01	1.15 to 7.9
Presence of stressful life event	1.04	.009	2.82	1.29 to 6.15

The factors show in the equation to give the predictive for suicidal attempts in depressed patients were

1. history of substance use
2. education level
3. presence of stressful life event

CHAPTER 6

SUMMARY, DISCUSSION , RECOMMENDATION

6.1 SUMMARY OF THE STUDY

This study aims to examine suicidal attempt in depressed patients in relation to psychosocial stress, severity of depression, the presence of personality disorders, comorbid condition and other associated factors and to identify the factors that can predict suicidal attempt in depressed patient population.

A matched case-control study was used to study the relationship between suicidal attempt and some associated factors as predictor in depressed patients. This study matched case and control for age and gender that were related to both the exposure and the outcome of interest . This study had been conducted at King Chulalongkorn Memorial hospital since 2000, collecting 90 eligible cases and 90 controls.

Psychiatric diagnosis with DSM-IV criteria , details of self harming, psychosocial stress factors and history of illness were assessed. The Hamilton rating scale for depression (HAM-D) were performed for measuring the severity of depression. Information on stressful life events was collected from administering the social readjustment rating scale assessment. The sixteen personality profile as well as Zung self-rating anxiety scale were performed.

The sample consisted of female 75.6% (n = 136) and male 24.4% (n = 44). The mean age were 27.65 years (SD = 10.57) in case, 30.12 years (SD = 10.84) in control and for total was 28.93 years (SD = 10.75). The method employed for suicidal attempt in case was ingestion of drug or chemical agents (93.4%). Psychiatric assessment revealed that 40.5% (n = 73) had adjustment disorder and 23.3% (n = 42) had depressive disorder not otherwise specified. For case most of them were adjustment disorder, for controls were depressive

disorder NOS. It was found that 68.9% in case group (n = 62) and 46.7% in control group (n = 42) reported current stressful life events. The mean score of clinical status from HAM-D scale were 16.69(SD = 3.41) in cases and 13.59 (SD = 3.52) in control. The mean score of anxiety from Zung self-rating anxiety scale were 40.71 (SD = 6.52) in case and 42.57 (SD = 7.40) in control.

There were some factors showing the association to suicidal attempt in depressed patients at the significant level of 0.05. Cases were more likely than controls to have current psychosocial stress (OR = 3, 95% CI = 1.43 to 6.88), severe depression (OR = 3.14, 95% CI = 1.3 to 8.7), recurrent depressive episode (OR = 5, 95%/CI = 1.68, to 20.12), history of substance use (OR = 4.33, 95% CI = 1.74 to 12.87), family history of alcohol or substance use (OR = 2.5, 95% CI = 1.05 to 6.56), financial problem (OR = 2.86, 95% CI = 1.16 to 8), lower level of education (OR = 4.5, 95% CI = 1.82 to 13.33) and personality profile that showed low intelligence (OR = 9.33, 95% CI = 2.88 to 47.97).

Multivariate analysis was performed to examine which factors would have some association or predictor of suicidal attempt in depressed patients from the sociodemographic and clinical variable included in table 5.10 to 5.21. A description of the result model is presented in table 5.22. Each made a significant independent contribution to the prediction of suicidal attempt. The following three factors were statistically significant associated with suicidal attempt: history of substance use (OR = 3.17, 95% CI = 1.21 to 8.32, p = .019), lower level of education (OR = 3.01, 95% CI = 1.15 to 7.9, p = .025), and presence of stressful life event (OR = 2.82, 95% CI = 1.29 to 6.15, p = .009).

6.2 DISCUSSION

Regarding demographic characteristics 75.6% of suicidal attempt patients in this study were female. The finding is consistent with other reports that women are 3-4 times more likely to attempt suicide than men.^{78,79} A review of the world

literature⁶ showed that attempted suicide rates varied between 100 and 300 per 100,000 ; there was a preponderance of female in all countries : about 50 percent of attempt were under 30 years of age ; there were an excess of divorced person ; the lower social classes were over represented. In this study, 44.4% were in age group of 15 to 25 years and mean age under 30 years. However, most of patients were single or married, a small number were divorced, this may be due to the Thai culture value that divorce is a big issue and often it is too difficult to make decision. About half of suicidal attempt patients had educational level as secondary school or graduated and employed.

Ingestion of drug or chemical agents resulting in self poisoning was the most common method for suicidal attempt. The finding was similar to other studies.^{6,76} Regarding type of drug used ; some studies report that insecticide and agents used in agriculture were common whereas we found that paracetamol was the most common. It may be due to this study was conducted in urban area. Although it may count as nonviolent method, paracetamol overdose may cause hepatotoxicity and lead to other serious complications. Availability of paracetamol from over the counter should be paid more attention to prevent suicide. Cleansing agents such as Vim, Vixol, Hiter, detergents were reported by patient for suicidal attempt up to 20%. These also cause medical complication such as corrosive esophagitis which may be followed by stricture. Moreover, one third of the patients had previous history of suicidal attempt and most of them used the same method.

Some studies⁶ report that about 40% of attempters have made a previous attempt. Follow-up studies show that between 13 and 35% will repeat the attempt during the next 2 years. During this time up to 7% will make two or more attempts, 2.5% three or more attempts, and 1%, five or more attempts. Seventy percent of the attempters who ultimately completed suicide died by methods similar to those used in their initial attempt, and the remainder used a more lethal method. Suicide due to drug overdoses in England and Wales decreased in the 20 or so years prior to 1990. Reduced exposure to lethal methods are responsible for the fall in

rate in both genders, while the gender difference in favour of women may be related to their preference for non-violent methods or to their being less affected by the social changes. Among over-the-counter drugs, aspirin and paracetamol are commonly found. Paracetamol appears to have replaced salicylates not only as a widely used analgesic in both genders but also as a very effective method of suicide both alone and in combination with other drugs. From September 1998, the Royal Pharmaceutical Society of Great Britain limited the size of packs of aspirin or paracetamol to 32 tablets or capsules. Although this has been shown to have reduced the amount taken in single overdoses it remains to be seen whether this will be effective in reducing attempted or completed suicide for these drugs. Nevertheless, concerning about these findings may have some benefit for preventing suicidal attempt.

THE RELATIONSHIP BETWEEN SUICIDAL ATTEMPT AND CURRENT PSYCHOSOCIAL STRESS IN DEPRESSED PATIENTS

Evidence from studies suggests that : (i) among those making suicidal attempt there is a high rate of exposure to recent stressful life events and adverse circumstances and (ii) exposure to such events is associated with significant increases in rates of suicidal behaviors.⁸⁰ These studies have reported elevated rates of a range of life stresses in the period preceding suicide^{81,82} and suicidal attempts.^{67,83-87} For example, OR estimates of the association between life events and suicidal attempts range from 1.3 to 15.8 (median = 4) suggesting that recent stresses make a moderate contribution to suicidal attempt risk.

In this study we also found that there were some relationship between suicidal attempt and current psychosocial stress in depressed patients. Cases were three time more likely than control to have stressful life event during 3 months preceding attempted suicide (OR = 3, 95% CI = 1.43 to 6.88, p value = .0016). It was found that stressors about their families and personal relationship were common. We found that there were statistically significant association between suicidal

attempt and argument with spouse (OR = 11.33, 95% CI = 3.56 to 57.67) and small mortgage (OR = 5.5, 95% CI = 1.2 to 51.08) as shown in table 5.13. These findings from measurement with life events in social readjustment ratings scale corresponded to findings about areas of psychosocial problems from clinical interview, that are, there were statistically significant on family problem (OR = 2.07, 95% CI = 1.08 to 4.12), relationship problem (OR = 12.67, 95% CI = 4.02 to 64.15) and financial problem (OR = 3.25, 95% CI = 1.004 to 13.68).

These results are consistent with other studies.^{6,67,81} The circumstances surrounding a suicide attempt invariably involve recent life change, particularly interpersonal stress. Roy A⁶ noted that suicide attempters report five particular events significantly more frequently than controls: serious argument with the spouse, having a new person in the home, serious illness of a family member, serious personal physical illness, and having to appear as a defendant in court. Lotrakul M et al⁷⁷ studied the nature of stressors in twenty adults who attempted suicide and found that female subjects' stressors mostly resulted from extramarital affairs of their husband while a majority of the male subjects faced with conflict or dispute with their spouse or close relatives. Nilchaikovit T et al⁷⁵ found that factors correlated with increased suicidal ideation were negative life events in the past years and current life stress such as marital conflict, conflict with others. Koivumaa Honkanen H et al⁸⁹ noted that life dissatisfaction has a long term effect in the risk of suicide and this seems to be partly mediated through poor health behaviors. Nevertheless, legal problems and stress about physical illness were found less common and no association with suicidal attempt in depressed patients in this study. This may be due to physical illness stressors were found more often among suicide over 30 years old⁶ but in this study most of them were young. Therefore help should be aimed at improving stress from marital or relationship problems, life skills and positive coping skills should be promoted.

Financial difficulties related to suicidal attempt although a small number of patients were unemployed. It may be explained by most of them had low income ;

about 90% had income less than 10,000 baht per month, some had financial debt and economic crisis in Thailand since 1997 may have some impact on their work and finance.

THE RELATIONSHIP BETWEEN SUICIDAL ATTEMPT AND SEVERITY OF DEPRESSION IN DEPRESSED PATIENTS

A large number of studies have reported that people with mood disorders have markedly increased risks of suicide with OR estimates ranging from 11 to 27 (median = 12)⁸² and of suicidal attempt (OR estimates ranging from 7 to 28, median = 13).^{23,46,90} Major depressive disorder is considerable to be high risk for suicide. In this study although case and control had equal number for clinical diagnosis of major depressive disorder, we found that depressed patients who attempted suicide had mean score in HAM-D higher than control (Table 5.8) and there are association between severe depression and suicidal attempt (OR = 3.14, 95% CI = 1.3 to 8.7).

Evaluating depressed patients by using tools for measuring severity of depression such as HAM-D beside diagnosis from clinical interview may be helpful for suicidal precaution or pay more attention for suicidal risk especially to general practitioners.

