

ความสัมพันธ์ระหว่างปัญหาสัมพันธ์ภาพระหว่างบุคคลกับโรคซึมเศร้าในผู้ป่วยซึมเศร้าไทย:  
การศึกษาโดยมีกลุ่มควบคุมแบบจับคู่



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RELATIONSHIP BETWEEN INTERPERSONAL PROBLEM AREAS AND  
DEPRESSIVE DISORDERS IN THAI DEPRESSED PATIENTS:  
A MATCHED CASE-CONTROL STUDY



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Thesis Title                   RELATIONSHIP BETWEEN INTERPERSONAL PROBLEM AREAS  
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A MATCHED CASE-CONTROL STUDY  
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พีรพันธ์ ลีอนุญวรัชชัย : ความสัมพันธ์ระหว่างปัญหาสัมพันธภาพระหว่างบุคคลกับโรคซึมเศร้าในผู้ป่วยซึมเศร้าไทย: การศึกษาโดยมีกลุ่มควบคุมแบบจับคู่. (RELATIONSHIP BETWEEN INTERPERSONAL PROBLEM AREAS AND DEPRESSIVE DISORDERS IN THAI DEPRESSED PATIENTS: A MATCHED CASE-CONTROL STUDY) อ. ที่ปรึกษา : ศ.พญ.นันทิกา ทวิชาชาติ, 85 หน้า.

**วัตถุประสงค์ของการศึกษา** : เพื่อค้นหาปัญหาสัมพันธภาพระหว่างบุคคลที่เกี่ยวข้องกับโรคซึมเศร้าในผู้ป่วยซึมเศร้าไทย โดยปัญหาสัมพันธภาพระหว่างบุคคล ได้แก่ อารมณ์เศร้าโศกจากการสูญเสีย ความขัดแย้งทางบทบาทสัมพันธภาพ การเปลี่ยนผ่านบทบาท และความบกพร่องทางสัมพันธภาพระหว่างบุคคล

**สถานที่ทำการศึกษา** : โรงพยาบาลจุฬาลงกรณ์

**รูปแบบการทำวิจัย** : การศึกษาเชิงวิเคราะห์โดยมีกลุ่มควบคุมแบบจับคู่ 1:1

**กลุ่มตัวอย่างและวิธีการ** : ศึกษาในผู้ป่วยโรคซึมเศร้าและผู้ที่ไม่ได้ซึมเศร้าจำนวน 90 คู่ โดยจับคู่จากเพศและอายุเดียวกัน อายุตั้งแต่ 18 ปีขึ้นไป ในแผนกจิตเวชศาสตร์ โรงพยาบาลจุฬาลงกรณ์ ตั้งแต่เดือนกรกฎาคม - ธันวาคม 2550 ผู้ป่วยโรคซึมเศร้าที่เข้าร่วมการศึกษา ได้แก่ ผู้ป่วยซึมเศร้ารายใหม่ ภายในช่วง 6 เดือน และมีคะแนน Hamilton Rating Scale for Depression ฉบับภาษาไทย (Thai HRSD) ตั้งแต่ 8 คะแนนขึ้นไป ส่วนผู้ที่ไม่ได้ซึมเศร้า ได้แก่ ผู้ที่มีคะแนน Thai HRSD ต่ำกว่า 8 คะแนน ผู้เข้าร่วมการศึกษาดอบแบบสอบถาม 2 ชุด ได้แก่ 1) แบบสอบถามข้อมูลส่วนบุคคล 2) แบบสอบถามปัญหาสัมพันธภาพระหว่างบุคคลภาษาไทย วิเคราะห์ความสัมพันธ์ระหว่างปัญหาสัมพันธภาพระหว่างบุคคลกับโรคซึมเศร้าด้วย McNemar's chi-square test โดยกำหนดนัยสำคัญทางสถิติไว้ที่ระดับน้อยกว่า 0.05 และแสดงระดับของความสัมพันธเป็นค่าอัตราส่วนออดส์ (odds ratio, OR) และช่วงความเชื่อมั่นที่ 95% (95% confidence interval, 95%CI) และวิเคราะห์ความถดถอยโลจิสติกแบบมีเงื่อนไขเพื่อหาปัจจัยที่ทำนายโรคซึมเศร้า

**ผลการศึกษา** : ผู้เข้าร่วมการศึกษามากกว่าครึ่งเป็นหญิงวัยผู้ใหญ่ตอนต้นและตอนกลาง อาศัยอยู่ในกรุงเทพมหานครและปริมณฑล ผลการศึกษาพบว่าปัญหาสัมพันธภาพระหว่างบุคคลทั้ง 4 ด้าน มีความสัมพันธ์กับโรคซึมเศร้า ( $p < 0.01$ ) โดยมีระดับความสัมพันธ์ดังนี้ ได้แก่ อารมณ์เศร้าโศกจากการสูญเสีย (OR = 7.25, 95%CI = 2.55-28.38) ความขัดแย้งทางบทบาทสัมพันธภาพ (OR = 4.30, 95%CI = 2.13-9.60) การเปลี่ยนผ่านบทบาท (OR = 15.00, 95%CI = 5.56-56.84) และความบกพร่องทางสัมพันธภาพระหว่างบุคคล (OR = 9.00, 95%CI = 3.58-29.05) และพบว่าปัญหาสัมพันธภาพระหว่างบุคคลทั้ง 4 ด้านเป็นปัจจัยทำนายโรคซึมเศร้าในผู้ป่วยซึมเศร้าไทย ( $p < 0.05$ )

**สรุปผลการศึกษา** : ปัญหาสัมพันธภาพระหว่างบุคคลทั้ง 4 ด้านมีความสัมพันธ์กับโรคซึมเศร้าในผู้ป่วยซึมเศร้าไทย

สาขาวิชา..... การพัฒนาสุขภาพ..... ลายมือชื่อนิสิต..... พีรพันธ์ ลีอนุญวรัชชัย.....  
ปีการศึกษา..... 2550..... ลายมือชื่ออาจารย์ที่ปรึกษา..... Han.....



# #497 50032 30 : MAJOR HEALTH DEVELOPMENT

KEY WORD: DEPRESSIVE DISORDER/ INTERPERSONAL PROBLEM AREA/ CASE\_CONTROL

PEERAPHON LUEBOONTHAVATCHAI: RELATIONSHIP BETWEEN INTERPERSONAL PROBLEM AREA AND DEPRESSIVE DISORDERS IN THAI DEPRESSED PATIENTS: A MATCHED CASE-CONTROL STUDY. THESIS ADVISOR: PROF. NUNTIKA THAVICHACHART, M.D.,M.Sc., 85 pp.

**Objectives** : To identify the interpersonal problem areas related to depressive disorders in Thai depressed patients. Four interpersonal problem areas include grief, interpersonal role disputes, role transitions, and interpersonal deficits.

**Setting** : King Chulalongkorn Memorial Hospital

**Design** : Analytic, matched case-control study 1:1

**Subjects and method** : The 90 pairs (matched by gender and age) of the depressed and the non-depressed subjects, age above 18 years old, from the Department of Psychiatry, King Chulalongkorn Memorial Hospital, were recruited into the study during July – December 2007. The inclusion criteria for the depressed subjects were new cases of depression (within 6 months) and scores of at least 8 points of Thai Hamilton Rating Scale for Depression (Thai HRSD); the non-depressed subjects: the scores of less than 8 points of Thai HRSD. All subjects completed two questionnaires; 1) Demographic data form, and 2) Thai Interpersonal Questionnaire. The association between interpersonal problem areas and depressive disorders were analyzed by McNemar's chi-square test. A p-value of less than 0.05 was considered statistically significant. The strength of association was reported by using odds ratio (OR) with 95% confidence interval (95%CI). Conditional logistic regression was performed to identify the predictors of depressive disorders.

**Results** : Most of subjects were young and middle-aged female, living in Bangkok and central region. All four interpersonal problem areas were associated with depressive disorders ( $p < 0.01$ ) in the following strength of association: grief (OR = 7.25, 95%CI = 2.55-28.38), interpersonal role disputes (OR = 4.30, 95%CI = 2.13-9.60), role transitions (OR = 15.00, 95%CI = 5.56-56.84), and interpersonal deficits (OR = 9.00, 95%CI = 3.58-29.05). All four interpersonal problem areas were predictors of depressive disorders in Thai depressed patients ( $p < 0.05$ ).

**Conclusion** : All four interpersonal problem areas were associated with depressive disorders in Thai depressed patients.

Field of study.....Health Development..... Student's signature.....*Peeraphon Lueboonthavatchai*  
 Academic year.....2007..... Advisor's signature.....*N. Thavichachart*

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# CHAPTER I

## INTRODUCTION AND BACKGROUND

### 1.1 BACKGROUND AND RATIONALE

Depressive disorder was the fourth leading cause of worldwide disease burden, accounting for 3.7% of total disability-adjusted life-years (DALYs), and was one of the worldwide leading causes of disabilities, accounting for 10.7% of total years lived with disabilities (YLDs) in 1990 [1]. A decade later, unipolar depression remains one of the leading causes of worldwide disease burden and disabilities, accounting for 4.46% of total DALYs and for 12.1% of total YLDs [2]. It was estimated that depressive disorder would be the second leading disease of burden in the next 20 years [2]. Among other psychiatric disorders, depressive disorder is the first leading cause of disease burden and disability.

Depressive disorder is mainly characterized by sustained depressed mood and decreased interest during a period, including decreased or increased appetite, weight loss or gain, insomnia or hypersomnia, guilt, hopelessness, helplessness, difficulty to concentrate, psychomotor retardation or agitation, thoughts of death or suicidal ideation [3,4]. According to Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition, Text Revision (DSM-IV-TR) classification [5], depressive disorder was mainly classified into major depressive disorder and dysthymic disorder [3,4]. Both major depressive disorder and dysthymic disorder are two common depressive disorders, with a lifetime prevalence of about 15% and 3 – 6% respectively [3,4]. Major depressive disorder is the more severe form of depressive disorder during the two-week period, while dysthymic disorder is the mild and chronic form of depressive disorder during the two-year period. Coexisting disorders of depressive disorders include anxiety disorders, alcohol dependence, and other substance-related disorders. Patients with these two depressive disorders have impairment of social and occupational functioning, and also have the higher risks of suicidal behaviors [3,4].

Depressive disorder is composed of both biological and psychosocial contributes. This leads to wide treatment modalities for patients with depressive disorders, containing biological treatment - antidepressants, electroconvulsive therapy, and psychosocial treatment - psychotherapies. One of the evidence-based psychotherapies (EBTs) [6-8] that has been shown the efficacy on treatment of depression is interpersonal psychotherapy (IPT) [9].

Interpersonal psychotherapy (IPT), developed by Myrna M. Weissman and Gerald M. Klerman [10-12], is a short-term, structure, focused psychotherapy. It focuses on the current interpersonal problems related to symptoms of depression. IPT therapist tries to link the main interpersonal problem area with symptoms of depression and tries to solve this main interpersonal problem. The goals of IPT are solving interpersonal problems and resolving depressive symptoms [13,14]. It is a time-limited and evidence-based psychotherapy of depression [8,9]. There are the clinical controlled trials showing the efficacy of IPT on major depressive disorder, dysthymic disorders, and other psychiatric disorders [9,15-17]. IPT concept was derived from the interpersonal or social theories of depression; that is, interpersonal or social difficulties lead to psychiatric morbidity, especially depression [18,19].

The interpersonal difficulties related to symptoms of depression are 1) grief or complicated bereavement, 2) interpersonal role disputes, 3) role transitions, and 4) interpersonal deficits [13,14]. In the initial phase of IPT, the therapist has to identify one of four main interpersonal problems related to patients' symptoms of depression. Resolving the main interpersonal problem area leads to lessening of depressive symptoms. Although there were many clinical trials showing the efficacy of IPT on depression, but there are the limited studies on mechanism of IPT. Until now, there are no any surveys on interpersonal problems related to depression or any studies concerning interpersonal problems related to symptoms of depression.

Although interpersonal problems seem to be universal human experiences and interpersonal problems related to depression are found in depressed patients worldwide, but the quality and quantity of interpersonal problems are varied due to the different socio-cultural context, especially between western and eastern countries. IPT is the psychotherapy that primarily focused on social context. Therefore, studying the interpersonal or social difficulties of depressed patients in will help to understand the mechanism of interpersonal triggers in depression and help to appropriately adapt IPT into treatment model in Thailand.

This study was aimed to identify the interpersonal problem areas associated with depressive disorders in Thai depressed patients. It will help in adaptation of IPT manual for use in Thai depressed patients.

## 1.2 RESEARCH QUESTIONS

### 1.2.1 Primary research question

Are the four interpersonal problem areas (grief, interpersonal role disputes, role transitions, and interpersonal deficits) associated with depressive disorders in Thai depressed patients?

### 1.2.2 Secondary research question

Are other psychosocial factors: education, occupation, incomes, physical illness, previous history of depressive disorder, and substance use disorders, associated with depressive disorders in Thai depressed patients?

## 1.3 RESEARCH OBJECTIVES

1.3.1 To identify the interpersonal problem areas associated with depressive disorders in Thai depressed patients

1.3.2 To identify other psychosocial factors: education, occupation, incomes, physical illness, and previous history of depressive disorder, and substance use disorders, associated with depressive disorders in Thai depressed patients

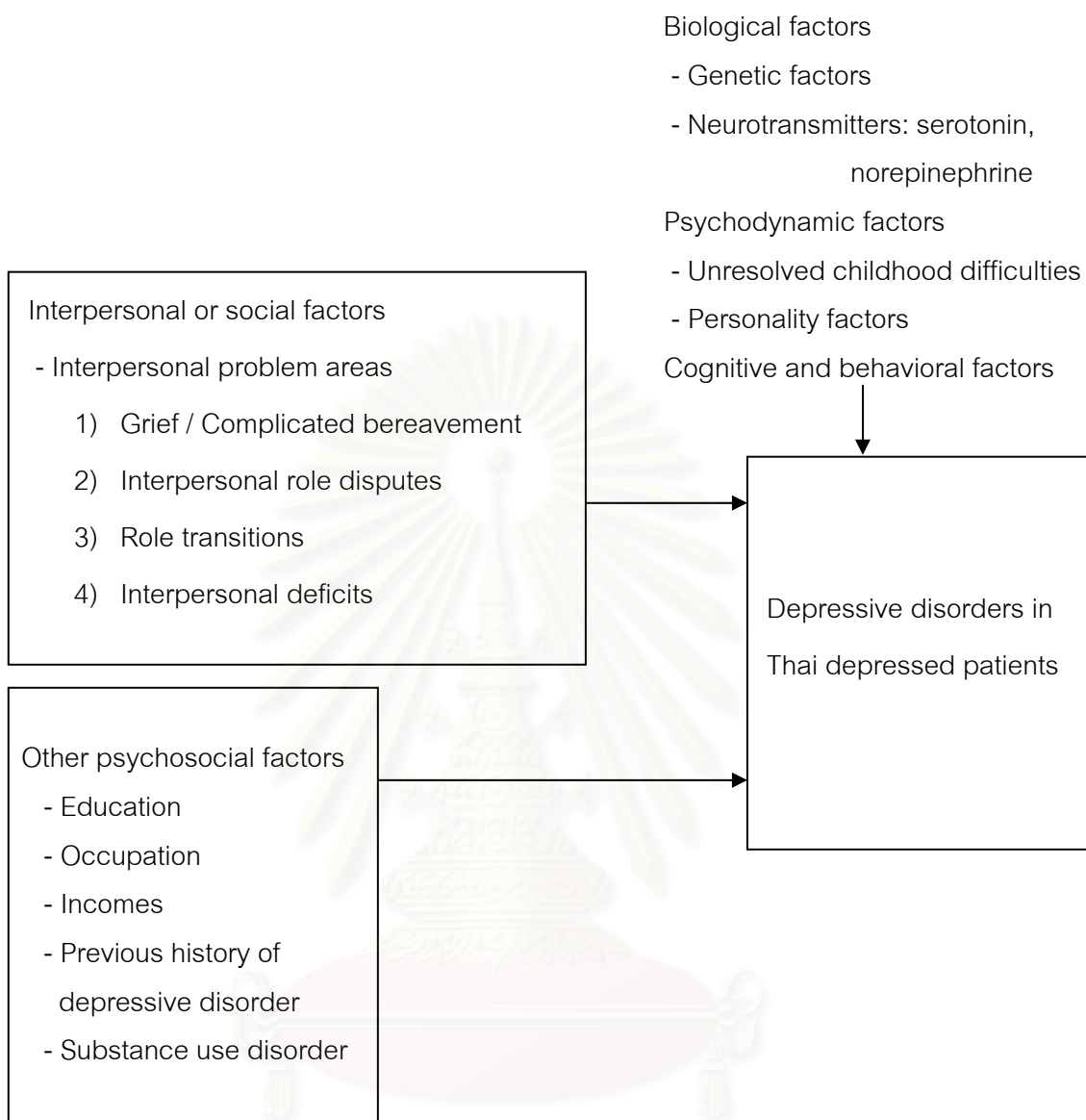
## 1.4 RESEARCH HYPOTHESES

1.4.1 The interpersonal problem areas are associated with depressive disorders in Thai depressed patients.

1.4.2 The other psychosocial factors: education, occupation, incomes, physical illness, and previous history of depressive disorder, substance use disorders, are associated with depressive disorder in Thai depressed patients.