THE RELATIONSHIP BETWEEN SUICIDAL ATTEMPT AND RECURRENT DEPRESSIVE EPISODE

Patients who are experiencing at least a second episode of depression are classified in DSM-IV as having depressive disorder, recurrent. Although some people have only a single episode of major depressive disorder, with full return to premorbid functioning, it is estimated that from 50% to 80% of the people who have such an episode will eventually have another episode, at which time the illness will meet the criteria for recurrent depressive disorder.⁹¹ The course of recurrent

depressive disorder is variable. Some people have episode separated by many years of normal functioning, others have clusters of episodes, and still others have increasingly frequent episodes as they grow older. Around 21% of patients with recurrent depressive disorders will attempt suicide and unfortunately many will die⁴⁵. In this study, it was found that 30% of suicidal attempt patients had recurrent depressive episode and there were statistically significant association between suicidal attempt and recurrent depressive episode (OR = 5, 95% CI = 1.68 to 20.12). Therefore suicidal prevention through proper management for recurrent depressive episode is a great importance.

Major depressive disorder is not a benign disorder. It tend to be chronic, and patients tend to relapse. Recurrence of major depressive episodes are also common. About 25% of patients experience a recurrence in the first 6 months after release from a hospital, about 30% to 50% in the first 2 years and about 50% to 75% in 5 years. The incidence of relapse is lower than these figures in patients who continue prophylactic psychopharmacological treatment and in patients who have only one or two depressive episodes. Generally, as a patient experiences more depressive episodes, the time between the episodes decreases and the severity of each episode increases. Risk factors for recurrence of major depressive disorder include multiple prior depressive episodes, incomplete recoveries from prior episodes, severe, chronic, presence of additional nonaffective psychiatric diagnosis or chronic general medical disorder, lack of self confidence, age and loss events.⁹²⁻⁹⁴

Regarding outpatient treatment, most depressed suicidal patients has a history of therapy ; however, less than half were receiving psychiatric treatment at the time of suicide. Of those who were in treatment, studies have shown that it was less than adequate. For example, most patients who received antidepressants were prescribed subtherapeutic doses of the medication. Some studies^{6,95} found that only 3% of depressed suicide victims had received antidepressants in adequate dosage, 7% had received weekly psychotherapy and 3% had

undergone electroconvulsive therapy. Men had more often used violent suicide methods. Thus, the Finnish workers concluded that for suicide prevention in major depressive disorder, great improvement in treatment and follow-up are required. Optimal treatment strategies should induce full remission, maintain long term recovery to ensure against relapse or prevent recurrence and be effective in treating depression and comorbid disorders.

RELATIONSHIP OF SUICIDAL ATTEMPT AND PERSONALITY FACTOR IN DEPRESSED PATIENTS

A high proportion of those who commit suicide have various associated personalities difficulties or disorder. Having a personality disorder may be a determinant of suicidal behavior in several ways : by predisposing to major mental disorder like depressive disorder or social adjustment ; by precipitating undesired life events ; by impairing the ability to cope with a mental or physical disorder ; and by drawing persons into conflicts with those around them including family members

Certain personality traits have often been cited as predisposing factors in suicidal behavior. Studies have examined association between risk of suicide and suicidal attempt in young people and the following traits : low self esteem ; external locus of control ; hopelessness ; introversion ; neuroticism ; impulsivity ; recklessness ; aggression and impulsive violence ; passive, dependent, oral, obsessive and hysterical personality traits ; state and trait anxiety and anger ; an aggrieved attitude ; social inadequacy ; and diminished cognitive attitude ; social inadequacy ; and diminished cognitive ability to evaluate the consequences of one's actions.^{85,96-98}

In this study we found that personality profile that showed less intelligence was statistically significant in association with suicidal attempt in depressed patients (OR = 9.33, 95% CI = 2.88-47.97, P<.0001) and cases were less likely than controls to be personality as shy or practical. It is plausible that these patients are less

adaptable due to less intelligence and cope poorly with stress or undesired life events so may be at increased risk of suicide.

Nevertheless there are some difficulties in examining the contribution of personality traits to suicide attempt risk. These difficulties include the argument that : (i) self reports of personality characteristics may be contaminated by current mental state factors, in particular, depression ; (ii) personality characteristics might be less clearly apparent among young people, than in older individuals ; (iii) among young people, it may be difficult to differentiate, diagnostically, between behaviors which represent mental disorders and those which emerging personality characteristics to determine the extent of comorbidity between those two set of risk factors. There is a strong need for all of these issues to be addressed in further research using rigorously designed controlled and longitudinal studies.

RELATIONSHIP BETWEEN SUICIDAL ATTEMPT AND COMORBID CONDITIONS

SUBSTANCE USE DISORDER

Substance use disorder are also linked with suicide, with a series of studies yielding OR estimates ranging from 3.3 to 10.7 (median = 5.5).⁹⁹ Similar trends have been found for suicide attempt behavior and aspects of substance abuse, with studies yielding OR ranging from 1.7 to 11.5 (median = 5.4).^{23,46} We found that depressed patients with suicidal attempt were 4.33 times more likely to have history of substance use than control (95% CI : 1.74 to 12.87) and 4.8 times more likely to have comorbid alcohol use disorder (95% CI = 1.8 to 16.1). Suokas J and Lonqvist J¹⁰⁰ have shown that increased alcohol use during an initial attempt predicts increased risk of suicide. This emphasizes the importance of alcohol and its effect on mood and impulse control for decision making. Therefore, for those with concurrent substance abuse /dependence and depressive disorder, the most important early psychiatric intervention may be immediate recognition an appropriate treatment for both their affective and substance use disorder.

ANXIETY DISORDER

Comorbid psychiatric disorders may be important as contributing risk factors to suicide in individuals, but this study provides no evidence for the hypothesis that comorbid anxiety disorders are predictors of suicidal attempt in depressed patients. Increased risks of suicide and suicidal attempt have been reported for people with anxiety disorder.^{23,46} However, when the association between anxiety disorder and risk of suicidal behavior has been controlled for mood disorder, anxiety disorders have not made significant contribution to suicide risk, suggesting that the observed association between anxiety disorders and suicidal behavior may reflect mood disorders that are frequently comorbid with anxiety disorder.^{46,80}

PHYSICAL ILLNESS

The relation of physical health and illness to suicide is significant. Previous medical care appears to be a positively correlated risk indicator of suicide : 32 % of all person who commit suicide have had medical attention within 6 months of death . Factors associated with illness and contributing to both suicide and suicidal attempt are loss of mobility, especially when physical activity is important to occupation or recreation ; disfigurement, particularly among women ; and chronic intractable pain. In addition to the direct effects of illness, the secondary effects – for example, disruption of relationship and loss of occupational status are prognostic factors. A significant association was found between medical conditions and suicidality that persisted after adjusting for depressive illness and alcohol use.¹⁰¹ However our finding did not find association between suicidal attempt and physical illness in depressed patients.

RELATIONSHIP TO OTHER FACTORS

EDUCATION LEVEL

Most studies which have examined associations between measures of social disadvantage and suicide or suicidal attempt have reported increased risk of suicidal behavior among individuals from socially disadvantaged backgrounds characterized by such features as low socioeconomic status, limited educational achievement, low income and poverty.^{82-83,102-104} Risk of suicide was shown to be elevated among young people who had dropped out of school (OR = 5.1) or were not at college⁸¹ (OR = 7.8). In Thailand Serisathien P et al⁷⁴ studies suicide attempter in hospital at Rayong province and found that demographic factors related suicide attempts were educational level, total family income and its sufficiency. Our finding also found that lower level of education associated with suicidal attempt (OR = 4.5, 95% CI = 1.82 to 13.3) however we did not find association with income, it may be due to this study focus on patient's income, not on total family income.

FAMILY

The importance of the role of the family in the development and course of major psychiatric illness has become increasingly recognized over the past 10 years.¹⁰⁵ They find that the family pathology evident during an acute depressive episode continues after the patient's remission; that the course of depressive illness, relapse rates, and suicidal behavior are all affected by family functioning; and that children of depressed parents are at high risk for psychopathology. Some studies^{105,106} found that depressed inpatients who attempted suicide perceived their family functioning to be worse than did their families. Suicidal patients also viewed their families more negatively than did depressed nonsuicidal inpatients, who actually viewed their family functioning more positively

than did their family members. Keitner GI et al¹⁰⁵ found that previous suicide attempts, interepisodic adjustment, changes in family constellation, and a negative perception of family functioning were characteristic of depressed patients with recurrent suicidal attempt.

Agid O et al¹⁰⁷ found that loss of parent during childhood significantly increased the likelihood of developing major depression during adult life (OR = 3.8, $p = .001$). The effect of loss due to permanent separation ($p = .008$) was more striking than loss due to death, as was loss before the age of 9 years (OR = 11, $p = .003$) compared to later childhood and adolescence.

King RA et al¹⁰⁸ found that low parental monitoring and risk behaviors (such as smoking, physical fighting, alcohol intoxication and sexual activity) are associated with increased risk of suicidal ideation and attempts in adolescents. Qin P et al¹⁰⁹ did a nest case control study using data from Danish Longitudinal registers. They included 4262 people who had committed suicide aged 9-45 years during 1987-97 (cases) and 80238 population based controls matched for age, sex and date of suicide and found that a family history of completed suicide and psychiatric illness significantly and independently increased suicide risk (OR = 2.58, 95% CI = 1.84 to 3.61) and 1.31 [1.19 to 1.45] respectively)

Family issue may be related to suicide in several ways : such as familial environmental factors (including early parental deprivation), family functioning, family history of psychopathology (depressive disorder, substance use disorder, suicidal behavior) , etc. In this study it was found that depressed patients with suicidal attempt were 2.5 times more likely to have family history of alcohol or substance use than control (95%CI = 1.05 to 6.56, P-value = .036). This relationship may reflect the genetic association, family stresses, impaired family function or supporting system. However we did not find relationship between family structure and family history of psychiatric illness to suicidal attempt in depressed patients. It may be due to family factors influence long term impact rather than precipitating attempted suicide or there are need to have larger sample size to determine this association.

THE PREDICTORS OF SUICIDAL ATTEMPT

From the univariate analysis, factors showing the association of suicidal attempt in depressed in patients were current stressful life event, severe depression, recurrent depressive episode, history and family history of substance use, financial problem, low intelligence and lower level of education.

Multivariate analyses was performed. It indicated 3 factors that were important in predicting suicidal attempt in depressed patients : history of substance use, educational level and presence of stressful life event. These factors were found to have independent effects on suicidal attempt from multivariate conditional logistic regression analysis.

Our results were consistent with findings from other studies.^{67,108,110-112} Kelly TM et al¹¹⁰ investigated the impact of recent life events and social adjustment on suicide attempter and noted that suicide attempter reported more recent life events and scored lower social adjustment compared with non attempters. Beautrais AL et al⁶⁷ found that important proximal occurrences for serious suicide attempts among young people include a series of life events associated principally with interpersonal conflicts relationship difficulties and legal problems.

Philip MP et al¹¹¹ studied risk factor for suicide in China and found important factors were high depression symptom, acute stress at time of death, low quality of life, high chronic stress and severe interpersonal conflict in the 2 days before death.

Cheng ATA et al¹¹² reported five major risk factor for suicide. There were loss event, suicidal behavior in first-degree relatives, major depressive episode, emotionally unstable and substance dependence.

Beautrais AL¹¹³ noted that commit suicide and medically serious suicide attempts are two overlapping population that share common psychiatric diagnosis and history features but are distinguished by gender and patterning of psychiatric disorder. Commit suicides were more likely to be male (OR = 1.9, 95% CI = 1.1 to 3.2) ; older (OR = 1.03, 95% CI = 1.02 to 1.04) and to have a current

diagnosis of non affective psychosis (OR = 8.5, 95% CI = 2 to 35.9). Suicide attempt were more likely than suicide to be female ; have a current diagnosis of anxiety disorder (OR = 3.5, 95% CI = 1.6 to 7.8) and to be socially isolated (OR = 2, 95% CI = 1.2 to 3.5). Multiple logistic regression identified the following risk factors that were common to suicide and serious suicide attempts : current mood disorder ; previous suicide attempts ; prior outpatient psychiatric treatment ; admission to psychiatric hospital within the previous year ; low income ; a lack of formal educational qualification ; exposure to recent stressful interpersonal, legal and work related life events.

Dieserud G et al¹¹⁴ applied a cognitive psychological approach toward an integrative model of suicide attempt. They expand previous research on stress-vulnerability models of depression and problem solving deficits, as it relates to suicide attempt. The results indicated a two path model of suicide attempt. The first path began with low self-esteem, loneliness and separation or divorce, which advanced to depression, and was further mediated by hopelessness and suicidal ideation which led to suicide attempt. The second path developed from low self esteem and a low sense of self-efficacy and advanced to suicide attempt, mediated by a negative appraisal of one's own problem solving capacity and poor interpersonal problem-solving skills. The importance of addressing both depression and problem-solving deficits when working with suicide attempter is noted. Problem solving capacity mostly depend on intellectual, education and training. These may explain why depressed patient who had less intelligence and lower level education employed suicidal attempt when exposure to stressful life events.

When considering suicide prevention, the individual should be seen in an ecological interactive relationship with the environment, where the suicidal act may be a response to internal and external stress . All of the above factors should be considered when planning a preventive strategy.

Restricting the availability of dangerous substances and commonly drugs used for employing suicidal attempt should be considered. Additionally, reduction of alcohol and substance misuse by young people may help to prevent suicide.

Suicide may be precipitated by interpersonal problems, indicating that improvements in interpersonal and life skills may be beneficial. Furthermore, depressed patients should have the knowledge of where to obtain help, in times of crisis. Effective treatment and follow-up are required for depressed patients who are at high risk of suicidal behavior.

6.3 CONCLUSION

Presence of current stressful life event, particularly family or interpersonal relationship problems, as well as history of substance use and lower level of education appear to have an important role in suicidal attempt in depressed patients. These findings underline the importance of adequate assessment of these factors when evaluating suicidal risk in depressed patients and development preventive strategies for those patients.

6.4 IMPLICATION

- This study provides the information for development of appropriate follow up and treatment of depressed patients known to be at high risk of suicidal behavior, including those who have recent stressful life event .

- This study provides the information for development of general mental health programs which aim to foster good mental health skill among young people especially those who are in lower level of education.

- Adding a family approach to the treatment of depressive illness may be helpful , especially for depressed female patients who are experiencing marital turmoil.

- Implement training for recognition of at risk behavior and delivery of effective treatment particularly for those with concurrent substance abuse /dependence and depressive disorder.

6.5 LIMITATION

- This study was conducted at hospital in Bangkok and most of patients had residence in Bangkok, the social factor about urbanization may have some influence on characteristics of patients who attempted suicide.

- There are small number of depressed elderly patients in this study so there may be limited interpretability for generalization to these group.

- Self reports of personality characteristics may be contaminated by current mental state factors particularly depression.

- This study did not focus on biological factor especially about serotonin dysregulation and genetic study because there were limitation on laboratory investigations however we also concerned with family suicide history and family psychiatric history.

6.6 SUGGESTION FOR FURTHER STUDIES

- Further research will need to address the specific risk factors associated with suicide or suicidal attempt in depressed elderly patients.

- Further research using rigorously designed controlled and longitudinal studies in examining the contribution of personality traits to suicide attempt risk.

- Studies focusing on familial factors in suicidal behavior on aspect of family functioning and their perception, role of supporting system

- Research about protective factors against stress related suicidal behavior such as social adjustment, supporting system.

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. Kaplan HI. Mood disorder. In : Kaplan HI, Sadock BJ, eds. Synopsis of psychiatry, behavioral science/clinical psychiatry. 8th ed. Baltimore: Williams & Wilkins, 1998.
3. Weissman MM, Bland RC, Canino GJ, Faravelli C, Greenwald S, Hwu HG, et al. Cross national epidemiology of major depression and bipolar disorder. JAMA 1996;276:293-9.
4. Sartorius N. The use of public health approaches in mental health programmes. Int Clin Psychopharmacol 1999;14 (suppl 3):S1-2.
5. Murray CJ, Lopez AD, Jamison DT. The global burden of disease in 1990 : summary results, sensitivity analysis and future directions. Bull World Health Organi 1994;72:495-509.
6. Roy A. Suicide. In : Sadock BJ, Sadock VA, eds. Kaplan & Sadock's comprehensive textbook of psychiatry. 7 th ed. Baltimore : Lippincott Williams & Wilkins ; 2001:2031-9.
7. Pokorny AD. Suicide rates in various psychiatric disorders. J Nerv Ment Dis 1964;139:499-506.
8. Isomatsa ET, Henriksson MM, Hillevi MA, Heikkinen ME, Huoppasalmi KI, Lonqvist JK. Suicide in major depression. AM J Psychiatry 1994;151:530-6.
9. Ennis J, Bames R, Kennedy S, Trachtenberg D. Depression in self-harm patients. Br J Psychiatry 1989;154:41-7.
10. Buzan RD, Weissberg MP. Suicide : risk factor and prevention in medical practice. Annu Rev Med 1992;43:37-46.
11. Avery D, Winokur G. Suicide, attempted suicide, and relapse rates in depression. Arch Gen Psychiatry 1978;35:749-53.

12. Rutz W, Von Knorring L, Malinder J. Frequency of suicide on Gotland after systematic postgraduate education of general practitioners. Acta Psychiatrica Scand 1989 ;79:151-4.
13. Jacob DG. Depression screening as an intervention against suicide. J Clin Psychiatry 1999 ; 60(suppl 2):42-5.
14. Paykel ES, Dienes MN. Suicide attempts following acute depression. J Nerv Ment Dis 1971;153:234-43.
15. Crook T, Raskin A, Davis D. Factors associated with attempted suicide among hospitalized depressed patients. Psycholog Med 1975;5:381-8.
16. Sonneck G, Grunberger J, Ringel E. Experimental contribution to the evaluation of the suicidal risk of depressive patients. Psychiatria Clin 1976;9:84-96.
17. Slater J, Depue RA. The contribution of environmental event and social support to serious suicide attempts in primary depressive disorder. J Abnorm Psychology 1981;90:275-85.
18. Bronisch T, Hecht H. Comparison of depressed patient with and without suicide attempts in their past history. Acta Psychiatr Scand 1987;76:438-49.
19. Carisson GA, Rich CI, Grayson P, Fowler RC. Secular trends in psychiatric diagnoses of suicide victims. J Affect Disord 1991;21:127-32.
20. Murphy GE, Wetzel RD. The lifetime risk of suicide in alcoholism. Arch Gen Psychiatry 1990;47:383-92.
21. Murphy GE, Wetzel RD, Robins E, McEvoy L. Multiple risk factors predict suicide in alcoholism. Arch Gen Psychiatry 1992 ; 49 :459-63.
22. Henriksson MM, Aro HM, Marttunen MJ, Heikkinen ME, Isometsa ET, Kuoppasalmi KI, Lonnqvist JK, Mental disorders and comorbidity in suicide. Am J Psychiatry 1993 ; 150 : 935-40.

23. Andrews JA, Lewinsohn PM. Suicidal attempts among older adolescents : prevalence and co-occurrence with psychiatric disorders. J Am Acad Child Adoles Psychiatry 1992 ; 31 : 655-62.
24. Mann AH, Cheng TA, Chan KA. Personality disorder in suicide : case-control study. Br J Psychiatry 1997;170:441-6.
25. 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.
26. World Health Organization treatment protocol project. Management of Mental disorders. 2 nd ed. Sydney : World Health Organization collaborating center for mental health and substance abuse, 1997.
27. Murray CJ, Lopez AD. The Global Burden of Disease : a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Cambridge, Mass : Harvard school of public health on behalf of The World Health Organization and the World Bank ; 1996.
28. Sitasuwan J. Epidemiology of psychiatric disorders in Bangkok Noi District. J Psychiatr Assoc Thailand 1976;21:1-7.
29. Otrakul A, Chareonkum S, Tungtrungpiroj V. Depression of elderly in urban and rural area. Bull Dep Med Service 1993;18(10):503-7.
30. Jaisin S. A Survey of mental problem in Cholburi Province. J Psychiatr Assoc Thailand 1988;33:119-27.
31. Trangkasombat U Depression in junior high school students in the Bangkok metropolis. J Psychiatr Assoc Thailand 1996;41(3):162-73.
32. Thavichachart N, Mehasupa O, Thavichachart T. Psychosocial factors correlate to depression in elderly : comparative study in Bangkok and Uthaitani province. Chula Med J 1991;35(4):195-203.