## 1.5 CONCEPTUAL FRAMEWORK



## 1.6 KEY WORDS

Depressive disorder, interpersonal problem area, case-control

## 1.7 OPERATIONAL DEFINITIONS

### Depressive disorders

Depressive disorder is characterized by sustained depressed mood and decreased interest during a period, including decreased or increased appetite, weight

loss or gain, insomnia or hypersomnia, guilt, hopelessness, helplessness, difficulty to concentrate, psychomotor retardation or agitation, thoughts of death or suicidal ideation.

In this study, depressive disorders included four depressive disorders diagnosed by Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition, Text Revision (DSM-IV-TR) criteria: major depressive disorder, dysthymic disorder, depressive disorder not otherwise specified (NOS), and adjustment disorder with depressed mood, and also at least 8 points of scores on Thai version of Hamilton Rating Scale for Depression (Thai HRSD).

### **Interpersonal problem areas**

Interpersonal problem areas include four main interpersonal problems: 1) grief or complicated bereavement, 2) interpersonal role disputes, 3) role transitions, and 4) interpersonal deficits.

**1) Grief or complicated bereavement** means the sadness following the death of a loved one; e.g. family members, spouse.

**2) Interpersonal role disputes** are defined as conflicts with a significant person such as a spouse, family members, a coworker, or a close friend.

**3) Role transitions** include any developmental changes or any changes in life status such as the beginning or the end of a relationship or career, a move, promotion, retirement, diagnosis of medical illness.

**4) Interpersonal deficits** include lack of interpersonal or social skills, resulting in problem in initiating or sustaining relationship, or lack of social support.

In this study, the interpersonal problem areas were defined by the subjects' problem in adjusting in the problem areas. The subjects who had interpersonal problem areas were those who had the scores of Thai Interpersonal Questionnaire in the second and the third interval of which were compatible with the problem areas diagnosed by the clinical interview.

## 1.8 ETHICAL CONSIDERATIONS

The approval for the study was obtained from the Ethical Committee, the Institutional Review Board (IRB) of Faculty of Medicine, Chulalongkorn University. This study was conducted by using answering the questionnaires and additional interview. There was no serious harm to the subjects. All eligible subjects were fully explained the objectives and method of the study before making the decisions to participate in the study. The investigator ensured the subjects' rights in making their own decisions to participate in the study or withdraw from the study. After the subjects made their own decisions to participate in the study, they gave their written, informed consents. The investigator maintained the confidentiality on the subjects' information. The subjects' data were analyzed, presented, and reported in general.



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## CHAPTER II

### REVIEW OF RELATED LITERATURES

Depression is a group of clinical conditions which is characterized by the patient's sustained depressed mood during a period, leading to their impaired interpersonal, social, or occupational functioning. Patients with depression show disturbance of mood (depressed mood, decrease in or loss of interest), vegetative functions (decreased appetite, insomnia, decreased sexual activity), cognition (feelings of guilt, hopelessness, helplessness, worthlessness, difficulty to concentrate, thoughts of death or suicidal ideation), and psychomotor (psychomotor retardation, psychomotor agitation) [3-4,20-23]. According to the Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> ed., Text Revision (DSM-IV-TR) classification [5], depressive disorders are mainly classified into two types: major depressive disorder and dysthymic disorder. Major depressive disorder is a severe form of depressive disorders, characterized by sustained depressed mood or loss of interest or pleasure during a 2-week period with five or more of the following symptoms: depressed mood, markedly diminished interest or pleasure, significant weight loss or decrease or increase in appetite, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive or inappropriate guilt, diminished ability to think or concentrate or indecisiveness, recurrent thoughts of death or recurrent suicidal ideation or a suicidal attempt. These symptoms lead to significant distress or impairment in social, occupational, or other important functioning [5]. Dysthymic disorder is a mild and chronic form of depressive disorders characterized by sustained depressed mood for at least two years with two or more of the following symptoms: poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficulty in decision making, feelings of hopelessness. These symptoms cause significant distress or impairment in social, occupational, or other important functioning [5].

## 2.1 DEPRESSIVE DISORDERS

### 2.1.1 EPIDEMIOLOGY

Depressive disorder is a common disorder, with a lifetime prevalence of about 15% (perhaps as high as 25% for women) for major depressive disorder and about 5 – 6% for dysthymic order [3,4]. The incidence of major depressive disorder is about 10% in primary care patients and 15% in medical inpatients [3,4]. Table 2.1 shows the lifetime prevalence of depressive disorder.

**Table 2.1 Prevalence of depressive disorders**

Depressive disorder	Lifetime Prevalence
Major depressive disorder (MDD)	10 – 25% for women; 5 – 12% for men
Recurrent, with full interepisode recovery, superimposed on dysthymic disorder	Approximately 3% of persons with MDD
Recurrent, without full interepisode recovery, superimposed on dysthymic disorder (double depression)	Approximately 20-25% of persons with MDD
Dysthymic disorder	Approximately 6%

\* Data are from American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4<sup>th</sup> ed. Text Revision. Washington, DC: American Psychiatric Association; 2000 [5].

#### Gender

Depressive disorder is more common in women than in men. The prevalence of major depressive disorder is twofold greater in women than in men [3,4].

#### Age

The mean age of onset of major depressive disorder is about 40 years [3,4]. 50% of patients with major depressive disorder have the age of onset between 20 – 50 years [3,4]. Dysthymic disorder is more commonly found in the younger persons [3,4].



### **Marital status**

Major depressive disorder usually occurs in persons without close interpersonal relationships or persons who are divorced or separated [3,4].

### **Socioeconomic status**

Major depressive disorder is more commonly found in rural areas than in urban areas [3,4]. Dysthymic disorder is common in persons with low incomes [3,4].

### **Coexisting disorders**

Major depressive disorder and dysthymic disorder usually coexist. The coexisting major depressive disorder and dysthymic disorder is called double depression. Moreover, depressive disorder frequently coexists with other psychiatric disorders, especially anxiety disorders, substance use disorders, and personality disorders such as borderline personality disorder [3,4].

In Thailand, the prevalence of depressive disorder is about 5.7-20.9%. From the epidemiological survey of Nuntika Thavichachart's [24], the lifetime prevalence of depressive disorder in Bangkok Metropolis is 19.9% [21].

## **2.1.2 ETIOLOGY**

Depressive disorder has multi-factorial etiologies: both biological and psychosocial factors.

### **1) Biological factors**

Biological factors contributing to depressive disorder include genetic factors, change in brain structure and function, neurotransmitter abnormalities, neuroendocrine dysregulation, and other biological dysfunction.

From the previous studies, genetic factors play the significant role in depressive disorder from family, adoption, twin, and linkage studies [25].

From the studies of brain structure from computed tomography (CT) และ magnetic resonance imaging (MRI), patients with depressive disorder were found ventriculomegaly and significant reduction of brain volume. Functional brain studies from positron emission tomography (PET) found the reduction of cortical cerebral blood flow and glucose metabolism, especially in prefrontal cortex [26,27].

Neurotransmitter abnormalities in depressive disorder include abnormalities of biogenic amines: norepinephrine, serotonin, and dopamine. The evidences showing the biogenic amine abnormalities in depressive disorder were metabolites of biogenic

amines (5-hydroxyindoleacetic acid or 5-HIAA, homovanilic acid or HVA, 3-methoxy-4-hydroxyphenyl-glycol or MHPG) in blood, urine, and cerebrospinal fluid, and the efficacy of antidepressants: increasing biogenic amines in synapses and modification of receptor sensitivities [28-30].

Neuroendocrine abnormalities in depressive disorder include abnormalities in hypothalamic-pituitary-adrenal or HPA axis. Fifty percent of depressed patients have increased cortisol level and non-suppression from dexamethasone suppression test [3,26,30]. Besides, abnormalities of thyroid axis and growth hormones were also found [3].

Other biological dysfunctions were abnormalities in sleep neurophysiology: terminal insomnia or early morning awakening, delayed sleep onset, shortened shortened rapid eye movement (REM) latency, longer first REM period, abnormal delta sleep; and abnormal regulation of sleep-wake cycle [3,26].

## 2) Psychosocial factors

Psychosocial factors of depressive disorder include intrapsychic psychodynamic factors, cognitive factors, behavioral factors, and also interpersonal or social factors.

Intrapsychic or psychodynamic factors focus on intrapsychic conflicts from past or childhood experience. Psychoanalysts and psychodynamic therapists see the patients' depressive symptoms as the reactivation of unresolved childhood difficulties and inadequate mothering [3,30,31]. Sigmund Freud and Karl Abraham explained depressive disorder is precipitated by the loss of loved one. The bereaved persons try to introject the lost person into themselves. Feelings of anger that are directed inward at themselves lead to patients' depressive symptoms. Melanie Klein focused on problematic mother-child relationship. Edward Bibling saw depression was developed from the failure to reach the ego-ideal. Heinz Kohut explained that damaged sense of self or self-esteem or narcissistic injury leads to depression. John Bowlby focused on early attachments in childhood. He saw that traumatic separation in childhood precipitates depression. Personality also plays the roles in depressive disorder. From previous studies, personality disorders predisposing to depressive disorder were obsessive-compulsive, histrionic, and borderline personality disorders [3,4].

Cognitive factors focus on distortion of cognition or thinking. Aaron Beck stated that depressed persons have all negative views of themselves, their world or experiences, and their future. They feel themselves as defective, inadequate,

undesirable, the others as negative, demanding, and their future as deprivation, hardship, suffering, and failure [3,32,33].

Maladaptive behavior patterns produce depressive symptoms. Many persons experience the repeated failures and disappointments may learn lead helplessness and hopelessness, leading to symptoms of depression [3,4].

Interpersonal or social factors also play important roles in depressive disorder. Many depressed patients report their adverse or stressful life events precipitating their symptoms of depression. These stressful life events include death of the loved one especially the death of spouse, separation, any life changes such as separation or divorce, unemployment, or financial problems [3,4,30].

### 2.1.3 CLINICAL FEATURES

Depressive disorder is characterized by a sustained period of depressed mood and loss of interest or pleasure in activities. Most of depressed patients complain about the decreased energy, trouble sleeping, and poor appetite and weight loss. They usually also have the cognitive symptoms: an ability to think or concentrate, guilt, feelings of helplessness, hopelessness, or worthless. They found difficulties in finishing tasks, and had less motivation to undergo the new projects. Moreover, many depressed patients had somatic complaints such as functional headaches, muscle tension, dyspepsia, or constipation. They usually withdraw from their families, their friends, or activities that previously interested them. These depressive symptoms lead to the impairment of patients' functioning at school or work, and also interpersonal or social functioning.

### 2.1.4 DIAGNOSIS

#### Major depressive disorder

According to the DSM-IV-TR diagnostic criteria [5], major depressive disorder is diagnosed by the presence of one or more depressive episodes in the absence of a history of mania or hypomania.

### DSM-IV-TR diagnostic criteria for major depressive episode [5]

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 (e.g., feels sad or empty) or observation made by others (e.g., appears tearful) **Note:** In children and adolescent, can be irritable mood.

(2) 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 (e.g. 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 (e.g. hypothyroidism).

E. The symptoms are not better accounted for by bereavement, i.e., 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

### DSM-IV-TR diagnostic criteria for dysthymic disorder [5]

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.

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); i.e., 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 provided there was a full remission (no significant signs or symptoms for 2 months) before development of the dysthymic disorder. In addition, after the initial 2 years (1 year in children or adolescents) or 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 delusional disorder.

G. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g. hypothyroidism)



H. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

### **Depressive disorder not otherwise specified**

#### **DSM-IV-TR diagnostic criteria for depressive disorder not otherwise specified [5]**

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. Examples of depressive disorder not otherwise specified include

1. Premenstrual dysphoric disorder: in most menstrual cycles during the past year, symptoms (e.g., 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 usual activities and be entirely absent for at least 1 week postmenses.

2. Minor depressive disorder: episodes of at least 2 weeks of depressive symptoms but with fewer than the five items required for major depressive disorder.

3. Recurrent brief depressive disorder: depressive disorders lasting from 2 days up to 2 weeks, occurring at least once a month for 12 months (not associated with menstrual cycle).

4. Postpsychotic depressive disorder of schizophrenia: a major depressive episode that occurs during the residual phase of schizophrenia.

5. A major depressive episode superimposed on delusional disorder, psychotic disorder not otherwise specified, or the active phase of schizophrenia.

6. 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 with depressed mood

### DSM-IV-TR diagnostic criteria for adjustment disorder [5]

A. The development of emotional or behavioral symptoms in response to an identifiable stressor(s) occurring within 3 months of the onset of 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 Axis I or Axis II 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.

Specify if:

**Acute:** if the disturbance lasts less than 6 months

**Chronic:** if the disturbance lasts for 6 months or longer

Adjustment disorders are coded based on the subtype, which is selected according to the predominant symptoms. The specific stressor(s) can be specified on Axis IV.

With depressed mood

With anxiety

With mixed anxiety and depressed mood

With disturbance of conduct

With mixed disturbance of emotions and conduct

Unspecified

## 2.2 INTERPERSONAL PSYCHOTHERAPY

Interpersonal psychotherapy (IPT) is one of the evidence-based therapies (EBTs) of depression [8,9,34]. It is based on the interpersonal theory of Adolf Meyer and Harry Stack Sullivan, which mentioned that interpersonal or social difficulties leading to psychiatric morbidities, especially depressive disorder [18,19]. IPT was developed by Myrna M. Weissman and Gerald L. Klerman [10,11]. Four interpersonal problems

include 1) grief or complicated bereavement, 2) interpersonal role disputes, 3) role transitions, 4) interpersonal deficits. IPT therapists try to link the interpersonal problem with depressive symptoms of patients. Resolving the patients' interpersonal problems leads to the reduction of depressive symptoms [13,14]. IPT was originally used as a treatment of depressive disorders, major depressive disorder and dysthymia. There are many studies showing the efficacy of IPT on depressive disorder, both major depressive disorder and dysthymia [9,15,16,35]. IPT was adapted to use for adolescent depression [36-39], late-life depression [40], depression in marital disputes [41], depression in medical illness [42], depression in HIV-positive patients [13], ante- and postpartum depression [43], and bipolar disorders [44-46]. IPT was also adapted to use for non-mood disorders such as anxiety disorders [47,48], eating disorders [49-51], somatization disorder [52], borderline personality disorder [53]. Moreover, IPT was also adapted for use as IPT group therapy [54-55]. It was tested for the efficacy for these kinds of psychiatric disorders. Now there is an IPT therapeutic manual, developed by Myrna M. Weissman, and John C. Markowitz [13]. It makes IPT as a uniform for teaching, training, practice, and also researches.

## 2.2.1 INTERPERSONAL APPROACH TO DEPRESSION

### 1) Symptom function

Symptoms of depression include depressed mood, vegetative symptoms (decreased appetite, weight loss, insomnia, fatigue, and decreased sexual desire), negative cognition (guilt, worthlessness, helplessness, and hopelessness), psychomotor retardation or agitation, and interpersonal or social dysfunction. The interpersonal or social dysfunction include less assertiveness, ineffective communication, limited social activities, limited social contact, and social isolation [13,20]. Besides, these symptoms had both biological and psychosocial contributes.

### 2) Social and interpersonal relations

Interpersonal problems related to depression include grief or complicated bereavement, interpersonal role disputes, role transitions, and interpersonal deficits [13,14].

### 3) Personality and character problems

Some personality or character traits such as inhibited expression of anger or guilt, poor psychological communication with significant others, and difficulty with self-esteem determine a person's reactions to interpersonal experiences, and may predispose depression [13]. IPT does not focus on personality reconstruction because of the short duration of treatment. However, many patients of IPT gain new social skills that may help to compensate for personality difficulties.

## 2.2.2 CHARACTERISTICS OF INTERPERSONAL PSYCHOTHERAPY [13,14, 34,56,57]

### 1) Time-limited psychotherapy

IPT is time-limited or short-term psychotherapy for immediate problems and for many Axis I disorders. This is different from long-term psychotherapy which is necessary for the treatment of patients with personality disorders (axis II disorder). IPT also avoids the adverse effects of reinforcing dependence and avoidance behavior which may be found in long-term psychotherapy.

### 2) Focused psychotherapy

IPT is a focused psychotherapy. IPT therapists focus on one or two areas of problem (core conflicts) in the patients' current or here-and-now interpersonal functioning. IPT is different from long-term psychotherapy which is an open-ended psychotherapy and relates to patients' intrapsychic issues from the past to the present.

### 3) Focusing on current relationships

IPT primarily focuses on patients' current relationship which is related to depressive symptoms. Although sometimes IPT therapist may review the past history of patients, it still focused on the past relationship that may affect the patient's current relationship or interpersonal functioning.

#### 4) Interpersonal focus

Unlike psychoanalytic psychotherapy, an IPT therapist does not try to explore patient's problem in terms of intrapsychic conflicts, but the therapist sees relationships with others within interpersonal context or interpersonal conflicts. Moreover, IPT is not like cognitive-behavioral therapy which focuses on thinking errors or distortion or maladaptive behaviors.

#### 5) Not focusing on personality

IPT does not focus on patients' personalities or traits like in long-term psychotherapy. Patients without personality disorders work with IPT better than patients with personality disorders. Although IPT does not try to change personality structure of the patients, it still helps to improve social skills of patients and may adapt maladaptive personality traits after patients have been relieved from their depressive symptoms.