33. Thavichachart N, Intoh P, Thavichachart T, Meksupa O, Tangwongchai S, Sughondhabirrom A, et al. Epidemiological survey of mental disorders and knowledge attitude practice upon mental health among people in Bangkok metropolis. J Med Asso Thai 2001;84(suppl 1):118-26.
34. Mc Dowell I, Kristjansson E, Netwell C. Depression. In : Mc Dowell I, Newell C, eds, Measuring health : a guide to rating scales and questionnaires. 2nd ed. New York : Oxford university press 1996 : 238-42, 269-76.
35. 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(4) :235-46.
36. Klerman GL, Weissman MM. The course, morbidity and costs of depression. Arch Gen Psychiatry 1992;49:831-4.
37. Keller MD, Beardslee WR, Dorer DJ, Lavori PW, Samuelson H, Klerman GL. Impact of severity and chronicity of parental affective illness on adaptive functioning and psychopathology in children. Arch Gen Psychiatry 1986 ; 43:930-7.
38. Mintz J, Mintz LI, Arruda MJ, Hwang SS. Treatments of depression and the functional capacity to work. Arch Gen Psychiatry 1992 ; 49:761-8.
39. Well K, Stewart HR. The functioning and well being of depressed patients. JAMA 1989 ;262 : 914-9.
40. Well KB, Rogers W, Burnam A. How the medical comorbidity of depressed patients differ across health care settings : results from Medical Outcome Study. Am J Psychiatry 1991;148:1688-96.
41. Greenberg P, Stiglin LE. The economic burden of depression in 1990. J Clin Psychiatry 1993;54:405-18.
42. Sadock BJ, Sadock VA. Emergency psychiatric medicine. In : Sadock BJ, Sadock VA, eds. Kaplan & Sadock's synopsis of psychiatry : behavioral science / clinical psychiatry. 9th ed. Philadelphia : Lippicott Williams & Wilkins, 2003 :900-22.

43. Lotrakul M. Suicide trends in Thailand categorized by age and gender. J Psychiatr Assoc Thailand 1998 ; 43(1):67-83.
44. Bunditchate A, Saosarn P, Kitiruksanon P, Chutha W. Epidemiology of mental disorders among Thai people. J Psychiatr Assoc Thailand 2001 ; 46(4) :335-43.
45. Sartorius N. The economic and social burden of depression. J Clin Psychiatry 2001 ; 62 [suppl 15] :8-11.
46. Beautrais AL, Joyee PR, Mulder RT. Psychiatric illness in a New Zealand sample of young people making serious suicidal attempts. New Zealand Med J 1998 ; 111 :44-8.
47. Grunhaus L. Clinical and Psychological characteristics of simultaneous panic disorder and major depression. Am J Psychiatry 1988;145:1214-21.
48. Mudler RT. Personality pathology and treatment outcome in major depression : a review. Am J Psychiatry 2002 March ; 159(3):359-71.
49. Henriksson MM, Marttunen MJ, Isometsa ET, Heikkinen ME, Aro HM, Kuoppassalmi KI, Lonnqvist JK. Mental disorders in elderly suicide. Int Psychogeriatr 1995 ; 7 : 275-86.
50. Harwood D, Hawton K, Hope T, Jacoby R. Psychiatric disorder and personality factors associated with suicide in older people : a descriptive and case-control study. Int J Geriatr Psychiatry 2001 ; 16:155-65.
51. Holmes TH, Rahe RH. The social Readjustment Rating Scale. J Psychosom Res 1967;11:213-8.
52. Thoits PS. Dimensions of life events that influence psychological distress : an evaluation and synthesis of the literature. In:Kaplan HB, ed. Psychosocial Stress : trends in theory and research. New York : Academic Press, 1983:33-102.
53. Paykel ES. Life events, Social support and depression. Acta Psychiatr Scand 1994;377:50-8.

54. Kessler RC. The effects of stressful life events on depression. Annu Rev Psychol 1997;48:191-214.
55. Kendler KS, Karkowski LM, Prescott CA. Causal relationship between stressful life events and the onset of major depression. Am J Psychiatry 1999;156:837-41.
56. Brent DA, Perper JA, Moritz G, Baugher M, Roth C, Balach L, et al. Stressful life events, psychopathology, and adolescent suicide: A case-control study. Suicide Life Threat Behav 1993;23:179-87.
57. Lesage AD, Boyer R, Grunberg F, Vanier C, Morrissette R, Menard-Buteau C, Loyer M. Suicide and mental disorders : A case-control study of young men. Am J Psychiatry 1994;151:1063-8.
58. Rich CL, Fowler RC, Fogarty LA, Young D. San Diego suicide study III : relationship between diagnoses and stressor. Arch Gen Psychiatry 1988;45:589-92.
59. Paykel ES, Prusoff BA, Myers JK. Suicide attempt and recent life events : a controlled comparison. Arch Gen Psychiatry 1975;32:327-33.
60. Birchnell J. Some familial and clinical characteristic of female suicidal psychiatric patients. Br J Psychiatry 1981 ; 138:381-90.
61. Brent DA, Kerr MM, Goldstein C, Bozigar J, Wartella M, Allan MJ. An outbreak of suicide and suicidal behavior in a high school. J Am Acad Child Adolesc Psychiatry 1989;28:918-24.
62. Davidson LE, Rosenberg ML, Marcy JA, Franklin J, Simmons JT. An Edipemiologic study of risk factors in two teenage suicide clusters. JAMA 1989;262:2687-92.
63. Wanger BM. Family risk factors child and adolescent suicidal behavior. Psychol Bull 1997;121:246-98.
64. Kessler RC, Downey G, Milavsky JR, Stipp H. Clustering of teenage suicides after television news stories about suicides : a reconsideration. Am J Psychiatry 1988;145:1379-83.

65. Gould MS, Wallenstein S, Kleinman MH. Time-space clustering of teenage suicide. Am J Epidemiol 1990;131:71-8.
66. Gould MS, Wallenstein S, Kleinman MH, O'Carroll P, Mercy J. Suicide clusters : an examination of age-specific effects. Am J Public Health 1990;80:211-2.
67. Beautrais AL, Joyce PR, Mulder KT. Precipitating factors and life events in serious suicide attempts among youths age 13 through 24 years. J Am Acad Child Adolesc Psychiatry 1997;36:1543-51.
68. Kendler KS, Kessler RC, Walters EE, Maclean C, Neal MC, Heath AC, et al. Stressful life events, genetic liability, and onset of an episode of major depression in women. Am J Psychiatry 1995 ; 152 : 833-42.
69. Brent DA, Perper JA, Goldstein CE, Kolko DJ, Allan MJ, Allman CJ, et al. Risk factors for adolescent suicide : A comparison of adolescent suicide victims with suicidal inpatient. Arch Gen Psychiatry 1988;45:581-8.
70. Motto JA, Heilbron DC, Juster RP. Development of a clinical instrument to estimate suicide risk. Am J Psychiatry 1985;142:680-6.
71. Walton HJ. Suicidal Behavior in Depression Illness. J Ment Sci 1958; 104:884.
72. Chinapatanapongsa E. A case-control study of suicidal attempt in age group 15-30 years. Master' thesis, Department of epidemiology, Graduate studies, Mahidol university, 1987.
73. Palitpongpanim P, Thanapaisal A, Gegina S. A study of 485 suicide attempters in Chiangrai regional hospital, northern Thailand. J Psychiatr Asso Thailand 1998 ; 43(1) : 2-13.
74. Serisathien P, Ucharatana W, Boonchome R. An epidemiological study of suicide attempter patients attending governmental hospital at Rayong Province. J Psychiatr Asso Thailand 1998 ; 43(1):14-21.
75. Nilchaikovit T, Sukying C. Community survey of suicidal ideation in Bangkok : a preliminary report. J Psychiatr Asso Thailand 1997; 42(2) : 77-87.

76. Trangkasombat U, Nukhaw O. Psychopathology of suicidal adolescents. J Psychiatr Assoc Thailand 1998 Jan-Mar ;43(1):22-38.
77. Lortrakul M, Thanapaisal A, Genenia S. Stressors and coping behaviors among males and females who attempted suicide. J Psychiatr Assoc Thailand 2001 ; 46(1):37-48.
78. Kushner HI. Women and suicidal behavior : epidemiology, gender, and lethality in historical perspective. In : Canetto SS, Lester D, eds. Women and suicidal behavior. New York : Springer, 1995 : 11-34.
79. McIntosh JL. US suicide : 1990 official final data. Denver : American association of suicidology, 1993.
80. Beautrais AL. Risk factors for suicide and attempted suicide among young people. Aust NZ J Psychiatry 2000 ; 34 : 420-36.
81. Gould MS, Fisher P, Parides M, Flory M, Shaffer D. Psychosocial risk factors for child and adolescent completed suicide. Arch Gen Psychiatry 1996;53:1155-62.
82. Lesage AD, Boyer R, Grunberg F et al. Suicide and mental disorders : a case-control study of young men. Am J Psychiatry 1994 ; 51 : 1063-8.
83. Dubow EF, Kausch DF, Blum MC, Reed J, Bush E. Correlates of suicidal ideation and attempts in a community sample of junior high and high school students. J Clin Child Psychology 1989 ; 18 : 158-66.
84. de Wilde EJ, Kienhorst CMW, Diekstra RFW, Wolters WHG. The relationship between adolescent suicidal behaviour and life events in childhood and adolescence. Psychiatry 1992 ; 149 : 45-51.
85. Kienhorst CWM, de Wilde EJ, Diekstra RFW, Wolters WHG. Differences between adolescent suicide attempters and depressed adolescents. Acta Psychiatr Scand 1992 ; 85 : 222-8.
86. Pfeffer CR, Klerman GL, Hurt SW, Lesser M, Peskin JR, Siefker CA. Suicidal children grow up : demographic and clinical risk factors for adolescent suicide attempts. J Am Acad Child Adoles Psychiatry 1991 ; 30:409-16.