#### 6) Active and advocate therapist

IPT therapists are active and serve as the advocates to the patient, not taking the neutral role like in psychodynamic psychotherapy. Nevertheless, IPT therapists maintain the nonjudgmental attitude, warmth, and unconditional positive regard; they are optimistic, helpful, supportive, and use more reassurance and direct advice when it seems useful.

### 2.2.3 GOALS OF INTERPERSONAL PSYCHOTHERAPY

#### 1) To resolve the interpersonal problems

IPT therapists help the patients recognize the connection between their interpersonal problems and symptoms of depression, and help them resolve their interpersonal problems.

#### 2) To increase the interpersonal skills

IPT therapists try to enhance the patients' interpersonal skills, increase the patients' social support, leading to the decreased patients' social isolation.

### 3) To improve the communication patterns

IPT therapists try to make the patients recognize their maladaptive communication patterns leading to interpersonal problems, and help them communicate with others more effectively.

### 4) To relieve symptoms of depression

IPT therapists help the patients relieve the symptoms of depression such as depressed mood, loss of interest, vegetative symptoms, and also help the patients return to their normal functioning.

## 2.2.4 PHASES OF INTERPERSONAL PSYCHOTHERAPY [13,14,34,57]

Interpersonal psychotherapy is a short-term psychotherapy. The duration of treatment is about 12 – 16 weeks (once a week session). The length of session is about 45-60 minutes. IPT consists of three phases of treatment.

### 1) Initial phases

The Initial session begins with a review of patient's depressive symptoms and the interpersonal context related to the depressive episode. After diagnosing depressive disorder, the therapists provide the information about depression and the treatment options to the patients. The therapists try to link depressive symptoms to the patients' interpersonal problems, and then identify the major problem areas of the patients. After considering IPT as a treatment for patients, the therapists explain the IPT concepts and set the treatment contract.

### 2) Intermediate phases

Intermediate sessions focus on the patient's areas of problem. In each session, therapists try to relate depression to interpersonal events that patient met during the past week, and work on the patient's areas of problem in order to relieve depressive symptoms.



### 3) Termination phases

Termination sessions, the last 3 - 4 sessions, include the discussion of the ending of treatment, the acknowledgment of grief, and the patient's recognition of independent competence. If the patients fail to respond to IPT, the therapists will discuss other alternative treatments with the patients. Moreover, in some cases, the therapists may discuss with the patients about the continuation treatment.

## 2.2.5 THERAPEUTIC METHOD OF INTERPERSONAL PSYCHOTHERAPY

[13,14, 34,57]

### 1) Grief or complicated bereavement

Grief or complicated bereavement is sadness following the death of a loved one. In IPT, the therapists help the patients accept their painful affects related to the grief or loss, facilitate their mourning process, and help them develop new attachment and social support to compensate for the loss.

### 2) Interpersonal role disputes

Interpersonal role disputes mean conflicts with a significant other: a spouse, other family members, a coworker, or a close friend. The therapists help the patients recognize the cause of disputes or maladaptive communication patterns, and then help them resolve the disputes.

### 3) Role transitions

Role transitions are any changes in life status: both developmental and situational changes: in life status, for example, parenthood, aging, the beginning or the ending of the relationship, a career advancement, a move, job loss, retirement, separation or divorce, diagnosis of medical illness. The therapists help the patients conceptualize more balanced views of the old roles and the new roles, and help them to develop new skills needed for their new roles.

#### 4) Interpersonal deficits

Interpersonal deficits are defined as the patient's lack of interpersonal or social skills, resulting in problem in initiating or sustaining a relationship, and also lack of social support. The therapists help the patients develop the interpersonal or social skills, and reduce the patients' social isolation.

#### 2.2.6 THERAPEUTIC TECHNIQUES OF INTERPERSONAL PSYCHOTHERAPY

[13,14,57]

Therapeutic techniques for IPT include exploratory techniques, clarification, encouragement or use of affect, communication analysis, role playing, use of therapeutic relationship, problem solving and decision making, behavior change techniques, and homework or task assignments,

#### 2.2.7 ROLES OF THE THERAPISTS [13,14,57]

##### 1) The therapist is a patient's advocate, not neutral.

The therapists maintain the nonjudgmental attitude and remain the unconditional positive regard to the patient. The therapists are the patients' advocates and allies. They are also optimistic and make the patients feel that the patients' problems can be resolved. The therapists are also supportive, and may use reassurance and direct advice when they consider these techniques will be helpful for the patients.

##### 2) The therapist is active, not passive.

IPT is a focused, short-term psychotherapy. The goal of treatment is to relieve depressive symptoms by solving the patients' interpersonal problems. Therefore, IPT therapists' role is active and the therapists help the patients focus on issues of the current interpersonal problems.

### 3) The therapeutic relationship is not interpreted as transference.

The therapist-patient relationship in IPT is realistic, not seen as a repetition of the patients' past relationships with others, or transferences. The therapists provide the alliance, the assistance, and realistic understanding to the patients. The patients' positive feelings toward the therapists are not explored, unless these feelings interrupt the treatment process.

### 4) The therapeutic relationship is not a friendship.

Although the therapists are the patients' advocates, the therapist-patient relationship is neither social relationship nor friendship. The therapist can give the personal opinions when the topics are relevant to the treatment. However, the therapists do not participate or get involved in the patients' activities unrelated to the treatment.

## 2.2.8 EVIDENCES IN EFFICACY OF INTERPERSONAL PSYCHOTHERAPY

### 1) Boston-New Haven study

#### 1.1) IPT for acute depression

The first comparative study of the efficacy of IPT and antidepressant was conducted in acutely depressed, ambulatory men and women by using IPT alone, amitriptyline alone, and the two in combination, against a nonscheduled treatment group for sixteen weeks [9,16]. IPT was administered by experienced psychiatrists. The eighty-one depressed patients entered the randomized treatment study [9,16]. The control group was the nonscheduled treatment; the patients in this group were assigned a psychiatrist with whom they were told to get in touch whenever they felt a need for treatment.

The results found that each treatment alone effectively reduced symptoms than the nonscheduled treatment and combination treatment had greater outcome than each treatment alone [9]. IPT alone and amitriptyline alone had no differences in symptom reduction at the end of treatment, although the treatment effect of amitriptyline on vegetative symptoms of depression appeared earlier. Amitriptyline initially affected on vegetative symptoms such as disturbance in sleep and appetite, while IPT mainly affected on the patients' mood, work performance and interest, suicidal ideation, and

guilt [16]. The effects of IPT became statistically apparent after four to eight weeks of treatment, and were sustained throughout the course of treatment [16].

### 1.2) Follow-up after acute treatment

Patients were followed up one year after treatment had ended. Patients who received IPT either alone or in combination with amitriptyline had better psychosocial functioning, as parents, family members. Generally, they were better than those who received amitriptyline alone [15].

### 1.3) IPT as maintenance treatment

There was a study of the efficacy of IPT maintenance treatment in an eight-month trial for women recovering from an acute depressive episode. This study compared with a low-contact control, with amitriptyline, placebo, or no pill. The combination of treatments was the most efficacious. It showed a lower risk of relapse, and greater improvement in social functioning [58,59].

## 2) NIMH TDCRP study

This was a multi-site National Institute of Mental Health Treatment of Depression Collaborative Research Program (NIMH TDCRP) [17]. This study randomly assigned 250 depressed outpatients to sixteen weeks of imipramine, IPT, cognitive-behavior therapy (CBT), or placebo. Treatment manuals were used to define each treatment, and the recorded tapes of sessions were used to monitor the treatment sessions. Most subjects completed at least fifteen weeks or twelve treatment sessions. IPT had the lowest attrition rate among the treatments. Less symptomatic patients improved in all treatments, including placebo/clinical management. Among more severe depressed patients, imipramine/clinical management induced the most rapid response and was the most consistently superior to placebo. IPT was comparable to imipramine/clinical management on several outcome measures, and was most consistently superior to placebo. CBT produced an immediate level of improvement, and was not superior to placebo for this group.

According to both the Boston-New Haven study and the TDCRP, sixteen weeks of treatment could induce remission, but not guarantee the maintenance of recovery from depression [15,17].

In conclusion, major depression tends to be a recurrent and relapsing illness for which no acute treatment, psychotherapy or psychopharmacology, is curative. This research shows that IPT can treat an acute depressive episode, but the continuation and maintenance treatment at monthly level may be necessary to sustain remission [15,17].

### **3) Neuroimaging study**

There was a neuroimaging study of patients who received antidepressant treatment and IPT [60]. They randomized 28 patients with major depression to receive either venlafaxine or weekly IPT. The subjects were assessed by using SPECT imaging at baseline and after six weeks. Both treatment groups improved markedly, but showed different patterns of single photon emission computed tomography (SPECT) change. Patients receiving venlafaxine showed angular gyrus and dorsolateral prefrontal cortical (DLPFC) normalization, while IPT patients showed DLPFC and limbic central cingulate normalization.

## **2.2.9 PREDICTORS OF RESPONSE**

There were studies of some factors predicting the treatment response of IPT.

### **1) Patient factors**

Sotsky and colleagues found that many patient factors predicted treatment outcome of depressed patients [61]. Patients with low level of social dysfunction (or interpersonal deficits) responded to IPT better than those with severe social dysfunction. Patients with symptom of more severity and difficulty in concentrating responded poorly to CBT. High initial severity of major depression and of impaired functioning predicted superior response to IPT and to imipramine. Both IPT and CBT had significantly higher response rates for patients with atypical depression (mood reactivity and reversed vegetative symptoms: hypersomnia, hyperphagia, and weight gain) than imipramine.

The study of efficacy of IPT on depressed patients with personality disorders showed that IPT was more efficacious than CBT for patients with obsessive compulsive personality disorder, while CBT had better response for patients with avoidant personality disorder than IPT [62].

Single, separated, or divorced patients responded to IPT better than to CBT, whereas married or cohabiting patients responded to CBT better than IPT [62].

According to a biological study, it showed that patients with abnormal sleep electroencephalogram (EEG), abnormal sleep efficiency, REM latency, and REM density, had poorer response to IPT than patients without sleep EEG abnormalities [63].

## 2) Therapist factors

A study of IPT maintenance for recurrent major depression found that the focal purity of IPT (the ability of therapist to focus on interpersonal issues) was significantly correlated with the prevention of relapse [64]. The strength of therapeutic alliance also influenced the treatment outcome of IPT [13].

### 2.2.10 MANUAL OF INTERPERSONAL PSYCHOTHERAPY

Treatment manuals provide a basis for relative homogeneity of therapeutic approach and techniques used by therapists. This makes psychotherapy a uniform treatment. This is beneficial for treatment, training, and also researches in psychotherapy. IPT is one of manualized psychotherapies. IPT therapeutic manual was initially released at the time of Boston-New Haven studies of the 1970s. In 1984, the manual became a book, "Interpersonal Psychotherapy of Depression" [13,14].

To develop the IPT treatment manual, it is necessary to know whether IPT will work for a particular diagnosis or subpopulation within a diagnosis requires testing its efficacy. These are steps preceding the actual treatment studies:

1. Clinical experience of the therapist in IPT and also in the specific population is required to develop a manual for that group of population.
2. A survey and an assessment of the psychosocial and interpersonal problems in the treatment population are needed to appropriately modify the IPT manual for subpopulation from the original IPT manual.
3. Modifications of IPT deriving from the survey and assessment can be addressed in the manual by using case examples and scripts. The cases and scripts provide examples of problems and guidelines for dealing with those problems.
4. When a new manual is developed, it should be first used in pilot group then in a treatment population. A therapist can add or adjust some issues when the manual is used in the pilot group.



5. Once the new manual is completed, the manual can be used for training therapists and for studying IPT efficacy in researches.

### 2.3 INTERPERSONAL OR SOCIAL FACTORS OF DEPRESSIVE DISORDERS

As mentioned in the former parts of review, depressive disorder is composed of both biological and psychosocial etiologies. This leads to wide treatment modalities for patients with depressive disorders, containing biological treatment - antidepressants, electroconvulsive therapy, and psychosocial treatment – psychotherapies [3,4].

Interpersonal psychotherapy (IPT) is one of the evidence-based psychotherapies of depression [8,9]. IPT concept was derived from the interpersonal or social theory of depression, which mentioned that interpersonal or social difficulties lead to psychiatric morbidity, especially depression [18,19]. Interpersonal problem areas include 1) grief or complicated bereavement, 2) interpersonal role disputes, 3) role transitions, and 4) interpersonal deficits. Solving the patients' current interpersonal problems leads to lessening their depressive symptoms [13,14,57].

Although there were many studies showing the efficacy of IPT on patients with depressive disorders [9,15-17,58-60], however; there were still limited studies on mechanisms or interpersonal problems related to depressive symptoms. These followings are the studies concerning interpersonal and social factors related to depressive symptoms.

Meyer A and Sullivan HS [18,19], the founders of the interpersonal school, stated that interpersonal problems and social factors contribute to psychiatric morbidities such as depression.

Holmes TH and Rahe RH [65] constructed the Social Readjustment Rating Scale for measuring stressful life events. The higher accumulation of life event scores indicates the greater vulnerability to disease. Among stressful life events, the death of spouse has the greatest impact on people's lives. The other stressful life events that have high impact include divorce, marital separation, detention in jail, death of a close family member, major injury or illness.

Kendler KS, et al [66] studied the stressful life events predicting the onset of major depression. The result showed that the stressful events considered as the most important predictors of major depression were death of a close relative, assault, serious marital problems, and divorce or breakup (odds ratio of more than 10).

Weissman MM and Paykel ES [67] reported that depressed women had problematic marital and family relationships.

Hammen C [68] studied the effect of stressful events on depression by demographically matched groups of women with unipolar depression (n = 14), bipolar depression (n = 11), chronic medical illness (n = 13), and no illness or disorder (n = 22). The results showed that unipolar depressed women experienced more stress than the normal women, and had more interpersonal event stress than all others.

Davila J and Hammen C, et al [69] studied the role of interpersonal problem-solving strategies in the stress generation in depression in 140 adolescents. The results showed that the interpersonal stress mediated the relationship between initial and later depressive symptoms, and the interpersonal problem-solving strategies predicted interpersonal stress, but there was no association between interpersonal problem-solving strategies and depressive symptoms.

Hammen C and Brennan PA [70] reported the interpersonal dysfunction in depressed women. They compared interpersonal behavior in the currently depressed (n = 83), formerly depressed (n = 271), and never depressed women (n = 458). The results showed that interpersonal difficulties were not only consequences of depression. The formerly depressed women had more marital instability, marital dissatisfaction, spouse coercion, physical injury, problematic relationship with their child, friends, extended family, more stressful interpersonal life events than never-depressed women.

Zlotnick C, Kohn R, Keitner G, and Della Grotta SA [71] compared the quality of interpersonal relationships in major depressive disorder to dysthymia, nonaffective disorders, and no psychiatric disorders. The results showed that individuals with major depressive disorders had significantly fewer positive interactions and more negative interactions with their spouses or partners than those with nonaffective disorders, and than those with no psychiatric disorders.

John C. Markowitz, et al [72] tried to study the mechanism of IPT by relating interpersonal problem improvement and patients' symptom reduction in 24 patients. The results found the correlation between solving interpersonal problems and symptom improvement. However; the limitation of this study was the small sample size and also the methodological limitation to show causal-effect of solving interpersonal problems and symptom improvement.

John C. Markowitz, et al [73] also assessed the interrater reliability on determining interpersonal psychotherapy problem areas. The three IPT therapists assessed 18 audiotapes of initial treatment session. The results showed that kappas for presence or absence of each of the four IPT problem areas were 0.87 (grief), 0.58 (role disputes), 1.0 (role transition), and 0.48 (interpersonal deficits). The studied showed that

the fourth problem area, interpersonal deficits, was the least well defined of the interpersonal problem areas.

Interpersonal difficulties: loss, conflicts, life transitions, and social isolation; seem to be universal human experiences and interpersonal problems are found in patients with depression worldwide. However, the quality and quantity of interpersonal problem areas and also interpersonal problem-solving strategies may differ due to different socio-cultural context. The example of this issue was found in Uganda as follows.

Verdeli H, Clougherty K, et al. [74] tried to adapted IPT for people in Uganda. They found that people in Uganda were usually socialized to participate in community activities. The isolation from community was rarely found. Therefore, the forth problem area: interpersonal deficits or social isolation, was not recognized as a relevant interpersonal trigger of depression in Uganda.

IPT now is a structure, manual-based psychotherapy. This makes it easier for teaching or training, and practicing and more reliable in comparing the treatment efficacy. Although IPT treatment manual was translated into many languages such as Italian, Japanese, German, and Spanish and was adapted to use worldwide, the cultural adjustment is still necessary to make it appropriate in the patients' cultural context [13].

In Thailand, people are more dependent. They have extended family, and have stronger social support than people in western countries. The different socio-cultural system from western countries may affect the interpersonal problem-solving strategies and the intensity of interpersonal problems in our country [57]<sup>33</sup>. The psychotherapists should adjust the methods or styles of psychotherapy according to the socio-cultural context of the patients [57,75,76].

Moreover, there were still no any surveys or studies concerning four interpersonal problem areas related to symptoms of depression in either western or eastern countries.