87. Wetzler S, Asnis GM, Hyman RB, Virtue C, Zimmerman J, Rathus JH. Characteristics of suicidality among adolescents. Suicide Life Threat Behav 1996 ; 26 : 37-45.
88. Donald M, Dower J, Lucker J, Raphael B. Prevalence of adverse life events, depression and suicidal thoughts and behavior among a community sample of young people aged 15-25 years. Aust NZJ Public Health 2001 oct ; 25(5):426-32.
89. Koivumaa - Honkanen H, Honkanen R, Viinamaki H, Heikkla K, Kaprio J, Koskenvuo M. Life satisfaction and suicide : a 20-year follow-up study. Am J Psychiatry 2001 Mar;158(3):433-9
90. Pelkonen M, Marttunen M, Pulkkinen E, Laippala P, Aro H. Characteristics of out-patient adolescent with suicidal tendencies. Acta Psychiatrica Scand 1997; 95:100-7.
91. Mueller TI, Leon AC, Keller MB, Solomon DA, Endicott J, Coryell W, et al. Recurrence after recovery from major depressive disorder during 15 years of observational follow-up. Am J Psychiatry 1999;156:1000-6.
92. Keller MB, Lavori PW, Mueller TI. Time to recovery, chronicity and levels of psychopathology in major depression : a 5 years prospective follow-up of 431 subjects. Arch Gen Psychiatry 1992 ; 45 :809-16.
93. Keller MB, Lavori PW, Rice J. The persistent risk of chronicity in recurrent episode of nonbipolar major depressive disorder : a prospective follow-up. Am J Psychiatry 1986;143:24-8.
94. Surtee PG, Wainwright NW. Fragile states of mind: neuroticism vulnerability and the long-term outcome of depression. Br J Psychiatry 1996;169:338-47.
95. Isometsa E, Henriksson M, Aro H, Heikkinen M, Kuoppasalmi K, Lonnquist J. Suicide in major depression. Am J Psychiatry 1996;151:530.

96. de Wilde EJ, Kienhorst CMW, Diekstra RFW, Wolters WHG. The specificity of psychological characteristics of adolescent suicide attempters. J Am Acad Child Adoles Psychiatry 1993;32:51-9.
97. Smith K, Crawford S. Suicidal behaviour among “normal” high school students. Suicide Life Threat Behav 1986;16:313-25.
98. Benjaminsea s, Krarup G, Layritsen R. Personality parental rearing behaviour and parental loss in attempted suicide : a comparative study. Acta Psychiatr scand 1990 ;82:389-97.
99. Hawton K, Fagg J, Platt S, Hawkins M. Factors associated with suicide after parasuicide in young people. Br Med J 1993;306:1641-4.
100. Suokas J, Lonngvist J. Suicide attempts in which alcohol is involved : a special group in general hospital emergency rooms. Acta Psychiatr Scand 1995;9(1):36-40.
101. Druss B, Pincus H. Suicidal ideation and suicide attempts in general medical illness. Arch Intern Med 2000 May 22;160(10):1522-6.
102. Bucca M, Ceppi M, Peloso P, Archellaschi M, Mussi D, Fele P. Social variables and suicide in the population of Genoa, Italy. Compre Psychiatry 1994;35:64-9.
103. Gunnell DJ, Peter TJ, Kammerling RM., Brooks J. Relation between parasuicide, suicide, psychiatric admissions and scocio-economic deprivation. Br Med J 1995;311:226-30.
104. Petronis KR, Samuels JF, Moscicki EK, Anthony JC. An epidemiologic investigation of potential risk factors for suicide attempts. Social Psychiatry and Psychiatric Epidemiology 1990 ;25:193-9.
105. Keitner GI, Miller IW. Family functioning and major depression : an overview. Am J Psychiatry 1990;147:1128-37.
106. Keitner GI, Miller IW, Fruzzetti AE. Family functioning, and suicidal behavior in psychiatric inpatients with major depression. Psychiatry 1987;50:242-55.

107. Agid O, Shapira B, Zislin J, Ritsner M, Hamin B, Murad H, Troudrat T, Bloch M, Heresco-Levy U, Lerer B. Environment and vulnerability to major psychiatric illness : a case control study of early parental loss in major depression, bipolar disorder and schizophrenia. Mol Psychiatry 1999 Mar ;4(2):163-72.
108. King RA, Schwab-Stone M, Flisher AJ, Greenwald S, Kramer RA, Goodman SH, et al. Psychosocial and risk behavior correlates of youth suicide attempts and suicidal ideation. J Am Acad Child Adolesc Psychiatry 2001 Jul ;40(7):837-46.
109. Qin P, Agerbo E, Mortensen PB. Suicide risk in relation of family history of completed suicide and Psychiatric disorders : a nested case-control study based on longitudinal registers. Lancet 2002 Oct ;360:1126-30.
110. Kell TM, Soloff PH, Lynch KG, Haas GL, Mann JJ. Recent life events , social adjustment, and suicide attempts in patients with major depression and borderline personality disorder. J Personal Disord 2000 winter ; 14(4): 316-26.
111. Phillips MP, Yang G, Zhang Y, Wang L, Ji H, Zhou M. Risk Factors for suicide in China : a national case-control psychological autopsy study. Lancet 2002;360:1728-36.
112. Cheng ATA, Chen THH, Chen CC, Jenkins R. Psychosocial and psychiatric risk factors for suicide : case - control psychological autopsy study. Br J Psychiatry 2000 ; 177:360-5.
113. Beautrais AL. Suicide and serious suicide attempts : two populations or one?. Psychol Med 2001 Jul ; 31(5):837-45.
114. Dieserud G, Roysamb E, Ekeberg O, Kraft P. Toward an integrative model of suicide attempt : a cognitive psychological approach. Suicide Life Threat Behav 2001;31(2):153-68.



APPENDIX

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

ข้อมูลผู้ป่วยควรรทราบ (Patient Information Sheet)

ชื่อโครงการ	ปัจจัยที่ช่วยบ่งบอกการพยายามกระทำอัตวินิบาตกรรมในผู้ป่วยซึมเศร้า
สถานที่ทำการวิจัย	คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
ผู้ทำการวิจัย	อาจารย์แพทย์หญิง ศิริลักษณ์ ศุภปีติพร
อาจารย์ที่ปรึกษา	รองศาสตราจารย์แพทย์หญิงนันทิกา ทิวชาชาติ
อาจารย์ที่ปรึกษา(ร่วม)	อาจารย์วินัส อุดมประเสริฐกุล

ข้อมูลทั่วไป

ภาวะซึมเศร้าเป็นโรคที่มีความสำคัญและเป็นปัญหาสาธารณสุขของประเทศ เหตุการณ์ความเครียดในชีวิตหรือปัจจัยทางจิตสังคม รวมถึงภาวะผิดปกติอื่นที่เกิดร่วม อาจเกี่ยวข้องกับภาวะซึมเศร้าหรือความเสี่ยงต่อพฤติกรรมทำร้ายตนเอง (หรืออัตวินิบาตกรรม) การป้องกันการทำร้ายตนเอง โดยการค้นพบและให้การวินิจฉัยผู้ป่วยที่มีความเสี่ยงสูงได้แต่เริ่มแรก และให้การดูแลรักษาที่มีประสิทธิภาพ เป็นเรื่องที่มีความสำคัญ

ข้อมูลของโครงการ

การศึกษาในโครงการวิจัยนี้ เป็นการศึกษาความสัมพันธ์ระหว่างการพยายามกระทำอัตวินิบาตกรรมกับปัจจัยความเครียดทางจิตสังคม ความรุนแรงของภาวะซึมเศร้า และปัจจัยอื่น ๆ ที่เกี่ยวข้อง ซึ่งใช้กลุ่มตัวอย่างเป็นผู้ป่วยซึมเศร้า จำนวนประมาณ 180 คน โดยมีขั้นตอนต่อไปนี้

1. สัมภาษณ์ทางคลินิกและซักถามอาการ
2. ผู้ป่วยตอบแบบสอบถามเกี่ยวกับเหตุการณ์ชีวิต ความรู้สึก และบุคลิกภาพอุปนิสัย

ประโยชน์ของการทำวิจัย

ทำให้ทราบถึงความสัมพันธ์ระหว่างการพยายามกระทำอัตวินิบาตกรรมในผู้ป่วยซึมเศร้าและปัจจัยทางจิตสังคม ความรุนแรงของภาวะซึมเศร้า และปัจจัยอื่น ๆ ที่เกี่ยวข้อง ซึ่งสามารถประยุกต์ใช้เป็นข้อมูลในการพัฒนาแนวทางป้องกันการพยายามกระทำอัตวินิบาตกรรม และวางแผนการดูแลรักษาผู้ป่วย

ความไม่สะดวกที่อาจเกิดจากการศึกษาวิจัย

การวิจัยนี้อาศัยการสัมภาษณ์ทางคลินิกและซักถามอาการ ซึ่งเป็นส่วนที่แพทย์ปฏิบัติอยู่แล้วในการดูแลผู้ป่วย ส่วนการตอบแบบสอบถามของผู้ป่วยเกี่ยวกับเหตุการณ์ชีวิต ความรู้สึกและบุคลิกภาพอุปนิสัยนั้น ผู้วิจัยใช้แบบสอบถามซึ่งได้รับการยอมรับในการประเมินผู้ป่วย ทั้งในทางปฏิบัติและทางวิจัย จึงไม่น่ามีปัญหาหรือเพิ่มความเสี่ยงแก่ผู้ป่วย

ข้อมูลที่ได้จากการวิจัยนี้จะประยุกต์ใช้เพื่อเป็นประโยชน์ในทางการแพทย์ มิได้เปิดเผยเป็นรายบุคคล จึงไม่น่ามีปัญหาด้านการเปิดเผยความลับหรือเรื่องส่วนตัว

ท่านจำเป็นต้องเข้ารับการศึกษานี้หรือไม่

ขึ้นอยู่กับท่านเอง แพทย์จะดูแลท่านอย่างดีที่สุด ไม่ว่าท่านจะเข้าร่วมในการศึกษานี้หรือไม่ และท่านจะถอนตัวจากการศึกษาได้ตลอดเวลา โดยไม่ทำให้ผลการรักษาพยาบาลต่อท่านด้อยลงไป

แพทย์ผู้ที่ท่านสามารถติดต่อได้

จากข้อมูลข้างต้นผู้ป่วยจะเป็นผู้ตัดสินใจเองว่าจะร่วมในการวิจัยหรือไม่ และสามารถสอบถามรายละเอียดเพิ่มเติมได้จาก แพทย์หญิงศิริลักษณ์ ศุภปีติพร โทรศัพท์ 02-2564298

ใบยินยอมเข้าร่วมโครงการวิจัย

ที่.....
วันที่.....

ชื่อโครงการ บัณฑิตที่ช่วยบ่งบอกการพยายามกระทำอัตวินิบาตกรรมในผู้ป่วยซึมเศร้า

ผู้ทำการวิจัย อาจารย์แพทย์หญิง ศิริลักษณ์ ศุภปิติพร

ใบประกอบวิชาชีพเวชกรรม เลขที่ 16161 หมายเลขโทรศัพท์ที่ติดต่อได้ 02-2564298

วัตถุประสงค์ เพื่อศึกษาความสัมพันธ์ระหว่างการพยายามกระทำอัตวินิบาตกรรมกับปัจจัยความเครียดทางจิตสังคม ความรุนแรงของภาวะซึมเศร้า และปัจจัยอื่น ๆ ที่เกี่ยวข้อง ทั้งนี้เพื่อค้นหาปัจจัยที่สามารถช่วยบ่งบอกการพยายามกระทำอัตวินิบาตกรรมในผู้ป่วยซึมเศร้า และเป็นข้อมูลในการวางแผนการช่วยเหลือ และป้องกัน

รายละเอียดที่จะปฏิบัติต่อผู้สมัคร

สัมภาษณ์และซักถามอาการ

ผู้ป่วยตอบแบบสอบถามเกี่ยวกับเหตุการณ์ชีวิต ความรู้สึก และบุคลิกภาพ อุปนิสัย

ประโยชน์และผลข้างเคียงที่จะเกิดแก่ผู้สมัคร

ประโยชน์

- ผู้ป่วยจะได้ประเมินตนเองเกี่ยวกับอารมณ์ความรู้สึก เหตุการณ์ชีวิต และภาวะซึมเศร้า

ผลข้างเคียง ไม่มี

การรับฟังคำชี้แจง

ข้าพเจ้า(นาย/นาง/นางสาว).....นามสกุล.....อายุ..... ปี
อยู่บ้านเลขที่.....ถนน.....ตำบล/แขวง.....อำเภอ.....จังหวัด.....นับถือศาสนา.....

ได้อ่านรายละเอียดของโครงการในใบสมัครเข้าร่วมโครงการโดยตลอด และได้รับฟังคำชี้แจงจาก
ผู้รับผิดชอบในการวิจัยแล้ว ได้เข้าใจถึงวัตถุประสงค์ของการวิจัย วิธีการวิจัย ประโยชน์และผลข้างเคียงที่อาจเกิด
แก่ตัวข้าพเจ้าเองทุกประการ

ผู้รับผิดชอบในการวิจัยจะดำเนินการด้วยความระมัดระวังอย่างดีที่สุด จะเก็บข้อมูลเฉพาะเกี่ยวกับตัว
ข้าพเจ้าเป็นความลับ และใช้ข้อมูลที่ได้เพื่อเป็นประโยชน์ในทางการแพทย์ การเปิดเผยข้อมูลเกี่ยวกับตัวข้าพเจ้า
ต่อหน่วยงานต่าง ๆ ที่เกี่ยวข้องกระทำได้เฉพาะกรณีจำเป็น ด้วยเหตุผลทางวิชาการหรือทางกฎหมายเท่านั้น
ข้าพเจ้าจะไม่เรียกร้องความเสียหาย ๆ ทั้งสิ้น

ข้าพเจ้าได้อ่านข้อความข้างต้นแล้ว และมีความเข้าใจดีทุกประการ ข้าพเจ้ายินดีให้ข้อมูลของข้าพเจ้า
เพื่อเป็นประโยชน์ในการศึกษาวิจัยครั้งนี้ และได้ลงนามในใบยินยอมนี้ด้วยความเต็มใจ

ลงนาม (ผู้ยินยอม)
(.....)

ลงนาม (ผู้วิจัย)
(.....)

ลงนาม (พยาน)
(.....)

No

CASE RECORD FORM

Type of patient Case group Control group
 O.P.D. or E.R. Inpatient ward.....

NAME

ADDRESS.....Tel.

Hospital number Admission number.....

Arrival date mo..... year.....

Interview date mo. year

PART 1. Demographic data

1. Gender

1. male 2. female

2. Age Year

1. 15-25 years 2. 25-50 years 3. over 50 years

3. Marital status

1. single 2. 25-50 years 3. over 50 years
 4. divorce 5. other specify

4. Religion

1. Buddhism 2. Christ 3. Islam
 4. other specify.....

5. Residence province.....

1. Bangkok 2. primary school 3. secondary school
 4. north-east 5. eastern 6. southern
 7. other specify.....

6. Education

1. no school 2. primary school 3. secondary school
 4. University or graduate 5. other specify.....

7. Occupation

1. employee 2. agriculturist 3. government officer
 4. business 5. student 6. housewife
 7. unemployed 8. other specify.....

8. Patient's income per month (Baht)

1. none 2. 2000 or lower 3. 2001-5000
 4. 5001-10000 5. more than 10000

9. Financial problem or debt

1. yes specify amount 2. no

10. History of physical illness

1. yes specify 2. no

11. History of psychiatric illness and treatment

1. yes specify disorder.....hospital.....
 2. no

12. History of substance use (; heroin, marijuana, amphetamine, alcohol, hypnotic, ...)

1. yes specify type....., duration
 2. no

13. Current substance use

1. always 2. seldom 3. no
 4. other specify

14. Duration of current depressive episode.....weeks

1. less than 2 weeks 2. 2 weeks – 4 weeks 3. 4-8 weeks
 4. 8-12 weeks 5. more than 12 weeks

15. Current depressive episode is

1. first 2. second 3. third 3. fourth or more than

16 Psychosocial stress or problem

- | | Current | Past |
|---|---------|------|
| 1. <input type="checkbox"/> yes specify | | |
| 1. work | | |
| 2. family | | |
| 3. social | | |
| 4. individual or relationship | | |
| 5. other | | |

specify.....

2. no

17. History of previous suicidal attempt (for case only)

1. yes specify.....items 2. never

18. Method of this presenting suicidal attempt (for case only)

1. drug ingestion, specify..... 2. hanging
 2. jumping 4. shooting
 5. cut or stab wound 6. other specify.....

19. Precipitating factor of this presenting suicidal attempt (for case only)

1. yes specify
1. work problem
 2. family problem
 3. marital problem
 4. health problem or illness
 5. school or learning problem
 6. interpersonal relationship problem
 7. financial problem
 8. other specify.....

2. no

20. Family structure in childhood (when age less than 15 years old)

1. father and mother lived together
2. father and mother divorced or separated when patient was.... Years old
3. father or mother remarried when patient was years old
4. father or mother died when patient was years old
5. other specify.....

21. Family history of psychiatric illness

- | | |
|--|---|
| 1. <input type="checkbox"/> yes, relation as parent
specify disorder..... | 2. <input type="checkbox"/> yes, relation as sibling
specify disorder..... |
| 3. <input type="checkbox"/> no | 4. <input type="checkbox"/> other specify..... |

22. Family history of suicide

- | | |
|---|--|
| 1. <input type="checkbox"/> yes, relation as parent | 2. <input type="checkbox"/> yes, relation as sibling |
| 3. <input type="checkbox"/> no | 4. <input type="checkbox"/> other specify..... |

23. Family history of alcoholism or substance use

1. yes specify type Duration
- Relation of patient as.....
2. no

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

SUMMARY OF DIAGNOSIS

Axis I.
.....
Axis II.....
Axis III.
Axis IV.
Axis V.....



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

แบบวัดผลของความเครียดต่อการปรับตัวทางสังคม

ชื่อ.....อายุ.....ปี เลขที่ผู้ป่วยนอก.....

โปรดกาเครื่องหมาย ถ้ามีเหตุการณ์ดังต่อไปนี้เกิดขึ้น

เหตุการณ์ชีวิต	ในช่วง 3 เดือน ที่ผ่านมา	ในอดีตหรือ มากกว่า 3 เดือน
1. การตายของสามีหรือภรรยา		
2. การหย่าร้าง		
3. การแยกกันจากคู่สมรส		
4. การติดคุก		
5. การตายของสมาชิกครอบครัวใกล้ชิด		
6. การบาดเจ็บ เจ็บป่วย		
7. การแต่งงาน		
8. การตกงาน		
9. การแต่งงานใหม่ คู่เก่า		
10. เกษียณอายุ		
11. การเจ็บป่วยของสมาชิกครอบครัว		
12. การตั้งครรภ์		
13. ปัญหาทางเพศ		
14. สมาชิกใหม่ในครอบครัว		
15. ปรับตัวกับงานใหม่		
16. เศรษฐกิจเปลี่ยนแปลง		
17. เพื่อนสนิทตาย		
18. เปลี่ยนสายงาน		
19. ทะเลาะกับสามี ภรรยา		
20. จำนวนของราคาสูงกว่า 250,000 บาท		
21. หมดเวลาจำนอง		
22. เปลี่ยนความรับผิดชอบในงาน		

เหตุการณ์ชีวิต	ในช่วง 3 เดือน ที่ผ่านมา	ในอดีตหรือ มากกว่า 3 เดือน
23. ลูกจากบ้าน		
24. เดือนร้อนทางกฎหมาย		
25. ความสำเร็จส่วนตัวที่สำคัญ		
26. ภรรยาเริ่มเลิกทำงาน		
27. เริ่มจบโรงเรียน		
28. เปลี่ยนสภาพที่อยู่		
29. เปลี่ยนนิสัยส่วนตัว		
30. ปัญหาเกี่ยวกับเจ้านาย		
31. เปลี่ยนเวลา สภาพที่ทำงาน		
32. เปลี่ยนที่อยู่		
33. เปลี่ยนโรงเรียน		
34. เปลี่ยนการสนุกสนาน		
35. เปลี่ยนกิจกรรมทางศาสนา		
36. เปลี่ยนกิจกรรมทางสังคม		
37. จำนวน หนี้ต่ำกว่า 250,000 บาท		
38. เปลี่ยนพฤติกรรมการนอน		
39. เปลี่ยนจำนวนสมาชิกครอบครัว		
40. เปลี่ยนพฤติกรรมการกิน		
41. หยุดงาน พักผ่อน		
42. คดี ปัญหากฎหมายเล็กน้อย		