This study was aimed to identify the interpersonal problem areas related to symptoms of depression in Thai depressed patients. The study would be beneficial for understanding interpersonal problem areas associated with the depressive disorder in Thai cultural context and would be the starting step for developing the manual of interpersonal psychotherapy suitable for Thai depressed patients.

## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.1 RESEARCH DESIGN

##### A matched case-control study

The main objective of this study was to identify the interpersonal problem areas as the social risk factors in depressed patients. Although the experimental study is the strongest-evidenced clinical research, but this kind of natural exposure can not be studied by using experimental design and it would be unethical to impose possible risk factors to the subjects. Therefore, the study design of these risk factors should be the observational study. Cohort study is the best study design used to identify the causal effect of risks. However; following the subjects who are and are not at risk for a long period of time until the outcomes occur is not feasible due to the time-, resource-, and money-consuming. The case-control study can be used to determine the relationship or association of risk factors and outcomes. It has more advantages on the feasibility and less expenses, but it has some disadvantages on possible confounding factors, recall biases, and limited identifying the causal link.

The methods to minimize the confounding factors and make the cases and the controls more comparable in this study were matching some variables that may affect the exposures and outcomes of interest and using the hospital-based controls. Moreover, the method that was used to reduce the possible recall biases from retrospective information was recruiting the new cases of depression within the sixth-month onset.

Matching means that individual pairing between each case and each control. Gender and age are the variables that may affect interpersonal difficulties due to developmental transitions, life experiences, and also symptoms of depression. Therefore, gender and age were already known confounding factors and were not variables of interest in this study. Matching the gender and the age may help to minimize the confounding factors and make cases and controls more comparable. Besides, the controls were recruited from the same hospital of the cases to ensure the similar demographic characteristics of the cases and the controls.

## 3.2 RESEARCH METHODOLOGY

### 3.2.1 Population and samples

#### 3.2.1.1 Target population

Target population was the depressed and the non-depressed individuals.

The study was aimed to identify the interpersonal or social risk factors of depressive disorders in Thai depressed patients. The findings of the study would be beneficial for the treatment of the depressed patients and also the prevention of depressive disorders in the non-depressed individuals who are at risks. Therefore, the target population of this study was the depressed and the non-depressed individuals.

#### 3.2.1.2 Sample population

The sample population was the depressed and the non-depressed subjects who fit to the eligible criteria from Department of Psychiatry, King Chulalongkorn Memorial Hospital during July – December 2007.

#### 3.2.1.3 Eligible criteria for the samples

##### Inclusion criteria for cases (the depressed subjects)

1. Male or female subjects, over 18 years old
2. New cases of depressive disorders diagnosed within 6 months
3. Depressive disorders diagnosed by Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition, Text Revision (DSM-IV-TR) diagnostic criteria: major depressive disorder, dysthymic disorder, depressive disorder NOS, or adjustment disorder with depressed mood
4. At least 8 points of the scores on Thai version Hamilton Rating Scale for Depression (Thai HRSD)

##### Exclusion criteria for cases (the depressed subjects)

1. Patients with schizophrenia and other psychotic disorders, bipolar disorders, organic mental disorders, mental retardation by using DSM-IV-TR diagnostic criteria

2. Patients who were not cooperated

#### Inclusion criteria for controls (the non-depressed subjects)

1. Male or female subjects recruited from the patients' family members or caregivers, over 18 years old
2. No depression from clinical interview by using DSM-IV-TR diagnostic criteria
3. Less than 8 points of scores on Thai HRSD
4. Individually matched with cases by the same gender and age (+/- 5 years)

#### 3.2.2 Sample size determination

Lachin (1992) The formula for determination of sample size for a matched case-control (1:1) is the following.

$$n \text{ (pairs)} = \frac{Z_{\alpha} \sqrt{(OR + 1)} + Z_{\beta} \sqrt{(OR + 1) - (OR - 1)^2 C^2}}{(OR - 1)^2 C}$$

OR = odds ratio = b / c (for matched case-control study)

C =  $\frac{\text{number of pairs that control exposure and case no exposure}}{\text{total number of pairs in the study}}$

From the previous study of Zlotnick C, Kohn R, et al [71], the odds ratio of interpersonal dysfunction in depressed women was about 2.5. Therefore, the odds ratio in the formula for determination of sample size were 2.5 (OR = 2.5). The value of C was estimated from the pilot study as 0.10.

Specify  $\alpha = 0.05$ ,  $Z_{\alpha} = 1.96$ ,  $\beta = 0.20$ ,  $Z_{\beta} = 0.84$ , OR = 2.5, C = 0.10  
 $n \text{ (pairs)} \sim 90$

The number of sample size in this study was about 90 cases (the depressed subjects) matched with 90 controls (the non-depressed subjects). (case : control = 1 : 1)

#### 3.2.3 Sample selection

Ninety pairs of depressed and the non-depressed subjects were recruited from Department of Psychiatry, King Chulalongkorn Memorial Hospital during July – December 2007. The depressed subjects were the new cases of depressive disorders



and had at least 8 points of scores on Thai HRSD. When a depressed subject was recruited into the study, the psychiatric patients' family member or caregiver who had the same gender and age ( $\pm 5$  years) as case, had no clinical diagnosis of depressive disorders, and had less than 8 points of scores on Thai HRSD were recruited into the study as the control (the non-depressed subject). All subjects were recruited into the study by the selection criteria. No sampling technique was used.



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## CHAPTER IV

### MEASUREMENTS AND INSTRUMENTS, DATA COLLECTION, AND DATA ANALYSIS

#### 4.1 MEASUREMENTS AND INSTRUMENTS

There were the two psychiatric rating scales used in this study. The first one, Thai version of Hamilton Rating Scale (Thai HRSD), was used to evaluate the subjects' depressive disorders, and the other one, Thai Interpersonal Questionnaire, was used to assess the subjects' interpersonal problem areas.

##### 4.1.1 Thai version of Hamilton Rating Scale for Depression (Thai HRSD)

Hamilton Rating Scale for Depression (HAM-D) is the psychiatric rating scale (clinician-rated) that was developed and used for evaluation of the severity of depressive disorder [77]. It is widely used and accepted as a valid and reliable instrument for evaluation of depressive disorder. It also has been translated in many languages and widely used. Manote Lotrakul also translated HAM-D into Thai version (Thai HRSD) and already tested for validity and reliability. The interrater reliability ( $\kappa$ ) = 0.87 and the Spearman's correlation coefficient which indicated the validity was 0.82 ( $p < 0.0001$ ). The internal consistency was good. (standardized Cronbach's alpha coefficient = 0.74) Thai HRSD had good validity and reliability, so it can be used to measure the severity of depression in Thai depressed patients [77]. Thai HRSD is composed of 18 items and had the range of total scores from 0 to 57. The scores of 7 or under indicate an absence of depression; score of 8 to 29 represent mild to major depression; and scores of 30 or above indicate severe depression or psychotic symptoms.

##### 4.1.2 Thai Interpersonal Problem Areas Questionnaire

Thai Interpersonal Questionnaire is the questionnaire developed for identifying interpersonal problem areas. This questionnaire was translated and adapted from the therapeutic manual, Comprehensive Guide to Interpersonal Psychotherapy [13] and also Interpersonal Questionnaire Baseline of Myrna M. Weissman and Helena Verdelli. Thai Interpersonal Questionnaire is composed of the four groups of items for identifying

interpersonal problem areas; 1) grief or complicated bereavement (scores: 0 - 12), 2) interpersonal role disputes (0 - 15), 3) role transitions (0 - 9), 4) interpersonal deficits (0 - 12). This questionnaire was already tested, and it showed good validity and reliability. (Cronbach's alpha coefficient of grief = 0.79; interpersonal role disputes = 0.96; role transitions = 0.96; and interpersonal deficits = 0.82) High score on each subscale of interpersonal problem area indicates problem in adjusting in that area. The range of scores (Maximum - Minimum) on each interpersonal problem areas was equally divided into three intervals. The first interval of scores indicates well adjustment in problem area (no interpersonal problem area) while the second and third intervals of scores indicate problem in adjustment (interpersonal problem area). The subjects who had interpersonal problem areas were those who had the scores of Thai Interpersonal Questionnaire in the second and the third interval which were compatible with the problem areas diagnosed by the clinical interview.

## 4.2 DATA COLLECTION PROCEDURE

Ninety pairs (matched by gender and age) of the depressed and the non-depressed subjects, above 18 years old, were recruited from Department of Psychiatry, King Chulalongkorn Memorial Hospital, Bangkok during July - December 2007. The approval for the study was obtained from the Ethical Committees, the Institutional Review Board of Faculty of Medicine, Chulalongkorn University. All subjects were informed the objectives and method of the study. They volunteered to participate in the study and gave their written, informed consents.

Patients with depressive disorders in Department of Psychiatry, King Chulalongkorn Memorial Hospital, who met the eligible criteria for cases were recruited into the study. The depressive disorders in this study include major depressive disorder, dysthymic disorder, depressive disorder NOS, and adjustment disorder with depressed mood. The inclusion criteria for the depressed subjects (cases) were new cases (within 6 months) of depressive disorders diagnosed by DSM-IV-TR criteria within 6 months and the scores of at least 7 points on Thai HRSD. The subjects completed two questionnaires: 1) Demographic data form containing subjects' personal information: gender, age, marital status, education level, occupation, and incomes; clinical history, and family history data; and 2) Thai Interpersonal Questionnaire that was used for identifying interpersonal problem areas.

The non-depressed individuals from patient's family members or caregivers in Department of Psychiatry who had the same gender and age (+/- 5 years of age) as the

depressed subjects were approached to participate in the study as controls. The inclusion criteria for the non-depressed subjects (controls) were no DSM-IV-TR diagnosis of depressive disorders by clinical interview and the scores of less than 7 points on Thai HRSD. The non-depressed subjects also completed the Demographic data form and the Thai Interpersonal Questionnaire.

### 4.3 DATA COLLECTION

The investigator collected the following data of the depressed subjects (cases) and the non-depressed subjects (controls).

1. Demographic data form: gender, age, marital status, education, occupation, and incomes, clinical history data, and family history data
2. Thai version Hamilton Rating Scale for Depression (Thai HRSD): scores on severity of depressive disorders
3. Thai Interpersonal Questionnaire: scores of four subscales on interpersonal problems:
  - 1) grief or complicated bereavement, 2) interpersonal role disputes, 3) role transitions, and 4) interpersonal deficits

There were two groups of data; 1) demographic data: gender, age, marital status, education, occupation, incomes; clinical history data: history of psychiatric illness, depressive episode, and substance use disorders; and family history data: family history of psychiatric illness, and depressive disorder, 2) outcome variables. The outcome variables were composed of independent variables (interpersonal problem areas: grief, interpersonal role disputes, role transitions, and interpersonal deficits) and dependent variables (depression vs. no depression).

### 4.4 DATA ANALYSIS

The statistical analysis was performed by using STATA for windows version 8.0 software.

#### 4.4.1 Baseline demographic characteristics

The baseline demographic characteristics (gender, age, marital status, education, occupation, and incomes), clinical history data (history of psychiatric illness, depressive episode, and substance use disorders), and family history data (family history of psychiatric illness, and depressive disorder) of the depressed subjects

(cases) and the non-depressed subjects (controls) were presented in number and percentage.

#### **4.4.2 Relationship between interpersonal problem areas and depressive disorders, and between other psychosocial factors and depressive disorders**

All data concerning interpersonal problem areas and depressive disorders were categorical data. The design of this study was a matched case-control (matching variables: gender and age). The strength of relationship or association between interpersonal problem areas and depressive disorders, and between other psychosocial factors and depressive disorders, was identified by using odd ratio with 95% confidence interval. The McNemar's test or Marginal chi-square test was used to test the association between interpersonal problem areas/ other psychosocial factors and depressive disorders. The assumptions of this test were composed of the homogeneity within pairs and the heterogeneity between pairs. A p-value of less than 0.05 was considered statistically significant.

#### **4.4.3 Multivariable analysis**

Multivariable analysis was performed to identify the multivariable relationship of potential predictors of depressive disorder in depressed patients. The study design was a matched case-control and the outcome variables are dichotomous variables (depression vs. no depression); therefore, the conditional logistic regression was used to derive the best-fitting model to predict the depressive disorders in depressed patients. Significant variables from theoretical review and univariate analysis (p-value from the test of association was less than 0.05) were selected into the fitting model to identify the potential predictors of depressive disorder in depressed patients. The stepwise method will be used in fitting the model. There are many independent variables in this study; therefore, the measurement of collinearity will be performed to ensure the independence among all independent variables.

## CHAPTER V

### RESULTS

The study was conducted at King Chulalongkorn Memorial Hospital during July – December 2007. The samples consisted of 90 pairs of depressed and non-depressed subjects who met the eligible criteria for cases and controls (matching variables: gender and age). The results of the study were presented in three parts as the following.

5.1 General characteristics of the subjects: demographic and clinical characteristics; family history; and interpersonal problem areas of the depressed (cases) and the non-depressed subjects (controls)

5.2 Scores on Thai version of Hamilton Rating Scale for Depression (Thai HRSD) and Thai Interpersonal Questionnaire

5.2 Relationship between interpersonal problem areas and depressive disorders, and between other psychosocial factors and depressive disorders

5.3 Multivariable analysis to identify the predictors of depressive disorder after adjusting potential confounding factors

#### 5.1 GENERAL CHARACTERISTICS OF THE SUBJECTS

##### 5.1.1 Demographic characteristics of the depressed (cases) and the non-depressed subjects on matching variables: gender and age

The demographic characteristics of the depressed (cases) and the non-depressed subjects are shown in Table 5.1. There were 90 pairs of the depressed and the non-depressed subjects in the study. The total number of all subjects was 180. Most of them were female (142 subjects, 78.9%). Half of subjects (96 subjects, 53.3%) were in the age range of 31 – 50 years. (mean age = 39.86, SD = 13.49). One hundred and eleven subjects were couples, and lived with their spouses (61.7%), 60 (33.3%) were single, and 9 (5%) were separated, widowed, or divorced. About 97% of them (175 subjects) were Buddhists. Most of them had above secondary school education (141 subjects, 78.3%) and were employed (125 subjects, 69.4%). Nearly half of them (86 subjects, 47.8%) had an income of 10,000 baht per month or above. About 31% of subjects (28 subjects) had financial problems (inadequate affordable money or debts). Most of subjects lived in Bangkok and central region (163 subjects, 90.6%).



Considering the demographic characteristics of the depressed (cases) and the non-depressed subjects (controls), the depressed subjects had the lower educational, occupational, and financial status than the non-depressed subjects (Table 5.1).

Table 5.1 Demographic characteristics of the depressed (n = 90) and the non-depressed (n =90) subjects on matching variables: gender and age

Demographic characteristics	The depressed (n = 90)		The non-depressed (n = 90)		Total (n = 180)	
	N	percent	N	percent	N	percent
	Gender					
Female	71	78.9%	71	78.9%	142	78.9%
Male	19	21.1%	19	21.1%	38	21.1%
Age						
18 – 30 years	16	17.8%	16	17.8%	32	17.8%
31 – 40 years	17	18.9%	21	23.3%	38	21.1%
41 – 50 years	32	35.6%	26	28.9%	58	32.2%
51 – 70 years	25	27.8%	27	30.0%	52	28.9%
Mean ± SD	42.7 ± 11.9		43.0 ± 12.1		42.8 ± 12.0	
Min, Max	18	66	18	68	18	68
Marital status						
Single	28	31.1%	32	35.6%	60	33.3%
Couple	59	65.6%	52	57.8%	111	61.7%
Separated	0	0.0%	2	2.2%	2	1.1%
Widowed	2	2.2%	3	3.3%	5	2.8%
Divorced	1	1.1%	1	1.1%	2	1.1%
Religion						
Buddhism	90	100.0%	85	94.4%	175	97.2%
Christ	0	0.0%	3	3.3%	3	1.7%
Islam	0	0.0%	2	2.2%	2	1.1%

Table 5.1 Demographic characteristics of the depressed (n = 90) and the non-depressed (n =90) subjects on matching variables: gender and age (continued)

Demographic characteristics	The depressed		The non-depressed		Total	
	(n = 90)		(n = 90)		(n = 180)	
	N	percent	N	percent	N	percent
Education						
Uneducated	2	2.2%	0	0.0%	2	2.2%
Primary school	22	24.4%	15	16.7%	37	41.1%
Secondary school	28	31.1%	20	22.2%	48	53.3%
Bachelor's degree	34	37.8%	45	50.0%	79	87.8%
Master's degree and above	4	4.4%	10	11.1%	14	15.6%
Occupation						
Unemployed	39	43.3%	16	17.8%	55	30.6%
Government	11	12.2%	14	15.6%	25	13.9%
State enterprise	0	0.0%	14	15.6%	14	7.8%
Business, Employer	12	13.3%	15	16.7%	27	15.0%
Employee	12	13.3%	24	26.7%	36	20.0%
Laborer	15	16.7%	6	6.7%	21	11.7%
Others	1	1.1%	1	1.1%	2	1.1%
Incomes (baht/month)						
None	19	21.1%	11	12.2%	30	16.7%
0 – 4,999	15	16.7%	9	10.0%	24	13.3%
5,000 – 9,999	22	24.4%	18	20.0%	40	22.2%
10,000 – 19,999	14	15.6%	22	24.4%	36	20.0%
20,000 and above	20	22.2%	30	33.3%	50	27.8%
Financial status						
Deposit	44	48.9%	52	57.8%	96	53.3%
Adequate	29	32.2%	27	30.0%	56	31.1%
Inadequate	4	4.4%	7	7.7%	11	6.1%
Debt	13	14.4%	4	4.4%	17	9.4%

Table 5.1 Demographic characteristics of the depressed (n = 90) and the non-depressed (n =90) subjects on matching variables: gender and age (continued)

Demographic characteristics	The depressed		The non-depressed		Total	
	(n = 90)		(n = 90)		(n = 180)	
	N	percent	N	percent	N	percent
Residence						
Bangkok	71	78.9%	78	86.7%	149	82.8%
Central	7	7.8%	7	7.8%	14	7.8%
North	4	4.4%	1	1.1%	5	2.8%
Northeast	3	3.3%	1	1.1%	4	2.2%
East	1	1.1%	1	1.1%	2	1.1%
West	2	2.2%	0	0.0%	2	1.1%
South	2	2.2%	2	2.2%	4	2.2%

#### 5.1.2 Clinical characteristics and family history of the depressed (cases) and the non-depressed subjects on matching variables: gender and age

The clinical characteristics of the depressed (cases) and the non-depressed subjects (controls) are shown in Table 5.2. About 39% of all subjects (71 subjects) had the history of physical illness. About 34 % of them (62 subjects) had the history of psychiatric illness, and 32% of them ever had a depressive episode once in their lives. About 17% of all subjects had the history of substance use. Eight subjects (4.4%) were current substance users. The family history of psychiatric illness was found in 67 subjects (37.2%), and the family history of depressive disorders was found in 34 subjects (18.9%).

Regarding the clinical characteristics of the depressed (cases) and the non-depressed subjects (controls), the depressed subjects had more history of physical illness, psychiatric illness, depressive episode, and substance use than the non-depressed subjects (Table 5.2). The family history of psychiatric illness and depressive disorders were also found in the depressed subjects than the non-depressed subjects (Table 5.2).

Table 5.2 Clinical characteristics and family history of the depressed (n = 90) and the non-depressed (n =90) subjects on matching variables: gender and age

Clinical characteristics and family history	The depressed (n = 90)		The non-depressed (n = 90)		Total (n = 180)	
	N	percent	N	percent	N	percent
	<hr/>					
History of physical illness						
Yes	43	47.8%	28	31.1%	71	39.4%
No	47	52.2%	62	68.9%	109	60.6%
History of psychiatric illness						
Yes	56	62.2%	6	6.7%	62	34.4%
No	34	37.7%	84	93.3%	118	65.6%
History of depressive episode						
Yes	52	57.8%	5	5.6%	57	31.7%
No	38	42.2%	85	94.4%	123	68.3%
History of substance use						
Yes	25	27.8%	5	5.6%	30	16.7%
No	65	72.2%	85	94.4%	150	83.3%
Current substance use						
Always	6	6.7%	2	2.2%	8	4.4%
Sometimes	8	8.9%	4	4.4%	12	6.7%
Rarely	3	3.3%	0	0.0%	3	1.7%
None	73	81.1%	84	93.3%	157	87.2%
Family history of psychiatric illness						
Yes	31	34.4%	36	40.0%	67	37.2%
No	59	65.6%	54	60.0%	113	62.8%
Family history of depressive disorders						
Yes	18	20.0%	16	17.8%	34	18.9%
No	72	80.0%	74	82.2%	146	81.1%

## 5.2 SCORES ON THAI VERSION OF HAMILTON RATING SCALE FOR DEPRESSION (THAI HRSD) AND THAI INTERPERSONAL QUESTIONNAIRE

### 5.2.1 Scores on Thai version of Hamilton Rating Scale for Depression (Thai HRSD) of the depressed (cases) and the non-depressed subjects (controls)

The scores on Thai version of Hamilton Rating Scale for Depression (Thai HRSD) of the depressed (cases) and the non-depressed subjects (controls) were shown in Table 5.3. The range of scores on Thai HRSD of total subjects varied from 0 – 43 (cases: 8 – 43; controls: 0 - 7). The mean score on Thai HRSD of total subjects was  $14.32 \pm 12.75$  (cases:  $25.34 \pm 8.58$ ; controls:  $3.29 \pm 2.67$ ).

Table 5.3 Scores on Thai version of Hamilton Rating Scale for Depression (Thai HRSD) of the depressed (n = 90) and the non-depressed (n = 90) subjects

Scores	The depressed (n = 90)		The non-depressed (n = 90)		Total (n = 180)	
	Mean	SD	Mean	SD	Mean	SD
Thai HRSD (0 – 52)	25.34	8.58	3.29	2.67	14.32	12.75
(Min, Max)	(8, 43)		(0, 7)		(0, 43)	

### 5.2.2 Intervals of scores on Thai Interpersonal Questionnaire in three groups of severity on interpersonal problem areas

The range of scores on each interpersonal problem areas was equally divided into three intervals (Table 5.4). The first interval of scores indicates well adjustment in problem area (or no interpersonal problem area) while the second and third intervals of scores indicate problem in adjustment (or interpersonal problem area). The subjects who had the scores of Thai Interpersonal Questionnaire in the second and the third interval were subjects who had interpersonal problem areas compatible with the problem areas diagnosed by the clinical interview. From Table 5.4, the score of at least 4 points on grief indicates problem area of grief; 6 points: interpersonal role disputes; 4 points: role transitions; and 4 points: interpersonal deficits. The numbers of subjects in each interval of scores were shown in Table 5.5. From Table 5.6, Forty-seven subjects

(26.1%) had problem area of grief; 101 subjects (56.1%): interpersonal role disputes; 68 subjects (37.8%): role transitions; and 74 subjects (41.1%): interpersonal deficits.

Table 5.4 Intervals of scores on Thai Interpersonal Questionnaire in three groups of severity on interpersonal problem areas

Range of scores on Thai Interpersonal Questionnaire	Well adjustment in problem area	Problem in adjustment	Severe problem in adjustment
Grief (0 – 10)	0 – 3	4 – 6	7 - 10
Interpersonal role disputes (0 – 15)	0 – 5	6 – 10	11 – 15
Role transitions (0 – 9)	0 – 3	4 – 6	7 – 9
Interpersonal deficits (0 – 11)	0 – 3	4 – 7	8 – 11

Table 5.5 Numbers of subjects in three groups of severity on interpersonal problem areas

Interpersonal problem areas	Well adjustment in problem areas		Problem in adjustment		Severe problem in adjustment	
	N	percent	N	percent	N	percent
	Grief	133	73.9%	24	13.3%	23
Interpersonal role disputes	79	43.9%	69	38.3%	32	17.8%
Role transitions	112	62.2%	40	22.2%	28	15.6%
Interpersonal deficits	106	58.9%	61	33.9%	13	7.2%

Table 5.6 Numbers of subjects on each interpersonal problem area

Interpersonal problem areas	No problem areas		Problem areas	
	N	percent	N	percent
Grief	133	73.9%	47	21.6%
Interpersonal role disputes	79	43.9%	101	56.1%
Role transitions	112	62.2%	68	37.8%
Interpersonal deficits	106	58.9%	74	41.1%



### 5.2.3 Scores on Thai Interpersonal Questionnaire of the depressed (cases) and the non-depressed subjects (controls)

The scores on Thai Interpersonal Questionnaire are shown in Table 5.7. The scores on interpersonal problem areas of total subjects ranged from 0 – 10 for grief (full score = 12); 0 – 15 for interpersonal role disputes (full score = 15); 0 – 9 for role transitions (full score = 9); and 0 – 11 for interpersonal deficits (full score = 12). The scores of interpersonal problems areas in the depressed subjects were higher than the non-depressed. (Table 5.7)

Table 5.7 Scores on Thai Interpersonal Questionnaire of the depressed (n = 90) and the non-depressed (n = 90) subjects

Scores	The depressed (n = 90)		The non-depressed (n = 90)		Total (n = 180)	
	Mean	SD	Mean	SD	Mean	SD
Thai Interpersonal Questionnaire						
Grief (0 – 12)	2.87	3.61	0.88	1.53	1.87	2.93
(Min, Max)	(0, 10)		(0, 6)		(0, 10)	
Interpersonal role dispute (0 – 15)	7.61	4.80	3.42	4.14	5.52	4.94
(Min, Max)	(0, 15)		(0, 14)		(0, 15)	
Role transitions (0 – 9)	4.56	3.19	0.54	1.40	2.56	3.18
(Min, Max)	(0, 9)		(0, 7)		(0, 9)	
Interpersonal deficits (0 – 12)	4.20	3.01	1.56	1.97	2.68	2.96
(Min, Max)	(0, 11)		(0, 7)		(0, 11)	

### 5.2.4 Interpersonal problem areas of the depressed (cases) and the non-depressed subjects (controls) on matching variables: gender and age

The interpersonal problem areas of the depressed (cases) and the non-depressed subjects (controls) are shown in Table 5.8. All four interpersonal problem areas were more found in the depressed (cases) than the non-depressed subjects (controls).

Table 5.8 Interpersonal problem areas of the depressed (n = 90) and the non-depressed (n =90) subjects on matching variables: gender and age

Interpersonal problem areas	The depressed (n = 90)		The non-depressed (n = 90)		Total (n = 180)	
	N	percent	N	percent	N	percent
	Grief	36	40.0%	11	12.2%	47
Interpersonal role disputes	67	74.4%	34	36.7%	101	56.1%
Role transitions	62	68.9%	6	6.7%	68	37.8%
Interpersonal deficits	57	63.3%	17	18.9%	74	41.1%

## 5.3 RELATIONSHIP BETWEEN INTERPERSONAL PROBLEM AREAS AND DEPRESSIVE DISORDERS AND BETWEEN OTHER PSYCHOSOCIAL FACTORS AND DEPRESSIVE DISORDERS

### 5.3.1 Relationship between interpersonal problem areas and depressive disorders

The relationship between interpersonal problem areas and depressive disorder on matching variables: gender and age is shown in Table 5.9. All interpersonal problem areas were associated with depressive disorder. ( $p < 0.01$ ) The strength of association was shown in odds ratio (OR) with 95% CI in Table 5.5. (grief: OR = 7.25, 95%CI = 2.55 – 28.38,  $p < 0.01$ , interpersonal role disputes: OR = 4.30, 95%CI = 2.13 – 9.60,  $p < 0.01$ , role transitions: OR = 15.00, 95%CI = 5.56 – 56.84,  $p < 0.01$ , interpersonal deficits: OR = 9.00, 95%CI = 3.58 – 29.05,  $p < 0.01$ ) In the problem area of role transitions, the common life changes that the subjects reported included separation and divorce, a move, job loss, health problems or physical illness, and financial problems.

Table 5.9 Relationship between interpersonal problem areas and depressive disorders on matching variables: gender and age

Interpersonal problem areas	Number of pairs (n = 90)			Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>Grief</u>	The non-depressed						
	-----						
The depressed	Exposed	Unexposed	Total				
-----							
Exposed	7	29	36	7.25	2.55 – 28.38	18.94	< 0.0001**
Unexposed	4	50	54				
Total	11	79	90				
<u>Interpersonal role disputes</u>	The non-depressed						
	-----						
The depressed	Exposed	Unexposed	Total				
-----							
Exposed	24	43	67	4.30	2.13 – 9.60	20.55	< 0.0001**
Unexposed	10	13	23				
Total	34	56	90				
<u>Role transitions</u>	The non-depressed						
	-----						
The depressed	Exposed	Unexposed	Total				
-----							
Exposed	2	60	62	15.00	5.56 – 56.84	49.00	< 0.0001**
Unexposed	4	24	28				
Total	6	84	90				
<u>Interpersonal deficits</u>	The non-depressed						
	-----						
The depressed	Exposed	Unexposed	Total				
-----							
Exposed	12	45	57	9.00	3.58 – 29.05	32.00	< 0.0001**
Unexposed	5	28	33				
Total	17	73	90				

\*\* p < 0.01

### 5.3.2 Relationship between other psychosocial factors and depressive disorders

The relationship between other psychosocial factors and depressive disorders on matching variables: gender and age is shown in Table 5.10. The demographic characteristics associated with depressive disorders included education (OR = 2.31, 95%CI = 1.17 – 4.82,  $p = 0.01$ ), occupation (OR = 6.33, 95%CI = 2.66 – 18.33,  $p < 0.01$ ), and incomes (OR = 2.05, 95%CI = 1.22 – 3.92,  $p = 0.02$ ). The marital status was not found the association with depressive disorders (OR = 0.59, 95%CI = 0.24 – 1.36,  $p = 0.25$ ).

Table 5.10 Relationship between demographic characteristics and depressive disorders on matching variables: gender and age

Demographic characteristics	Number of pairs (n = 90)			Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>Marital status</u>	The non-depressed						
	-----						
The depressed	Others	Couple	Total				
-----							
Others	21	10	31	0.59	0.24 – 1.36	1.81	0.25
Couple	17	42	59				
Total	38	52	90				
<u>Education</u>	The non-depressed						
	-----						
	Lower than bachelor's degree	Bachelor's degree and above	Total				
The depressed							
-----							
Lower than bachelor's degree	22	30	52	2.31	1.17 – 4.82	6.72	0.01*
Bachelor's degree and above	13	25	38				
Total	35	55	90				

Table 5.10 Relationship between demographic characteristics and depressive disorders on matching variables: gender and age (continued)

Demographic characteristics	Number of pairs (n = 90)			Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>Occupation</u> The non-depressed							
-----							
The depressed	Unemployed	Employed	Total				
-----							
Unemployed	17	38	55	6.33	2.66 – 18.33	23.27	< 0.0001**
Employed	6	29	35				
Total	23	67	90				
<u>Incomes (baht/month)</u> The non-depressed							
-----							
The depressed	<10,000	≥10,000	Total				
-----							
<10,000	21	35	56	2.05	1.22 – 3.92	6.23	0.02*
≥10,000	17	17	34				
Total	38	52	90				
<u>Financial status</u> The non-depressed							
-----							
The depressed	Inadequate	Adequate	Total				
-----							
Inadequate	23	23	46	1.53	0.77 – 3.16	1.68	0.26
Adequate	15	29	44				
Total	38	52	90				

\* p < 0.05, \*\* p < 0.01

The relationship between clinical characteristics and depressive disorders is shown in Table 5.11. The clinical characteristics that were associated with depressive disorders included history of physical illness (OR = 2.36, 95%CI = 1.19 – 5.30, p = 0.02), history of psychiatric illness (OR = 51.00, 95%CI = 8.75 – 2,053.39, p < 0.01), depressive episode (OR = 48.00, 95%CI = 8.21 – 1,934.90, p < 0.01), substance use (OR = 7.67, 95%CI = 2.32 – 39.89, p = 0.01), and current substance use (OR = 3.20, 95%CI = 1.12 – 11.17, p = 0.03).

Table 5.11 Relationship between clinical characteristics and depressive disorders on matching variables: gender and age

Clinical characteristics	Number of pairs (n = 90)			Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>History of physical illness</u>	The non-depressed -----						
The depressed	Yes	No	Total				
-----							
Yes	17	26	43	2.36	1.19 – 5.30	6.08	0.02*
No	11	36	47				
Total	28	62	90				
<u>History of psychiatric illness</u>	The non-depressed -----						
The depressed	Yes	No	Total				
-----							
Yes	5	51	56	51.00	8.75 – 2,053.39	48.08	< 0.0001**
No	1	33	34				
Total	6	84	90				
<u>History of depressive episode</u>	The non-depressed -----						
The depressed	Yes	No	Total				
-----							
Yes	4	48	52	48.00	8.21 – 1,934.90	45.08	< 0.0001**
No	1	37	38				
Total	5	85	90				
<u>History of substance use</u>	The non-depressed -----						
The depressed	Yes	No	Total				
-----							
Yes	2	23	25	7.67	2.32 – 39.89	15.38	0.0001**
No	3	62	65				
Total	5	85	90				



Table 5.11 Relationship between clinical characteristics and depressive disorders on matching variables: gender and age (continued)

Clinical characteristics	Number of pairs (n = 90)			Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>Current substance use</u>	The non-depressed -----						
The depressed -----	Yes	No	Total				
Yes	1	16	17	3.20	1.12 – 11.17	5.76	0.03*
No	5	68	73				
Total	6	84	90				

\* p < 0.05, \*\* p < 0.01

The relationship between family history and depressive disorders is shown in Table 5.12. The family history of psychiatric illness (OR = 0.81, 95%CI = 0.44 – 1.49, p = 0.57) and depressive disorder (OR = 1.17, 95%CI = 0.50 – 2.76, p = 0.84) were not found the association with depressive disorders.

Table 5.12 Relationship between family history and depressive disorders on matching variables: gender and age

Family History	Number of pairs (n = 90)			Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>Family history of psychiatric illness</u>	The non-depressed -----						
The depressed -----	Yes	No	Total				
Yes	9	22	31	0.81	0.44 – 1.49	0.51	0.57
No	27	32	59				
Total	36	54	90				

Table 5.12 Relationship between family history and depressive disorders on matching variables: gender and age (continued)

Family History	Number of pairs (n = 90)	Odds ratio (OR)	95% CI of OR	McNemar's $X^2$	p-value
<u>Family history of depressive disorders</u>					
The non-depressed					
-----					
The depressed	Yes	No	Total		
-----					
Yes	4	14	18	1.17	0.50 – 2.76
No	12	60	72		
Total	16	74	90		0.15
					0.84

\* p < 0.05, \*\* p < 0.01

#### 5.4 MULTIVARIABLE ANALYSIS TO IDENTIFY THE PREDICTORS OF DEPRESSIVE DISORDERS

After the univariate analysis was performed to test the association between interpersonal problem areas and depressive disorders, and between other psychosocial factors and depressive disorders, the significant factors from the univariate analysis were selected into the fitting model for identifying the predictors of depressive disorders. The result of multivariable analysis (conditional logistic regression analysis) for identifying the predictors of depressive disorders is shown in Table 5.13. The other psychosocial factors were dropped from the fitting model. The remaining predictors of depressive disorders were four interpersonal problem areas: grief (adjusted OR = 13.87, 95%CI = 1.41 – 136.27, p = 0.02), interpersonal role disputes (adjusted OR = 24.00, 95%CI = 2.84 – 203.01, p < 0.01), role transitions (adjusted OR = 21.44, 95%CI = 3.43 – 134.14, p < 0.01), and interpersonal deficits (adjusted OR = 5.05, 95%CI = 1.14 – 22.38, p = 0.03).

Table 5.13 Multivariable analysis to identify the predictors of depressive disorders

Variables	Coefficient ( $\beta$ )	p-value	Adjusted odds ratio (OR)	95% CI of adjusted OR
Grief	2.6295	0.024*	13.87	1.41 – 136.27
Interpersonal role disputes	3.1780	0.004**	24.00	2.84 – 203.01
Role transitions	3.0654	0.001**	21.44	3.43 – 134.14
Interpersonal deficits	1.6189	0.033*	5.05	1.14 – 22.38
Education	0.3749	0.668	1.45	0.26 – 8.06
Incomes	0.9278	0.180	2.53	0.65 – 9.83
History of physical illness	-0.1847	0.858	0.83	0.11 – 6.30

\* p < 0.05, \*\* p < 0.01

สถาบันวิทยบริการ  
จุฬาลงกรณ์มหาวิทยาลัย

## CHAPTER VI

### SUMMARY, DISCUSSION, RECOMMENDATIONS

#### 6.1 SUMMARY OF THE STUDY

This study was aimed to identify the interpersonal problem areas and other psychosocial factors associated with depressive disorder in Thai depressed patients. A matched case-control study was used to identify interpersonal and other psychosocial triggers of depressive disorder (matching variables: gender and age). The study was conducted at King Chulalongkorn Memorial Hospital during July – December 2007.

There were 90 pairs of the depressed (cases) and the non-depressed subjects (controls) (matched by the same gender and age). The inclusion criteria for the depressed subjects (cases) were new cases (within 6 months) of depressive disorder diagnosed by DSM-IV-TR criteria and the scores of Thai HRSD of at least 8 points. Schizophrenia or other psychotic disorders, bipolar disorder, organic mental disorders, and mental retardation were exclusion criteria for cases. The inclusion criteria for the non-depressed subjects (controls) were no depressive disorder by clinical interview and the scores of Thai HRSD of less than 8 points. All subjects completed two questionnaires: 1) Demographic data form, and 2) Thai Interpersonal Questionnaire.

The total numbers of all subjects were 180 (90 pairs of the depressed and the non-depressed subjects matched by the same gender and age). Most of subjects were female (142 subjects, 78.9%). Half of them (96 subjects, 53.3%) were in the age range of 31 – 50 years. (mean age = 39.86, SD = 13.49). One hundred and eleven subjects were couples, and lived with their spouses (61.7%), 60 (33.3%) were single, and 9 (5%) were separated, widowed, or divorced. Most of them had above secondary school education (141 subjects, 78.3%) and were employed (125 subjects, 69.4%). Nearly half of them (86 subjects, 47.8%) had an income of 10,000 baht per month or above. About 31% of subjects (28 subjects) had financial problems (inadequate affordable money or debts). Most of subjects lived in Bangkok and central region (163 subjects, 90.6%).

Considering the demographic and clinical characteristics of the depressed (cases) and the non-depressed subjects (controls), the depressed subjects had the lower educational, occupational, and financial status than the non-depressed subjects, while had more history of physical illness, psychiatric illness, depressive episode, substance use than the non-depressed subjects.

Regarding the scores of Thai HRSD and the scores of interpersonal problem areas, the depressed subjects had higher scores on Thai HRSD scores and all four subscales of Thai Interpersonal Questionnaire (grief, interpersonal role disputes, role transitions, and interpersonal deficits) than the non-depressed subjects.

The McNemar's chi-square was used to test the association between interpersonal problem areas and depressive disorder and between other psychosocial factors and depressive disorders for the matched case-control study. The result showed that all interpersonal problem areas were associated with depressive disorder (grief: OR = 7.25, 95%CI = 2.55 – 28.38,  $p < 0.01$ , interpersonal role disputes: OR = 4.30, 95%CI = 2.13 – 9.60,  $p < 0.01$ , role transitions: OR = 15.00, 95%CI = 5.56 – 56.84,  $p < 0.01$ , interpersonal deficits: OR = 9.00, 95%CI = 3.58 – 29.05,  $p < 0.01$ ). In the problem area of role transitions, the common life changes that the subjects reported included separation and divorce, a move, job loss, health problems or physical illness, and financial problems. The demographic characteristics associated with depressive disorder included education (OR = 2.31, 95%CI = 1.17 – 4.82,  $p = 0.01$ ), occupation (OR = 6.33, 95%CI = 2.66 – 18.33,  $p < 0.01$ ), and incomes (OR = 2.05, 95%CI = 1.22 – 3.92,  $p = 0.02$ ). The clinical characteristics associated with depressive disorder included history of physical illness (OR = 2.36, 95%CI = 1.19 – 5.30,  $p = 0.02$ ), history of psychiatric illness (OR = 51.00, 95%CI = 8.75 – 2,053.39,  $p < 0.01$ ), depressive episode (OR = 48.00, 95%CI = 8.21 – 1,934.90,  $p < 0.01$ ), substance use (OR = 7.67, 95%CI = 2.32 – 39.89,  $p = 0.01$ ), and current substance use (OR = 3.20, 95%CI = 1.12 – 11.17,  $p = 0.03$ ). The family history of psychiatric illness (OR = 0.81, 95%CI = 0.44 – 1.49,  $p = 0.57$ ) and depressive disorders (OR = 1.17, 95%CI = 0.50 – 2.76,  $p = 0.84$ ) were not found the association with depressive disorders.

The multivariable analysis was performed to identify the predictors of depressive disorders. The significant factors from theoretical review and univariate analysis were selected into the fitting model to identify the predictors of depressive disorders in depressed patients. After performing conditional logistic regression, the other psychosocial factors were dropped from the model. The remaining predictors of depressive disorder were all four interpersonal problem areas: grief (adjusted OR = 13.87, 95%CI = 1.41 – 136.27,  $p = 0.02$ ), interpersonal role disputes (adjusted OR = 24.00, 95%CI = 2.84 – 203.01,  $p < 0.01$ ), role transitions (adjusted OR = 21.44, 95%CI = 3.43 – 134.14,  $p < 0.01$ ), and interpersonal deficits (adjusted OR = 5.05, 95%CI = 1.14 – 22.38,  $p = 0.03$ ).

## 6.2 DISCUSSION

From the demographic characteristics, most of subjects were female and were young adults and the middle age. They were educated and employed. Most of them lived in Bangkok and central region.

### 6.2.1 Relationship between interpersonal problem areas and depressive disorders

Regarding interpersonal problem areas associated with depressive disorders, the results showed that all four interpersonal problem areas: grief, interpersonal role disputes, role transitions, and interpersonal deficits, were associated with depressive disorders in Thai depressed patients (grief: OR = 7.25, 95%CI = 2.55 – 28.38,  $p < 0.01$ , interpersonal role disputes: OR = 4.30, 95%CI = 2.13 – 9.60,  $p < 0.01$ , role transitions: OR = 15.00, 95%CI = 5.56 – 56.84,  $p < 0.01$ , interpersonal deficits: OR = 9.00, 95%CI = 3.58 – 29.05,  $p < 0.01$ ). Grief, interpersonal role disputes, and role transitions are universal human experiences that persons may encounter during their lifetimes [14]. Persons facing these interpersonal crises may have the increased tension, and feel frustrated or anxious. They may use their own personal resources such as problem-solving or coping styles to deal with these difficulties. Interpersonal or social skills, strong social support, and adaptive problem-solving patterns are positive resources to encounter these difficulties. Patients who lack of interpersonal or social skills or lack of social support, called persons with interpersonal or social deficits, usually find difficulties when experiencing these crises [14]. Persons have adaptive problem-solving patterns and adequate social resource can overcome the crises, and the crises will be resolved. If not, the crises will remain unresolved or chronic, or will intensify, leading to emotional problems and psychiatric disorders especially depressive disorders and anxiety disorders. From the previous studies, adverse life events or social stressors have been recognized as risk factors of depressive disorders [22,78,79].

From this study, grief was associated with depressive disorders (OR = 7.25, 95%CI = 2.55 – 28.38,  $p < 0.01$ ). Grief or complicated bereavement is one of the stressful life events associated with depression [65,80]. From previous studies, the experience of bereavement leads to chronic depression in approximately 10 – 15% of people [81]. Clayton PJ and Darvish HS [82] reported that depressive disorders were present in approximately 42% of the bereaved at 1 month, decreasing to 16% at 1 year. When comparing the bereaved with the non-bereaved, the 1-year incidence of depression was 47% in the bereaved vs. 8% in the non-bereaved [83]. Zisook S and



Shuchter SR [84] reported that bereavement-related major depression was found in 24% of the widows at 2 months, 23% at 7 months, and 16% at 13 months while depressive disorders in the non-bereaved was found in 4% at 13 months.

Interpersonal role disputes also had the association with depressive disorders (OR = 4.30, 95%CI = 2.13 – 9.60,  $p < 0.01$ ). Interpersonal role disputes include arguments or disagreements with a spouse (marital conflicts), other family member, boss, colleague or co-worker, or a close friend [13,14,57]. From the previous studies, the depressed individuals had the problematic relationships with others than the non-depressed ones [67,70,71]. Weissman MM and Paykel ES [67] found that the depressed women had more problematic relationships with their spouses and their family members than the non-depressed women. Hammen C and Brennan PA [70] reported that the depressed women had more marital instability, marital dissatisfaction, spouse coercion, physical injury, problematic relationships with their child, friends, extended family, and more stressful interpersonal life events than never-depressed women. Zlotnick C, Kohn R, Keitner G, and Della Grotta SA [71] found that the depressed individuals had significantly fewer positive interactions, but had more negative interactions with their spouses or partners than the non-depressed ones.

Role transitions had the high association with depressive disorders (OR = 15.00, 95%CI = 5.56 – 56.84,  $p < 0.01$ ). Role transitions or life changes that the subjects reported in this study included separation and divorce, a move, job loss, health problems or physical illness, and financial problems. Persons experiencing role transitions have to adjust themselves to their new roles [13,14]. Persons who can not adjust themselves may have emotional problems and psychiatric disorders such as depressive disorders and anxiety disorders. For examples, widowhood promotes anxiety and depression by increasing concerns about living alone and social interaction [85]. Having a serious illness or a cancer leads to many psychological reactions such as disbelief, denial, anger, anxiety, or depression [86]. Job loss promotes anxiety and depression by increasing financial strain and heightening reactivity to stress [85]. From the previous study of job loss, the unemployed workers had the two- to three-fold higher rate of anxiety and depression than the stably employed workers [85].

Interpersonal deficits were also associated with depressive disorders (OR = 9.00, 95%CI = 3.58 – 29.05,  $p < 0.01$ ). Interpersonal deficits include lack of interpersonal or social skills, and lack of social support [13,14]. Some indicators for interpersonal deficits include limited friends or family contact, lack of socially rewarded relationship, and repeated relationship failures [14]. Persons with interpersonal deficits usually found difficulties in life adjustment when experiencing the interpersonal crises

such as grief or loss, or role transitions because they have difficulties to develop social connection with others, or new social relationships after loss or life changes [14]. Social support includes family support, social network, social interaction, and instrumental support [78]. From previous studies, poor support is related to onset, relapse, and recurrence of depressive disorders [78].

### 6.2.2 Relationship between other psychosocial factors and depressive disorders

Other psychosocial factors associated with depressive disorders in this study included demographic characteristics, and clinical characteristics.

Demographic characteristics associated with depressive disorder in this study included education, occupation, and incomes. From previous studies, there were many studies showing the relationship between depressive disorders and the low social class [78]. Individuals with lower socioeconomic status have a lower level of education, lower income, and poor living conditions [78]. They also have a higher rate of unemployment, or even homelessness [78]. Gilchrist G and Gunn J [87] found that risk factors for the persistence of depression included low educational level and unemployment. From the study of Kessler RC, et al [88], the sociodemographic correlates of depressive disorders included low educational level, unemployment, low income, and living in or near poverty. Dooley D, Fielding J, and Levi L [89] found the increased rate of psychiatric problems such as depression and substance abuse among laid-off workers, and a positive association between unemployment and suicidal rates over time. Wilson SH and Walker GM [90], and Morell SL, Taylor RJ, and Kerr CB [91] found that unemployed men had a reduction in psychological well-being, an increased incidence of anxiety, depression, smoking, and alcohol consumption, and also an increased mortality from suicide. Regarding the marital status, previous studies founded that depressive disorders are common in the separated, divorced, and widowed individuals [78]. The association between the separated, divorced, or widowed status and depressive disorders could not be identified from this study due to the small numbers in these groups of marital status (2 subjects: separated; 5 subjects: divorced; and 2 subjects: widowed). When grouping the marital status as couples and others (mainly single), the association between the marital status and depressive disorders was not found. This may be explained that the relationship between the marital status (single vs. couple) and depressive disorders is quite complex and indefinite [78]. It depends on the gender difference and the quality of marital relationship. Single women have lower rates of depression than married woman do, but this is opposite among men [78]. Moreover,

having marital status as married or couple could not indicate the stable or satisfied relationship. Although the couples have marital problems, most of them still maintain their married status due to Thai socio-cultural pressure. All these reasons may explain why the marital status was not found the association with depressive disorders in this study.

Clinical characteristics associated with depressive disorders in this study included history of physical illness, psychiatric illness, depressive episode, substance use, and current substance use. About the physical illness, depressive disorders are very common in the medically ill. From the previous studies, the prevalence of depressive disorders in medical patients was high up to 20 – 40% [92]. The medical disorders that were highly associated with depressive disorders included coronary heart disease and other cardiac diseases, cancers (especially oropharyngeal, pancreatic, breast, and lung cancers) [93], neurological disorders (e.g. stroke, Parkinson's disease, Alzheimer's disease, vascular dementia) [94]. From the previous reports, the prevalence of depressive disorders in medical patients was high up to 20 – 40% [94]. Regarding history of depressive episode, depression is common in patients with previous history of a depressive episode due to its chronic and relapsing course [3,4]. Beekman AT, Deeg DJ, Smit JH, et al [95] found that 32% of depressed patients remitted without relapse, 25% remitted but relapsed later, and 43% were chronically depressed. Gilchrist G and Gunn J [87] found that chronicity and severity of the depressive episode was the risk factors for the persistence of depression. About the age of onset of recurrence, the average age of onset of recurrent unipolar depression falls between the ages of 30 and 35 years [78]. Depressive disorders usually coexist with other Axis I psychiatric disorders [3,4,78]. From previous studies, patients with depressive disorders are at risks of having additional comorbid psychiatric disorders. The most frequent Axis I disorders found in depressive disorder are anxiety disorders: panic disorder, obsessive compulsive disorder (OCD), and social anxiety disorder; and substance use disorders: alcohol abuse or dependence [78]. Conversely, patients with substance use disorders and anxiety disorders also have the elevated risks of lifetime or current depressive disorder [78,96,97]. From the ECA studies [78], the lifetime prevalence of substance use disorders, panic disorder, and OCD was high among patients with major depression (27 percent, 10 percent, and 12 percent, respectively). Scott J, Gilvarry E, and Farrell M [98] found that patients with substance use disorders had the high prevalence (30 – 60%) of comorbid anxiety and mood disorders, and, conversely, a third of those with mood disorders also had a history of substance use disorder. In Thailand, Lueboonthavatchai P, and Thavichachart N. [99] found that people with alcohol use disorders in Bangkok

Metropolis had the higher prevalence of comorbid depressive disorders (31.88%), suicidal behaviors (33.33% had suicidal ideation and 7.25% had suicidal attempts), and also other substance use disorders than the general population (19.9%) [24]. About the gender difference in comorbidity of depression, men more frequently present with substance use disorder, while women more frequently present with comorbid anxiety and eating disorders [78]. Comorbid substance use disorders and anxiety disorders also worsen the prognosis of the depressive disorders, and markedly increase the risk of suicide [78].

Regarding the family history of psychiatric illness and depressive disorders, there were many studies showing the genetic influence of depressive disorders [3,4,25]. In this study, the controls were recruited from the patients' family or caregivers. Therefore, the genetic factors did not show the influence as risk factors in this study.

### 6.2.3 Predictors of depressive disorders in Thai depressed patients

After the univariate analysis was performed, the significant factors from the theoretical review and the initial analysis were entered into the fitting model to identify the predictors of depressive disorder in Thai depressed patients. By conditional logistic regression, other psychosocial factors: demographic and clinical characteristics were dropped from the model. The remaining predictors of depressive disorders in Thai depressed patients were all four interpersonal problem areas: grief (adjusted OR = 13.87, 95%CI = 1.41 – 136.27,  $p = 0.02$ ), interpersonal role disputes (adjusted OR = 24.00, 95%CI = 2.84 – 203.01,  $p < 0.01$ ), role transitions (adjusted OR = 21.44, 95%CI = 3.43 – 134.14,  $p < 0.01$ ), and interpersonal deficits (adjusted OR = 5.05, 95%CI = 1.14 – 22.38,  $p = 0.03$ ).

Although the relationship between depressive disorders and low social class was documented in previous studies; however, most of studies found only a weak correlation [78]. The adverse social stressors that affect the persons' life adjustment were more closely related with the onset of the depressive episode, and well recognized as risk factors or precipitation of depressive disorders [23,78]. Some psychosocial variables: low socioeconomic status (unemployment, or low income) and having a physical illness, may overlap with the interpersonal problem area of role transitions. However, the adjustment difficulties in the problem area of role transitions (assessed by Thai Interpersonal Questionnaire) were more closely associated with depressive disorders than these psychosocial variables. Therefore, when entering the interpersonal

problem areas and other psychosocial factors into the regression model, the other psychosocial factors were dropped from the model.

Regarding interpersonal triggers of depressive disorders, interpersonal role disputes and role transitions were the two significant predictors of depressive disorders (interpersonal role disputes: adjusted OR = 24.00, 95%CI = 2.84 – 203.01,  $p < 0.01$ , role transitions: adjusted OR = 21.44, 95%CI = 3.43 – 134.14,  $p < 0.01$ ). From previous studies, the depressed patients had more problematic interpersonal relationships with their spouses, their child, family, and friends than the non-depressed individuals [67-70]. About the quality of interaction, the depressed individuals had significantly fewer positive interactions and more negative interactions with their spouses or partners than those with the non-depressed ones [71]. Interpersonal disputes or disagreements are parts of all human relationships. Interpersonal disputes will turn to be a problem when they are unresolved or remain chronic [14]. These will make the person feel frustrated, annoyed, angry, or suffered. Many individuals with interpersonal role disputes reported maladaptive communication patterns such as ambiguous or indirect verbal and nonverbal communication, low assertiveness, incorrect assumption that others understood their opinions or their needs, or closing off communication or being silence [13,14,100]. Besides, depressed patients are usually uncomfortable in social situations and sensitive to rejection or criticism, and have problems expressing their feelings toward others honestly and directly [100]. They have trouble asserting themselves, and feel helpless when connecting with others. Clear, assertive, and adaptive communication is an important part in close interpersonal relationship and help to reduce the depressed feelings [100].

Role transitions were also the significant predictor of depressive disorders (adjusted OR = 21.44, 95%CI = 3.43 – 134.14,  $p < 0.01$ ). The finding may relate to the age group of the subjects in this study. Most of subjects were young adults and the middle age. There are many issues on role transitions in young adults and the middle age, both developmental and situational crises [101]. The developmental crises include occupation, marriage, and parenthood [101]. The situational crises include occupational status change or advancement, beginning or ending of the relationship, separation and divorce, a move, job loss, retirement, health problems or physical illness, and financial problems [101]. Many subjects reported unsatisfactory experiences and difficulties to adjust to the significant life changes such as separation and divorce, job loss, physical illness, and financial problems. They usually were used to their old roles and felt uncomfortable with their new roles. Loss of social support from the old roles, experiencing new environment, and fear of lacking skills for the new roles, make



persons perceive their new role as overwhelming, anxiety-provoking, and difficult to adjust [14]. From previous study, 17% of men and 11% of women reported their life after retirement as unsatisfactory [102]. Besides losing salaries, they may perceive the loss of their social status, their self-confidence, and the social support from their workplaces [101,102].

Grief or complicated bereavement, especially spousal bereavement, is the most stressful life event predicting depression [65]. From the present study, interpersonal problem area of grief did not show the highest association among other problem areas (grief: adjusted OR = 13.87, 95%CI = 1.41 – 136.27,  $p = 0.02$ ). This may be explained that the subjects in this study were young and middle-aged adults while spousal bereavement is commonly found in the middle-aged adults and in the elderly. From previous study, annually in the US approximately 800,000 people were newly widowed [81]. At the age of 65, 51% of all women and 14% of all men were widowed at least one time and experienced spousal bereavement [81]. Spousal bereavement and bereavement-related depressive disorder were commonly found in the age above 65 years. The rate of spousal bereavement and bereavement-related depressive disorders was increasing by the increasing age [81].

Interpersonal deficits were also the interpersonal trigger of depressive disorders, but this problem area did not show the high association with depressive disorders when comparing with other problem areas (adjusted OR = 5.05, 95%CI = 1.14 – 22.38,  $p = 0.03$ ). This may relate to the Thai socio-cultural system and Thai family structure. Thai people have connections and close relationships with their families and their relatives [103]. About the family structure, Thai families are more extended when comparing with the western countries [103]. Although now there is a change of family structure from extended to nuclear family, Thai people still have close connections with their former families [103]. The Thai family structure and socio-cultural background may help Thai people be socialized in communities. These are social resources for buffering life stress when persons experience the crises. Therefore, interpersonal or social deficits were not the significant trigger of depressive disorders in Thai depressed patients when comparing with other interpersonal problem areas.

As the above, all four interpersonal problem areas were the associated factors and the predictors of depressive disorders in Thai depressed patients, but were varied in quantity. Interpersonal role disputes and role transitions were highest associated problem areas with depressive disorders, while interpersonal deficits were the least problem areas associated with depressive disorders in Thai depressed patients. The quantity of interpersonal problem areas was differed due to the different socio-cultural



context. From the previous study of interpersonal problem areas in Uganda, grief, interpersonal role disputes, and role transitions were the three problem areas associated with depressive disorders in Uganda, while the fourth problem area, interpersonal deficits (loneliness and social isolation) were not recognized as trigger of depressive disorders [74]. People in Uganda were socialized to participate in communal activities on their daily lives. Therefore, the isolation from the community was rare in Uganda [74]. People in Uganda felt that social isolation was the result of depression than the trigger of depression [74].

From the findings of this study, all four interpersonal problem areas were associated with depressive disorders in Thai depressed patients. These are the social risk factors of depressive disorders. Therapeutic strategies of IPT [13,14,57,104] for grief include facilitating mourning process, and helping the patients initiate new attachments or new relationships; interpersonal role disputes: modification of patients' expectations about their relationships and their faulty communication patterns; role transitions: helping the patients accept the loss of new roles, conceptualize the old roles and the new roles in more balanced views, and develop new social support or social skills needed for their new roles; interpersonal deficits: reducing patients' social isolation, and encouraging the formation of new relationships. All these therapeutic strategies will help Thai depressed patients solve their interpersonal problems, leading to lessening their depressive symptoms.

### **6.3 CONCLUSION**

All four interpersonal problem areas: grief, interpersonal role disputes, role transitions, and interpersonal deficits, were the predictors of depressive disorder in Thai depressed patients. Interpersonal role disputes and role transitions were the significant predictors of depressive disorder in this study. Helping depressed patients by therapeutic methods of interpersonal psychotherapy (IPT): resolving grief or interpersonal disputes, helping to adjust to the new role, and enhancing interpersonal or social skills, will help depressed patients overcome interpersonal crises and lead to reduction of their depressive symptoms.

### **6.4 IMPLICATIONS**

The findings from this study provide the information about interpersonal problem areas in Thai depressed patients. This study helps the clinicians to consider the

interpersonal problem areas as social triggers of depressive disorders. Besides biological, psychodynamic, cognitive, and behavioral etiologies of depressive disorders, the clinician should aware and focus on the interpersonal or social etiologies of depression: four interpersonal problem areas. This study may also show the therapeutic mechanisms of interpersonal psychotherapy (IPT) by identify the interpersonal or social difficulties. Using IPT therapeutic methods and techniques that target on these interpersonal difficulties helps to reduce the patients' depressive symptoms. Moreover, the baseline information about interpersonal or social stressors in Thai depressed patients is useful for developing IPT treatment manual for Thai depressed patients. Besides helping the clinician in the treatment of depressive disorders, it can also be used for prevention of depressive disorders. Early detection and crisis intervention on people who are at risks of depressive disorders such as people experiencing severe social stressors such as traumatic grief from disasters e.g. Tsunami, or severe economic crises (e.g. financial problems, or unemployment) will help to reduce the incidence of depressive disorders in these groups of people.

## 6.5 LIMITATIONS

This study tried to find the interpersonal or social factors of depressive disorder by using case-control study, tried to reduce confounding factors by matching the gender and age, and also used the same-based controls from the hospital to make the controls comparable with cases. However, there were some following limitations. First, most of subjects were female and in the young adult and middle age. The age range of study group may have influence on interpersonal or social factors found in this age group. Second, the study was conducted at King Chulalongkorn Memorial Hospital, the tertiary hospital in Bangkok. The factors about urbanization may have influence on interpretation or generalizability of the findings. Finally, although the results of the study showed interpersonal problem areas as one of the important triggers of depressive disorders, these factors were only interpersonal or social factors of depressive disorders. There are still other factors contributing to depressive disorders: biological factors (genetic factors, neurotransmitter abnormalities, etc.), psychodynamic factors, personality factors, and behavioral and cognitive factors that the clinicians should also focus on when treating patients with depressive disorders.

## 6.6 SUGGESTIONS FOR FURTHER STUDIES

The present study helps to know the interpersonal problem areas in Thai depressed patients. From this study, interpersonal problem areas that were highly associated with depressive disorder were interpersonal role disputes and role transitions. The next step is to understand how these interpersonal problem areas affect Thai depressed patients or how the depressed patients cope with these problem areas. The study will be the qualitative study in the interpersonal problem areas or coping strategies in these problem areas of Thai depressed patients. Studying the prevalence and risk factors of grief, and abnormal, pathological, or complicated grief, in the middle-aged or the elderly persons and also in the psychiatric patients is also help the clinicians in treatment of abnormal grief. Moreover, conducting controlled trials in Thai depressed patients will help to prove the efficacy of IPT in Thai depressed patients. All these directions for future studies will help to appropriately adapt and develop IPT manual suitable for Thai depressed patients.



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APPENDICES

สถาบันวิทยบริการ  
จุฬาลงกรณ์มหาวิทยาลัย



## APPENDIX A

## หนังสือยินยอมให้ทำการวิจัยในมนุษย์ (INFORMED CONSENT FORM)

โครงการวิจัยเรื่อง ความสัมพันธ์ระหว่างปัญหาสัมพันธภาพระหว่างบุคคลกับโรคซึมเศร้า ในผู้ป่วยโรคซึมเศร้าไทย: การศึกษาโดยมีกลุ่มควบคุมแบบจับคู่ (Relationship between interpersonal problem areas and depressive disorders in Thai depressed patients: a matched case-control study.)

ก่อนที่ข้าพเจ้าจะลงนามในหนังสือยินยอมเข้าร่วมโครงการวิจัยนี้ ข้าพเจ้าได้อ่านคำชี้แจงและได้รับคำอธิบายจากผู้วิจัยเกี่ยวกับวัตถุประสงค์และวิธีการวิจัยอย่างละเอียดดีแล้ว และเข้าใจว่าไม่จำเป็นต้องเข้าร่วมการศึกษา และหากว่าไม่เข้าร่วม จะไม่เกิดผลกระทบใดๆทั้งสิ้น

วิธีการศึกษาครั้งนี้ จะทำการเก็บรวบรวมข้อมูล โดยการตอบแบบสอบถามและการสัมภาษณ์เพิ่มเติม ซึ่งข้อมูลที่ได้จะถูกนำมาวิเคราะห์และแสดงผลในภาพรวมเท่านั้นโดยมิได้มีการระบุถึงตัวบุคคล ผู้วิจัยจะเก็บรักษาข้อมูลของท่านไว้เป็นความลับและจะนำเสนอผลการศึกษาในภาพรวมเพื่อประโยชน์ทางวิชาการต่อหน่วยงานต่างๆที่เกี่ยวข้องเท่านั้น

ผู้วิจัยรับรองว่าจะตอบคำถามต่างๆที่ข้าพเจ้าสงสัยด้วยความเต็มใจ ไม่ปิดบังซ่อนเร้น จนข้าพเจ้าพอใจ

ข้าพเจ้าได้อ่านข้อความดังกล่าวข้างต้นแล้วและมีความเข้าใจดีทุกประการ จึงได้ลงนามไว้ในใบยินยอมนี้ด้วยความเต็มใจ

ลงนาม.....ผู้เข้าร่วมการวิจัย

( )

ลงนาม.....พยาน

( )

ลงนาม.....พยาน

( )

ลงนาม.....ผู้วิจัย

(นายแพทย์พีรพนธ์ ลีอนุญธวัชชัย)

## APPENDIX B

**เอกสารที่แจ้งข้อมูล / คำแนะนำแก่ผู้เข้าร่วมวิจัย (PARTICIPANT INFORMATION SHEET)**

**โครงการวิจัยเรื่อง** ความสัมพันธ์ระหว่างปัญหาสัมพันธภาพระหว่างบุคคลกับโรคซึมเศร้าในผู้ป่วยโรคซึมเศร้าไทย: การศึกษาโดยมีกลุ่มควบคุมแบบจับคู่ (Relationship between interpersonal problem areas and depressive disorders in Thai depressed patients: a matched case-control study)

**ชื่อผู้วิจัย** นายแพทย์พีรพันธ์ ลือบุญธวัชชัย ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

**บุคคลและวิธีการติดต่อเมื่อมีเหตุฉุกเฉินหรือความผิดปกติที่เกี่ยวข้องกับการวิจัย**

นายแพทย์พีรพันธ์ ลือบุญธวัชชัย ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

โทรศัพท์ที่ทำงาน: 02-2564298 โทรศัพท์มือถือของผู้วิจัย: 081-3731275 และหมายเลขโทรศัพท์สำนักงาน

คณะกรรมการพิจารณาจริยธรรม: 02-2564455 ต่อ 14 หรือ 15

**วัตถุประสงค์การวิจัย**

1. เพื่อศึกษาปัญหาสัมพันธภาพระหว่างบุคคลในผู้ป่วยโรคซึมเศร้าไทย
2. เพื่อศึกษาปัจจัยทางจิตสังคมอื่นๆที่เกี่ยวข้องกับโรคซึมเศร้าในผู้ป่วยโรคซึมเศร้าไทย

**ขั้นตอนการเก็บข้อมูล**

การศึกษาในครั้งนี้เป็นการสำรวจโดยใช้แบบสอบถามและการสัมภาษณ์เพิ่มเติม โดยจะเก็บข้อมูลจากผู้ป่วยโรคซึมเศร้า 90 ราย และผู้ที่ไม่มีอาการของโรคซึมเศร้า 90 ราย ในโรงพยาบาลจุฬาลงกรณ์ ที่มีอายุตั้งแต่ 18 ปีขึ้นไป และยินดีให้ความร่วมมือในการศึกษา จำนวนผู้เข้าร่วมการศึกษารวมทั้งหมด 180 ราย โดยจะเก็บข้อมูลโดยอาศัยแบบสอบถามเกี่ยวกับข้อมูลทั่วไปของท่าน และใช้แบบประเมินอาการของโรคซึมเศร้า และแบบประเมินปัญหาสัมพันธภาพระหว่างบุคคล เพื่อทำการประเมินโรคซึมเศร้าและปัญหาสัมพันธภาพระหว่างบุคคล โดยจะใช้เวลาท่านในการตอบแบบสอบถามทั้งหมดประมาณ 15-30 นาที โดยผู้ศึกษาวิจัยจะขอชดเชยค่าตอบแทนสำหรับการเดินทางและการเสียเวลาให้กับผู้เข้าร่วมวิจัยท่านละ 200 บาท

**เหตุผลของการศึกษาและประโยชน์ที่คาดว่าจะได้รับ**

ผู้ศึกษาวิจัยได้ทำการศึกษานี้ เพื่อประเมินปัญหาสัมพันธภาพระหว่างบุคคลในโรคซึมเศร้า รวมถึงปัจจัยทางจิตสังคมอื่นๆที่เกี่ยวข้อง ซึ่งจะเป็ประโยชน์ในการนำไปใช้ดูแลรักษาผู้ป่วยโรคซึมเศร้าให้มีประสิทธิภาพยิ่งขึ้น และนำไปพัฒนาเป็นรูปแบบของการรักษาที่เหมาะสมกับผู้ป่วยโรคซึมเศร้าในประเทศไทย

**ความเสี่ยงหรือผลข้างเคียงที่อาจเกิดขึ้น / แนวทางป้องกัน / แก้ไขความเสี่ยงหรือการแก้ไข**

การศึกษาในครั้งนี้เป็นแบบการสำรวจ โดยเก็บข้อมูลจากการใช้แบบสอบถามและการสัมภาษณ์เพิ่มเติม ผู้ทำวิจัยจะเก็บข้อมูลต่างๆของผู้เข้าร่วมวิจัยเป็นความลับ และจะนำเสนอผลการวิจัยจะนำเสนอเป็นภาพรวมโดยมิได้มีการระบุตัวบุคคล จึงไม่มีผลกระทบในเรื่องของความเสี่ยงและผลข้างเคียงเกิดขึ้นกับผู้เข้าร่วมวิจัย

**สิทธิในการเข้าร่วมหรือการขอยกเลิกการเข้าร่วมในโครงการวิจัย**

การเข้าร่วมการวิจัยจะเป็นไปโดยความสมัครใจ ท่านมีสิทธิไม่ตอบคำถามข้อใดที่ไม่อยากตอบ และมีสิทธิที่จะเข้าร่วมหรือสามารถถอนตัวออกจากโครงการได้เมื่อท่านต้องการ โดยจะไม่มีผลกระทบต่อการรักษาหรือสิทธิต่างๆที่ท่านจะได้รับใดๆทั้งสิ้น

ขอขอบคุณในความร่วมมือของท่านมา ณ โอกาสนี้

## APPENDIX C

NO.....

## แบบสอบถามข้อมูลส่วนตัวของผู้ป่วย (DEMOGRAPHIC DATA FORM)

ขอให้ท่านตอบแบบสอบถามโดยทำเครื่องหมาย  ลงใน  ในแต่ละข้อคำถามที่ตรงกับท่านมากที่สุด

## ข้อมูลส่วนบุคคลทั่วไป

เพศ หญิง  (1)  
ชาย  (2)

อายุ .....ปี

สถานภาพสมรส โสด  (1)  
คู่ อยู่ด้วยกัน  (2)  
คู่ ไม่ได้อยู่ด้วยกัน  (3)  
หม้าย  (4)  
หย่าร้าง  (5)

ระดับการศึกษาสูงสุด ไม่ได้ศึกษา  (1)  
ประถมศึกษา  (2)  
มัธยมศึกษาตอนต้น  (3)  
มัธยมศึกษาตอนปลาย  (4)  
ปวช.  (5)  
อนุปริญญา หรือ ปวส.  (6)  
ปริญญาตรี  (7)  
สูงกว่าปริญญาตรี  (8)

- อาชีพ
- ไม่ได้ประกอบอาชีพ  (1)
- รับราชการ  (2)
- รัฐวิสาหกิจ  (3)
- ธุรกิจส่วนตัว  (4)
- ลูกจ้าง พนักงาน  (5)
- รับจ้าง แรงงาน  (6)
- อื่นๆ  (7)
- โปรดระบุ.....
- รายได้โดยเฉลี่ย (ต่อเดือน)
- ไม่มีรายได้  (1)
- น้อยกว่า 5,000 บาท  (2)
- 5,000 บาทถึงน้อยกว่า10,000 บาท  (3)
- 10,000 บาทถึงน้อยกว่า 20,000 บาท  (4)
- 20,000 บาทขึ้นไป  (5)
- ท่านเคยเจ็บป่วยด้วยโรคทางจิตเวชหรือไม่
- ไม่เคย  (1)
- เคย  (2)
- ถ้าเคย โปรดระบุโรคหรืออาการที่ท่านเคยเป็น .....
- ท่านเคยเจ็บป่วยด้วยโรคซึมเศร้าหรือไม่
- ไม่เคย  (1)
- เคย  (2)
- ท่านมีสมาชิกในครอบครัวหรือญาติพี่น้องป่วยเป็นโรคทางจิตเวชหรือไม่
- ไม่มี  (1)
- มี  (2)
- ถ้ามี โปรดระบุโรคหรืออาการที่ญาติเคยเป็น.....
- ท่านมีสมาชิกในครอบครัวหรือญาติพี่น้องป่วยเป็นโรคซึมเศร้าหรือไม่
- ไม่มี  (1)
- มี  (2)

## APPENDIX D

## แบบวัดอาการของโรคซึมเศร้าฉบับภาษาไทย

(THAI VERSION – HAMILTON RATING SCALE FOR DEPRESSION, THAI HRSD)

1. อารมณ์ซึมเศร้า (เศร้าใจ, สิ้นหวัง, หมดหนทาง, ไร้ค่า)
  0. ไม่มี
  1. จะบอกภาวะความรู้สึกนี้ ต่อเมื่อถามเท่านั้น
  2. บอกภาวะความรู้สึกนี้ออกมาเอง
  3. สื่อภาวะความรู้สึกนี้โดยภาษากาย ได้แก่ ทางการแสดงสีหน้า, ท่าทาง, น้ำเสียงและท่าทางจะร้องไห้
  4. ผู้ป่วยบอกเพียงความรู้สึกนี้อย่างชัดเจน ทั้งการบอกเล่าเอง และภาษากาย
  
2. ความรู้สึกว่าตนเองผิด
  0. ไม่มี
  1. ตีเถียนตนเอง รู้สึกตนเองทำให้ผู้อื่นเสียใจ
  2. คิดว่าตนเองมีผิด หรือครุ่นคำนึงถึงความผิดพลาดหรือการก่อกรรมทำบาปในอดีต
  3. ความเจ็บป่วยในปัจจุบันเป็นการลงโทษ, มีอาการหลงผิดว่าตนเองมีความผิดบาป
  4. ได้ยินเสียงกล่าวโทษ หรือประนาม และ/หรือ เห็นภาพหลอนที่ข่มขู่คุกคาม
  
3. ความคิดฆ่าตัวตาย
  0. ไม่มี
  1. รู้สึกชีวิตไร้ค่า
  2. คิดว่าตนเองน่าจะตาย หรือมีความคิดใด ๆ เกี่ยวกับการตายที่อาจเกิดขึ้นได้กับตนเอง
  3. มีความคิดหรือทำที่จะฆ่าตัวตาย
  4. พยายามฆ่าตัวตาย (ความพยายามใดๆ ที่รุนแรง ให้คะแนน 4)
  
4. การนอนไม่หลับในช่วงต้น
  0. ไม่มีนอนหลับยาก
  1. แจ้งว่ามีนอนหลับยากบางครั้ง ได้แก่ นานมากกว่า 1/2 ชั่วโมง
  2. แจ้งว่านอนหลับยากทุกคืน
  
5. การนอนไม่หลับ ในช่วงกลาง
  0. ไม่มีปัญหา
  1. ผู้ป่วยแจ้งว่ากระสับกระส่ายและนอนหลับไม่สนิทช่วงกลางคืน
  2. ตื่นกลางดึก การลุกจากที่นอนไม่ว่าจะจากอะไรก็ตาม ให้คะแนน 2 (ยกเว้นเพื่อปัสสาวะ)

## 6. การตื่นนอนเช้ากว่าปกติ

0. ไม่มีปัญหา

1. ตื่นแต่เช้ามีดี แต่นอนหลับต่อได้

2. ไม่สามารถนอนหลับต่อได้อีก หากลุกจากเตียงไปแล้ว

## 7. การงานและกิจกรรรม

0. ไม่มีปัญหา

1. มีความคิดหรือความรู้สึกว่าตนเองไม่มีสมรรถภาพ เหนื่อยล้า หรืออ่อนแรงที่จะทำกิจกรรมต่าง ๆ การงาน หรือ งานอดิเรก

2. หหมดความสนใจในกิจกรรมต่างๆ งานอดิเรก หรืองานประจำ-ไม่ว่าจะทราบโดยตรงจากการบอกเล่าของผู้ป่วย หรือทางอ้อมจากการที่ผู้ป่วยดูไม่กระตือรือร้น ลังเลใจ และเปลี่ยนใจไปมา (ผู้ป่วยรู้สึกที่ต้องบังคับให้ตนเองทำงานหรือกิจกรรม)

3. ใช้เวลาจริงในการทำงานอย่างเป็นผลลดลง หากอยู่ในโรงพยาบาล ให้คะแนน 3 ถ้าผู้ป่วยใช้เวลาต่ำกว่า 3 ชั่วโมงต่อวันในการทำงานหรือกิจกรรม (งานของโรงพยาบาลหรืองานอดิเรก) ยกเว้นหน้าที่ประจำวันในโรงพยาบาล

4. ไม่ได้ทำงานเพราะการเจ็บป่วยในปัจจุบัน หากอยู่ในโรงพยาบาล ให้คะแนน 4 ถ้าผู้ป่วยไม่ทำกิจกรรมอื่น นอกจากหน้าที่ประจำวัน หรือถ้าผู้ป่วยทำหน้าที่ประจำวันไม่ได้หากไม่มีคนช่วย

## 8. ความเฉื่อยช้า (ความเชื่องช้าของความคิดและการพูดจา: สมาธิเสื่อม, การเคลื่อนไหวลดลง)

0. การพูดจาและความคิดปกติ

1. มีความเฉื่อยช้าเล็กน้อยขณะสัมภาษณ์

2. มีความเฉื่อยช้าชัดเจนขณะสัมภาษณ์

3. สัมภาษณ์ได้อย่างลำบาก

4. อยู่นิ่งเฉยไม่ขยับเขยื้อน

## 9. อาการกระวนกระวายทั้งกายและใจ

0. ไม่มี

1. หงุดหงิดงุ่นง่าน

2. เล่นมือ สางผม ฯลฯ

3. ขยับตัวไปมา นั่งนิ่งๆไม่ได้

4. บีบมือ กัดเล็บ ดึงผม กัดริมฝีปาก



## 10. ความวิตกกังวลในจิตใจ

0. ไม่มีปัญหา
1. ผู้ป่วยรู้สึกตึงเครียด และหงุดหงิด
2. กังวลในเรื่องเล็กน้อย
3. การพูดจาหรือสีหน้ามีท่าทีหวัดวิตก
4. แสดงความหวาดกลัว โดยไม่ต้องถาม

## 11. ความวิตกกังวลซึ่งแสดงออกทางกาย

0. ไม่มี
1. เล็กน้อย
2. ปานกลาง
3. รุนแรง
4. เสื่อมสมรรถภาพ

มีอาการด้านสรีระวิทยาพร้อมกับความวิตกกังวล เช่น :

ระบบทางเดินอาหาร : ปากแห้ง ลมขึ้น อาหารไม่ย่อย ท้องเสีย ปวดเกร็งท้อง แน่นท้อง

ระบบหัวใจและหลอดเลือด : ใจสั่น ปวดศีรษะ

ระบบหายใจ : หายใจหอบเร็ว ถอนหายใจ

ปัสสาวะบ่อย

เหงื่อออก

## 12. อาการทางกาย ระบบทางเดินอาหาร

0. ไม่มี
1. เบื่ออาหาร แต่รับประทานได้โดยผู้อื่นไม่ต้องคอยกระตุ้น
  - รู้สึกหน่วงในท้อง
2. รับประทานยากหากไม่มีคนคอยกระตุ้น
  - ขอหรือจำต้องได้ยาระบายหรือยาเกี่ยวกับลำไส้ หรือยาสำหรับอาการของระบบทางเดิน

อาหาร

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## 13. อาการทางกาย อาการทั่วไป

0. ไม่มี

1. ตั้งแขนขา หลังหรือศีรษะ ปวดหลัง ปวดศีรษะ ปวดกล้ามเนื้อ ไม่มีแรงและอ่อนเพลีย
2. มีอาการใด ๆ ที่ชัดเจน ให้คะแนน 2

## 14. อาการเกี่ยวข้องกับระบบสืบพันธุ์

0. ไม่มี อาการเช่น หมดความสนใจทางเพศ, ประจำเดือนผิดปกติ

1. เล็กน้อย
2. ปานกลาง

## 15. อาการคิดว่าตนป่วยเป็นโรคทางกาย

0. ไม่มี

1. สนใจอยู่แต่เรื่องของตนเอง (ด้านร่างกาย)
2. หมกมุ่นเรื่องสุขภาพ
3. แจ้งถึงอาการต่าง ๆ บ่อย เรียกร้องความช่วยเหลือ ฯลฯ
4. มีอาการหลงผิดว่าตนป่วยเป็นโรคทางกาย

## 16. น้ำหนักลด เลือกข้อ ก. หรือ ข.

ก. เมื่อให้คะแนนโดยอาศัยประวัติ

0. ไม่มีน้ำหนักลด

1. อาจมีน้ำหนักลด ซึ่งเกี่ยวเนื่องกับการเจ็บป่วยครั้งนี้
2. น้ำหนักลดชัดเจน (ตามคำบอกเล่าของผู้ป่วย)
3. ไม่ได้ประเมิน

ข. จากการให้คะแนนประจำสัปดาห์โดยจิตแพทย์ประจำหอผู้ป่วย เมื่อได้ชั่งวัดน้ำหนักที่เปลี่ยนไปจริง

0. น้ำหนักลดน้อยกว่า 1 ปอนด์ใน 1 สัปดาห์
1. น้ำหนักลดมากกว่า 1 ปอนด์ใน 1 สัปดาห์
2. น้ำหนักลดมากกว่า 2 ปอนด์ใน 1 สัปดาห์
3. ไม่ได้ประเมิน

17. การหยั่งเห็นถึงความผิดปกติของตนเอง

0. ตระหนักว่าตนเองกำลังซึมเศร้า และเจ็บป่วย

1. ตระหนักว่ากำลังเจ็บป่วย แต่โดยสาเหตุกับ อาหารที่ไม่มีคุณค่า ดินฟ้าอากาศ การทำงานหนัก ไวรัส การต้องการพักผ่อน ฯลฯ

2. ปฏิเสธการเจ็บป่วยโดยสิ้นเชิง

18. การเปลี่ยนแปลงตามช่วงเวลา

ก. สังเกตว่าอาการเลวลงในช่วงเช้าหรือเย็น หากไม่มีการเปลี่ยนแปลงตามช่วงเวลา ไม่ต้องกา

0. ไม่มีการเปลี่ยนแปลง

1. อาการเลวลงในช่วงเช้า

2. อาการเลวลงในช่วงเย็น

ข. หากมีการเปลี่ยนแปลง ระบุความรุนแรงของการเปลี่ยนแปลง

กา “ไม่มี” หากไม่มีการเปลี่ยนแปลง

0. ไม่มี

1. เล็กน้อย

2. รุนแรง

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3. มีการเปลี่ยนแปลงเกิดขึ้นในชีวิตคุณ (เช่น การแต่งงาน การคลอดบุตร การหย่าร้าง การแยกกันอยู่ การย้ายเข้าหรือย้ายออกจากครอบครัว การเปลี่ยนแปลงฐานะทางกรงาน ปัญหาทางด้านเศรษฐกิจ) ในช่วงเวลาที่ผ่านมานั้นหรือไม่

.....ไม่มีเลย                      .....มีครั้งเดียว                      .....มีหลายครั้ง                      .....มีอยู่มากมาย

ถ้าคุณตอบว่า ไม่มีเลย ให้ข้ามไปที่คำถามข้อที่ 4

ก. คุณนาระบุการเปลี่ยนแปลงที่เกิดขึ้นลงที่นี่.....

ข. คุณสามารถปรับตัวต่อการเปลี่ยนแปลงได้หรือไม่

.....ไม่ได้เลย                      .....ได้บางครั้ง                      .....ได้บ่อยๆ                      .....ได้ตลอด

ค. คุณสามารถทำหน้าที่กิจวัตรได้เป็นปกติหลังจากการเปลี่ยนแปลงนี้หรือไม่

.....ไม่ได้เลย                      .....ได้บางครั้ง                      .....ได้บ่อยๆ                      .....ได้ตลอด

ง. คุณสามารถพอใจกับการเปลี่ยนแปลงนี้ได้หรือไม่

.....ไม่เลย                      .....บางครั้ง                      .....บ่อยๆ                      .....ตลอดเวลา

4. ในช่วงเวลาที่ผ่านมานั้น คุณรู้สึกโดดเดี่ยวบ้างหรือไม่

.....ไม่เลย                      .....บางครั้ง                      .....บ่อยๆ                      .....ตลอดเวลา

ถ้าคุณตอบว่าไม่เลย ถือว่าจบแบบสอบถาม

ก. คุณได้ใช้เวลากับบุคคลอื่นหรือไม่

.....ไม่เลย                      .....บางครั้ง                      .....บ่อยๆ                      .....ตลอดเวลา

ข. คุณพอใจในความสัมพันธ์ต่างๆหรือไม่

.....ไม่เลย                      .....บางครั้ง                      .....บ่อยๆ                      .....ตลอดเวลา

ค. คุณมีความลำบากในการทำความรู้จักบุคคลใหม่ๆหรือไม่

.....ไม่เลย                      .....บางครั้ง                      .....บ่อยๆ                      .....ตลอดเวลา

ง. คุณมีความลำบากในการรักษามิตรภาพไว้หรือไม่

.....ไม่เลย                      .....บางครั้ง                      .....บ่อยๆ                      .....ตลอดเวลา

สถาบันวิทยบริการ  
จุฬาลงกรณ์มหาวิทยาลัย

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## ACADEMIC ACHIEVEMENT

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2000	Diploma of Clinical Sciences (Psychiatry)	Chulalongkorn University
2002	Certificate in Psychiatric Board	Thai Royal College of Psychiatrists
2004	Certificate in Family Medicine	Thai Royal College of Family Medicine
2005	Fellowship in Interpersonal Psychotherapy	Columbia University, New York, U.S.A

## RESEARCHES AND ARTICLES

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