ลำดับที่				
HN				
ผู้วัด				
วัน เดือน ปี				
เพศ				
อายุ				
การวินิจฉัย				

THAMD
HAMILTON RATING SCALE FOR DEPRESSION (THAI VERSION)

1. อารมณ์ซึมเศร้า (เศร้าใจ, สิ้นหวัง, หมัดหนทาง, ไร้ค่า)		5. การนอนไม่หลับในช่วงกลาง	
<input type="checkbox"/> ไม่มี	0	<input type="checkbox"/> ไม่มี	0
<input type="checkbox"/> จะบอกภาวะความรู้สึกนี้ ต่อเมื่อถามเท่านั้น	1	<input type="checkbox"/> ผู้ป่วยแจ้งว่ากระสับกระส่ายนอนหลับไม่สนิท	1
<input type="checkbox"/> บอกภาวะความรู้สึกนี้ออกมาเอง	2	ช่วงกลางคืน	
<input type="checkbox"/> สื่อภาวะความรู้สึกนี้โดยภาษากาย ได้แก่ การแสดง, สีหน้า, น้ำเสียง, และมักร้องไห้	3	<input type="checkbox"/> ตื่นกลางดึก หากมีลูกจากที่นอน ให้คะแนน 2 (ยกเว้นเพื่อปัสสาวะ)	2
<input type="checkbox"/> ผู้ป่วยบอกเพียงความรู้สึกนี้อย่างชัดเจน ทั้งการบอกออกมาเอง และภาษากาย	4	6. การตื่นนอนเช้าน่าปกติ	
2. ความรู้สึกผิด		<input type="checkbox"/> ไม่มี	0
<input type="checkbox"/> ไม่มี	0	<input type="checkbox"/> ตื่นแต่เช้ามีด แต่นอนหลับต่อได้	1
<input type="checkbox"/> ตีเทียบตนเอง รู้สึกตนเองทำให้ผู้อื่นเสียใจ	1	<input type="checkbox"/> นอนต่อไม่หลับอีก หากลุกจากเตียงไปแล้ว	2
<input type="checkbox"/> รู้สึกผิด หรือครุ่นคิดถึงความผิดพลาดหรือการก่อกรรมในอดีต	2	7. การงานและกิจกรรม	
<input type="checkbox"/> ความเจ็บป่วยในปัจจุบันเป็นการลงโทษ มีอาการหลงคิดว่าตนเองผิด	3	<input type="checkbox"/> ไม่มี	0
<input type="checkbox"/> ได้ยินเสียงกล่าวโทษ หรือประมาณ และ/หรือ เห็นภาพหลอนที่ข่มขู่คุกคาม	4	<input type="checkbox"/> มีความคิดและความรู้สึกว่าตนเองไม่มีสมรรถภาพ	1
3. การฆ่าตัวตาย		อ่อนเปลี้ย, หรือหย่อนกำลังที่เกี่ยวข้องกับกิจกรรมต่าง ๆ : การงาน หรืองานอดิเรก	
<input type="checkbox"/> ไม่มี	0	<input type="checkbox"/> หมดความสนใจในกิจกรรมต่าง ๆ : งานอดิเรกหรืองานประจำ ไม่ว่าจะทราบโดยตรงจากการบอกของผู้ป่วยหรือทางอ้อมจากการไม่กระตือรือร้น, ลังเลใจ และเปลี่ยนใจไปมา (ผู้ป่วยรู้สึกว่าจะต้องกระตุ้นให้ตนเองทำงานหรือกิจกรรม)	2
<input type="checkbox"/> รู้สึกชีวิตไร้ค่า	1	<input type="checkbox"/> เวลาที่ใช้จริงในการทำกิจกรรมหรือผลงานลดลง	3
<input type="checkbox"/> คิดว่าตนเองน่าจะตาย หรือความคิดใด ๆ เกี่ยวกับการตายที่อาจเกิดขึ้นได้กับตนเอง	2	หากอยู่ในโรงพยาบาล, ให้คะแนน 3 ถ้าผู้ป่วยใช้เวลาต่ำกว่า 3 ชั่วโมงต่อวัน ในการทำกิจกรรม (งานของโรงพยาบาลหรืองานอดิเรก) ยกเว้นหน้าที่ประจำในโรงพยาบาล	
<input type="checkbox"/> มีความคิดหรือทำที่จะฆ่าตัวตาย	3	<input type="checkbox"/> หยุดทำงาน เพราะการเจ็บป่วยในปัจจุบัน หากอยู่ในโรงพยาบาล, ให้คะแนน 4 ถ้าผู้ป่วยไม่ทำกิจกรรมอื่นนอกจากหน้าที่ประจำในโรงพยาบาล หรือถ้าผู้ป่วยทำหน้าที่ไม่ได้หากไม่มีคนช่วย	4
<input type="checkbox"/> พยายามที่จะฆ่าตัวตาย (ความพยายามใด ๆ ที่รุนแรง ให้คะแนน 4)	4	4. การนอนไม่หลับในช่วงต้น	
4. การนอนไม่หลับในช่วงต้น		<input type="checkbox"/> ไม่มีปัญหาเข้านอนแล้วหลับยาก	0
<input type="checkbox"/> ไม่มีปัญหาเข้านอนแล้วหลับยาก	0	<input type="checkbox"/> แจ้งว่านอนหลับยากบางครั้ง ได้แก่ นานกว่า ½ ชั่วโมง	1
<input type="checkbox"/> แจ้งว่านอนหลับยากบางครั้ง ได้แก่ นานกว่า ½ ชั่วโมง	1	<input type="checkbox"/> แจ้งว่านอนหลับยากทุกคืน	2
<input type="checkbox"/> แจ้งว่านอนหลับยากทุกคืน	2		

8. อาการเบื้องต้น (ความซ้ำของความคิดและการพูดจา : สมาธิ บกพร่อง (การเคลื่อนไหวลดลง)		13. อาการทางกาย อาการทั่วไป	
<input type="checkbox"/> การพูดจาและความคิดปกติ	0	<input type="checkbox"/> ไม่มี	0
<input type="checkbox"/> มีอาการเบื้องต้นเล็กน้อยขณะสัมภาษณ์	1	<input type="checkbox"/> ตึงแขน ขา หลัง หรือศีรษะ ปวดหลัง ปวดศีรษะ ปวดกล้ามเนื้อ หดแรง และอ่อนเพลีย	1
<input type="checkbox"/> สัมภาษณ์ได้อย่างลำบาก	2	<input type="checkbox"/> มีอาการใด ๆ ที่ชัดเจน ให้คะแนน 2	2
<input type="checkbox"/> อยู่นิ่งเฉยโดยสิ้นเชิง	3	14. อาการทางระบบสืบพันธุ์ เช่น หดความต้องการทางเพศ ปัญหาด้านประจำเดือน	
9. อาการกระวนกระวายทั้งกายและใจ		<input type="checkbox"/> ไม่มี	0
<input type="checkbox"/> ไม่มี	0	<input type="checkbox"/> เล็กน้อย	1
<input type="checkbox"/> ง่วงงัน / อยู่ไม่สุข	1	<input type="checkbox"/> ปานกลาง	2
<input type="checkbox"/> เล่นมือ เล่นผม ฯลฯ	2	15. อาการคิดว่าคนป่วยเป็นโรคทางกาย	
<input type="checkbox"/> เดินไปมา นั่งไม่ติดที่	3	<input type="checkbox"/> ไม่มี	0
<input type="checkbox"/> บีบมือ กัดเล็บ ตึงผม กัดริมฝีปาก	4	<input type="checkbox"/> หมกมุ่นในตนเอง (ด้านร่างกาย)	1
10. ความวิตกกังวลในจิตใจ		<input type="checkbox"/> หมกมุ่นเรื่องสุขภาพ	2
<input type="checkbox"/> ไม่มีปัญหา	0	<input type="checkbox"/> แจ้งถึงอาการต่าง ๆ บ่อย เรียกร้องความช่วยเหลือ ฯลฯ	3
<input type="checkbox"/> รู้สึกตึงเครียด และหงุดหงิด	1	<input type="checkbox"/> มีอาการหลงผิดว่าคนป่วยเป็นโรคทางกาย	4
<input type="checkbox"/> กังวลในเรื่องเล็กน้อย	2	16. น้ำหนักลด เลือกข้อ ก. หรือ ข.	
<input type="checkbox"/> การพูดจาหรือสีหน้ามีทำที่หนักแล้ว	3	ก. เมื่อให้คะแนนโดยอาศัยประวัติ	
<input type="checkbox"/> แสดงความหวาดกลัว โดยไม่ต้องถาม	4	<input type="checkbox"/> ไม่มีน้ำหนักลด	0
11. ความวิตกกังวลซึ่งแสดงออกทางกาย		<input type="checkbox"/> อาจมีน้ำหนักลด ซึ่งเกี่ยวข้องกับอาการเจ็บป่วยครั้งนี้	1
อาการร่วมด้านสรีระวิทยาของความวิตกกังวล เช่น : ระบบทางเดินอาหาร : ปากแห้ง ลมขึ้น อาหาร ไม่ย่อย ท้องเสีย ปวดเกร็งท้อง เรอ ระบบหัวใจและหลอดเลือด : ใจสั่น ปวดศีรษะ ระบบหายใจ : หายใจหอบเร็ว ถอนหายใจ ปัสสาวะบ่อย เหงื่อออก		<input type="checkbox"/> น้ำหนักลดชัดเจน (ตามที่ผู้ป่วยบอก)	2
<input type="checkbox"/> ไม่มี	0	ข. จากการให้คะแนนประจำสัปดาห์โดยจิตแพทย์ ประจำหอผู้ป่วย เมื่อช่วงวัดน้ำหนักที่เปลี่ยนไปจริง	
<input type="checkbox"/> เล็กน้อย	1	<input type="checkbox"/> น้ำหนักลดน้อยกว่า 1 ปอนด์ ใน 1 สัปดาห์	0
<input type="checkbox"/> ปานกลาง	2	<input type="checkbox"/> น้ำหนักลดมากกว่า 1 ปอนด์ ใน 1 สัปดาห์	1
<input type="checkbox"/> รุนแรง	3	<input type="checkbox"/> น้ำหนักลดมากกว่า 1 ปอนด์ ใน 1 สัปดาห์	2
<input type="checkbox"/> เสื่อมสมรรถภาพ	4	17. การเห็นถึงความคิดปกติของตนเอง	
12. อาการทางกาย ระบบทางเดินอาหาร		<input type="checkbox"/> ยอมรับว่ากำลังซึมเศร้า	0
<input type="checkbox"/> ไม่มี	0	<input type="checkbox"/> ยอมรับความเจ็บป่วย แต่โยงสาเหตุกับอาหารที่เลว ดินฟ้าอากาศ การทำงานหนัก ไวรัส การต้องการ พักผ่อน ฯลฯ	1
<input type="checkbox"/> เบื่ออาหาร แต่รับประทานโดยผู้อื่นไม่ต้องคอย กระตุ้น	1	<input type="checkbox"/> ปฏิเสธการเจ็บป่วยโดยสิ้นเชิง	2
- รู้สึกห่วงในท้อง			
<input type="checkbox"/> รับประทานอาหารยาก หากไม่มีคนคอยกระตุ้น	2		
- ขอหรือจำต้องได้ยาระบายหรือยาเกี่ยวกับลำไส้ หรือยาลำหรับอาการของระบบทางเดินอาหาร			

ตัวอย่างแบบทดสอบทางจิตวิทยาเกี่ยวกับบุคลิกภาพ

คำแนะนำในการตอบแบบสอบถาม

วิธีทำ คำถามในแบบทดสอบฉบับนี้เป็นคำถามเพื่อความเข้าใจเกี่ยวกับความสนใจและความคิดเห็นของท่าน ต่อเรื่องต่าง ๆ คำถามส่วนใหญ่ไม่มีคำตอบที่ผิดหรือถูก เพราะแต่ละคนมีความคิดเป็นของตนเอง ดังนั้นจึงขอให้ตอบคำถามตามความเป็นจริงสำหรับท่าน

ในแต่ละคำถาม มีคำตอบอยู่สามข้อ โปรดเลือกคำตอบที่ท่านต้องการเพียงคำตอบเดียว จากข้อ ก. ข. ค. ที่กำหนดให้แล้ว ใช้ดินสอระบายให้เต็มลงในแต่ละช่อง ได้ตัวอักษรซึ่งเป็นข้อความที่ท่านเลือกในกระดาษคำตอบ ก่อนอื่นโปรดอ่านคำถามตัวอย่าง 4 ข้อ ต่อไปนี้แล้วกาคำตอบที่ท่านเลือกลงในกระดาษคำตอบในช่องที่เขียนว่า “ตัวอย่าง”

ตัวอย่าง

1. ฉันชอบดูกีฬาที่เล่นเป็นทีม

ก. ใช่	ข. เป็นบางครั้งบางคราว	ค. ไม่ใช่
--------	------------------------	-----------
2. ฉันชอบคนที่

ก. เกือบตัว	ข. อยู่ระหว่าง ข้อ ก. กับ ข้อ ค.	ค. เป็นมิตรกับคนง่าย
-------------	----------------------------------	----------------------
3. เงินไม่สามารถบันดาลสุข

ก. จริง	ข. อยู่ระหว่าง ข้อ ก. กับข้อ ค.	ค. ไม่จริง
---------	---------------------------------	------------
4. “ผู้ใหญ่” คู่กับ “เด็ก” เช่นเดียวกับ “แมว” คู่กับ

ก. ลูกแมว	ข. สุนัข	ค. ทารก
-----------	----------	---------

ในตัวอย่างข้อ 4 คำตอบที่ถูกคือ ข้อ ก. ลูกแมว แต่ในแบบทดสอบฉบับนี้ มีคำถามที่ต้องการคำตอบที่มีเหตุผล ท่านองนี้น้อยมาก

ในการตอบแบบทดสอบนี้โปรดคำนึงถึงหลัก 3 ประการ คือ

1. ห้ามเลือกคำตอบที่เหมือนกันทุกข้อ แต่ให้ตอบตามความรู้สึกที่แท้จริงของท่าน
2. อย่าใช้เวลาในการตอบแต่ละคำถามนานเกินไป พยายามตอบทันทีที่ท่านอ่านคำถามและคำตอบเสร็จ คำถามบางข้ออาจสั้น หรือให้ข้อมูลน้อยเกินไป ขอให้เลือกคำตอบที่ใกล้เคียงหรือตรงกับความคิดของท่านมากที่สุด
3. โปรดตอบทุกข้อโดยไม่เว้น ข้อใดข้อหนึ่ง

(โปรดตอบลงในกระดาษสำหรับเขียนคำตอบ และโปรดอย่าขีดเขียนหรือทำเครื่องหมายใด ๆ ลงในแบบทดสอบนี้ ขอให้ใช้ดินสอในการเขียนคำตอบ และในกรณีที่ต้องการเปลี่ยนแปลงคำตอบให้ลบคำตอบเดิมทิ้ง แล้วใช้ดินสอระบายให้เต็มลงในช่อง ที่ท่านเลือกใหม่)

แบบวัดระดับความวิตกกังวล

คำชี้แจงในการตอบแบบสอบถาม

แบบสอบถามนี้ต้องการทราบความรู้สึกของท่าน โปรดอ่านข้อความแต่ละข้อความอย่างรอบคอบ และกรุณาทำเครื่องหมาย ✓ ตรงช่องที่ตรงกับความรู้สึกของท่านตามความเป็นจริงให้มากที่สุด ในช่วง 2 สัปดาห์ที่ผ่านมา ไม่มีคำตอบใดที่จะถือว่าถูกหรือผิด ดังนั้น ขอให้ตอบด้วยความสบายใจ ตามความรู้สึกจริงของท่าน ในแต่ละข้อ ขอให้ท่านตอบเพียงคำตอบเดียวและกรุณาตอบทุกข้อ การเลือกตอบจะถือเกณฑ์ ดังนี้

- | | | |
|-----------|---------|--|
| หมายเลข 1 | หมายถึง | ผู้ตอบไม่มีความรู้สึกหรือไม่มีพฤติกรรมตามข้อความนั้นเลย หรือถ้ามีความรู้สึก หรือมีพฤติกรรมเช่นนั้น เกิดขึ้นก็น้อยมาก ในช่วง 2 สัปดาห์ที่ผ่านมา |
| หมายเลข 2 | หมายถึง | ผู้ตอบมีความรู้สึกหรือมีพฤติกรรมตามข้อความนั้น เกิดขึ้นบ้าง เป็นบางครั้ง แต่ไม่บ่อยในช่วง 2 สัปดาห์ที่ผ่านมา |
| หมายเลข 3 | หมายถึง | ผู้ตอบมีความรู้สึกหรือมีพฤติกรรมตามข้อความนั้น เกิดขึ้น บ่อยครั้ง แต่ไม่เกิดตลอดเวลาในช่วง 2 สัปดาห์ที่ผ่านมา |
| หมายเลข 4 | หมายถึง | ผู้ตอบมีความรู้สึกหรือมีพฤติกรรมตามข้อความนั้น เกิดขึ้นบ้าง เกือบตลอดเวลาหรือเป็นตลอดเวลาในช่วง 2 สัปดาห์ที่ผ่านมา |

ชื่อ.....อายุ.....ปี เลขที่ผู้ป่วยนอก.....

	ไม่เลยหรือ เป็นเวลา เล็กน้อย	เป็น บาง ครั้ง	เป็นเวลา นานพอ สมควร	เกือบ หรือ ตลอดเวลา
1. ฉันรู้สึกตื่นเต้นและกระวนกระวายมากกว่าปกติ				
2. ฉันรู้สึกกลัว กังวล โดยไม่มีสาเหตุ				
3. ฉันตกใจง่าย หรือตื่นตระหนก				
4. ฉันรู้สึกวูบเหมือนตกจากที่สูง				
5. ฉันรู้สึกอะไรมันเรียบร้อยดี และไม่มีเรื่องน่า วิตกเกิดขึ้น				
6. ฉันเคยรู้สึกแขนขาสั่นสะท้าน				
7. ฉันเคยรู้สึกไม่สบายใจเพราะปวดศีรษะ ปวดคอ และหลัง				
8. ฉันรู้สึกเพลีย				
9. ฉันรู้สึกจิตใจสงบ และนั่งเฉย ๆ ได้ง่าย				
10. ฉันรู้สึกใจสั่น				
11. ฉันรู้สึกไม่สบายเวียนศีรษะ				
12. ฉันเป็นลม				
13. ฉันหายใจเข้า – ออก ได้สบาย				
14. ฉันเคยรู้สึกชาและเสียวแปลบที่นิ้วมือ นิ้วเท้า				
15. ฉันไม่สบาย ปวดท้องหรือคลื่นไส้				
16. ฉันปัสสาวะบ่อย				
17. มือของฉันมักแห้งและอุ่น				
18. ฉันรู้สึกหน้าร้อนวูบวาบ				
19. ฉันหลับง่ายและหลับสบายตลอดคืน				
20. ฉันฝันร้าย				

VITAE

Mrs.Siriluck Suppapitiporn was born on 10 September 1966. She graduated Medical Doctor from Chulalongkorn University in 1990. In 1993, she got Board of Psychiatry from Medical Council of Thailand. She has been enrolled in the Master Degree of Science in Health Development at Faculty of Medicine, Chulalongkorn University since 1999. The present position is Staff at Department of Psychiatry, Faculty of Medicine, Chulalongkorn University and King Chulalongkorn Memorial hospital , Thai Red Cross Society.



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย