ความชุกของภาวะซึมเศร้าและปัจจัยที่เกี่ยวข้องในผู้ป่วยนอกคลินิกทั่วไปวัยผู้ใหญ่ชาวไทยที่

โรงพยาบาลพนมไพร จังหวัดร้อยเอ็ด ประเทศไทย

นางสาวปัณฑ์ชนิต นันตติกูล

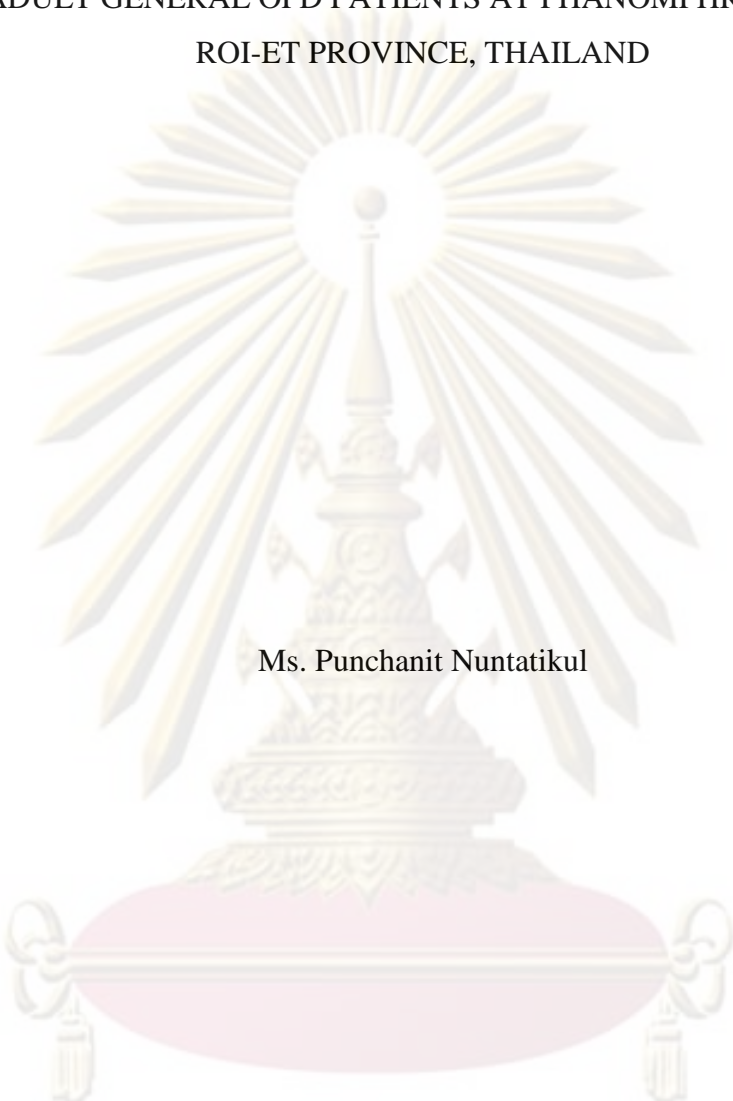วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาสาธารณสุขศาสตรมหาบัณฑิต

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วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย

ปีการศึกษา 2552

PREVALENCE OF AND FACTORS ASSOCIATED WITH DEPRESSION IN
THAI ADULT GENERAL OPD PATIENTS AT PHANOMPHRAI HOSPITAL,
ROI-ET PROVINCE, THAILAND

Ms. Punchanit Nuntatikul

A Thesis Submitted in Partial Fulfillment of the Requirements

for the Degree of Master of Public Health Program in Public Health

College of Public Health Sciences

Chulalongkorn University

Academic Year 2009

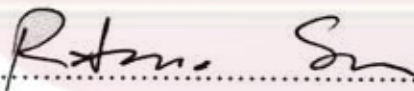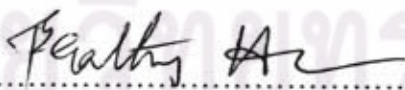|	
Thesis Title	PREVALENCE OF AND FACTORS ASSOCIATED WITH DEPRESSION IN THAI ADULT GENERAL OPD PATIENTS AT PHANOMPHRAI HOSPITAL, ROI-ET PROVINCE, THAILAND
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ปัณฑ์ชนิต นันตติกูล: ความชุกของภาวะซึมเศร้าและปัจจัยที่เกี่ยวข้องในผู้ป่วยนอกคลินิก

ทั่วไปวัยผู้ใหญ่ชาวไทยที่โรงพยาบาลพนมไพร จังหวัดร้อยเอ็ด ประเทศไทย.

(PREVALENCE OF AND FACTORS ASSOCIATED WITH DEPRESSION

IN THAI ADULT GENERAL OPD PATIENTS AT PHANOMPHRAI

HOSPITAL, ROI-ET PROVINCE, THAILAND) อ.ที่ปรึกษาวิทยานิพนธ์

หลัก: อ. ดร.ประเทือง หงสรานากร, 104 หน้า

การวิจัยครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาความชุกของภาวะซึมเศร้าและปัจจัยที่มีความสัมพันธ์กับการเกิด
ภาวะซึมเศร้าในผู้ป่วยนอกคลินิกทั่วไปวัยผู้ใหญ่ โรงพยาบาลพนมไพร จังหวัดร้อยเอ็ด โดยศึกษาจากกลุ่ม
ตัวอย่างทั้งหมด 425 คน ซึ่งเป็นผู้ป่วยอายุ 18-59 ปี ที่มารับบริการตรวจรักษาที่คลินิกทั่วไป โรงพยาบาลพนม
ไพร ในช่วงวันที่ 3-19 มีนาคม 2553 เครื่องมือที่ใช้คือ แบบสัมภาษณ์ข้อมูลทั่วไป แบบวัดการสนับสนุนทาง
สังคม แบบวัดเหตุการณ์ความเครียดในชีวิต และแบบประเมินอาการซึมเศร้า สถิติที่ใช้ คือ ค่าร้อยละ ค่าเฉลี่ย
ส่วนเบี่ยงเบนมาตรฐาน การทดสอบไคสแควร์ การทดสอบ t-test และค่าสหสัมพันธ์ของเพียร์สัน

ผลการวิจัย พบว่า ความชุกของภาวะซึมเศร้า พบร้อยละ 11.5 โดยมีภาวะซึมเศร้าอยู่ในระดับเล็กน้อยถึง
ปานกลาง ร้อยละ 8 และภาวะซึมเศร้าระดับรุนแรง ร้อยละ 3.5

สถานภาพสมรส, บุคคลที่อาศัยอยู่ด้วย และประวัติการเป็นโรคซึมเศร้า มีความสัมพันธ์กับการเกิดภาวะ
ซึมเศร้าอย่างมีนัยสำคัญทางสถิติที่ระดับ $p<0.001$ รายได้ครัวเรือนต่อเดือน มีความสัมพันธ์กับการเกิดภาวะ
ซึมเศร้าอย่างมีนัยสำคัญทางสถิติที่ระดับ $p<0.01$ เพศ อาชีพ และโรคซึมเศร้าในครอบครัวมีความสัมพันธ์กับการ
เกิดภาวะซึมเศร้าอย่างมีนัยสำคัญทางสถิติที่ระดับ $p<0.05$

การสนับสนุนทางสังคม พบว่า มีความสัมพันธ์เชิงลบกับการเกิดภาวะซึมเศร้า ($r = -.647$, $p<0.001$)
ส่วนเหตุการณ์ความเครียดในชีวิต พบว่า มีความสัมพันธ์เชิงบวกกับการเกิดภาวะซึมเศร้า ($r= .648$, $p<0.001$)

การวินิจฉัยกลุ่มตัวอย่างที่พบว่ามีภาวะซึมเศร้าโดยละเอียด, การดูแลเป็นพิเศษในกลุ่มเสี่ยงต่อภาวะ
ซึมเศร้า, การให้ความรู้ และการจัดกิจกรรมเพื่อลดปัจจัยเสี่ยงต่อภาวะซึมเศร้า เป็นแนวทางที่น่าจะช่วยพัฒนา
คุณภาพชีวิตของคนพนมไพรได้

สาขาวิชา สาธารณสุขศาสตร์ ลายมือชื่อนิสิต ปัณฑ์ชนิต นันตติกูล

ปีการศึกษา 2552 ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก

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KEYWORDS : THAI ADULT GENERAL OPD PATIENTS / PHANOMPHRAI HOSPITAL / ROI-ET / THAILAND / DEPRESSION

PUNCHANIT NUNTATIKUL : PREVALENCE OF AND FACTORS ASSOCIATED WITH DEPRESSION IN THAI ADULT GENERAL OPD PATIENTS AT PHANOMPHRAI HOSPITAL, ROI-ET PROVINCE, THAILAND. THESIS ADVISOR: PRATHURNG HONGSRANAGON, Ph.D., 104 pp.

The purpose of this research was studying about the prevalence of depression and factors related to the depression in general Outpatients Department of Phanomphrai Hospital. The subjects were 425 patients aged 18-59 years old, who received treatment at the hospital during 3rd-19th March 2010. The tools composed of a structured interview about general information, social support (measured by The Personal Resource Questionnaire), life stress event and depression (measured by HRSR Scale: Diagnostic Screening for Depression in Thai). The variables were determined by percentage, mean, standard deviation, Chi-square, independent t-test and Pearson Correlation.

The results of this research were as follow: the prevalence of depression was 11.5%. The severity of the depression was classified as little to moderate 8% and severe 3.5%.

Marital status, family member living with, and history of depression was statistically significant related with depression ($p<0.001$), monthly household income was statistically significant related with depression ($p<0.01$), gender, occupation, and depression in family was statistically significant related with depression ($p<0.05$).

Social support was statistically significant negative correlated with depression ($r = -.647$, $p<0.001$). Stress in life was statistically significant positive correlated with depression ($r = .648$, $p<0.001$).

Scrupulous diagnosis for depressed subjects, special taking care of vulnerable group, education, and appropriate activities for reducing risk factors to depression are recommended to improve quality of life among Phanomphrai people.

Field of Study: Public Health   Student's Signature: .... Punchanit Nuntatikul ....

Academic Year: 2009   Advisor's Signature: ..../...........................

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LIST OF ABBREVIATIONS

DALYs   Disability Adjusted Life Years

DSM-IV   The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition

EENT   Eye Ear Nose Throat

HRSR   Health-Related Self Report Scale: Diagnostic Screening For Depression in Thai

ICD-10   the International Classification of Diseases, Tenth Revision

OPD   Out Patient Department

PRQ85   Personal Resource Questionnaire 85

SLE   Systemic Lupus Erythematosus

WHO   World Health Organization

YLDs   Years Lived with Disability

CHAPTER I

INTRODUCTION

1.1 Background & Rationale

It is universally accepted that sadness is a gesture adopted when human face losses. In much the same way, it is a facet of life that is inevitable, and as such, will be encountered at some stage as the human life progresses. There are a number of levels at which sadness itself is felt and expressed, ranging from a genuine discontentment, melancholy, to tears and a desire to inflict harm on oneself and others. Sadness expressions of the lesser extent may be amenable and alleviated easily while those of greater levels tend to cause stagnation. This exacerbates the intensity of sadness to the extent that the lack of a desire to carry out everyday tasks, socialize and work may be inherent. Ultimately, stagnating sadness leads to mood disorder called "depression". (Thase & Lang, 2004; World Health Organization, 2006)

Data from World Health Organization (2009) have shown that depression is the leading cause of disability as measured by YLDs and the 4th leading contributor to the global burden of disease (DALYs) in 2000. By the year 2020, depression is projected to reach 2nd place of the ranking of DALYs calculated for all ages, both sexes. Today, depression is already the 2nd cause of DALYs in the age category 15-44 years for both sexes combined. At its worst, depression can lead to suicide, a tragic fatality associated with the loss of about 850,000 thousand lives every year.

Depression is a significant public health problem because it is relatively common and its recurrent nature profoundly disrupts patients' lives. Depression costs the US economy more than US$ 43 billion annually in medical treatment and lost productivity. (World Health Organization, 2006) General population surveys conducted in many parts of the world, including some SEAR (South-East Asia Region) countries, have revealed a high rate of depression with a lifetime risk of 7-12 % for men and 20-25 % for women. These rates of occurrence are unrelated to race, education, income, or civil status. (World Health Organization, 2006)

The impairment of functioning in aspect of personal care, family responsibilities, social and occupational are shown in depressed patients. But for patients with other chronic illnesses like hypertension, diabetes, coronary artery diseases, and arthritis, the gravity of such impairment/disabilities is almost equal to or greater than that. (World Health Organization, 2006)

Depressed patients spend more days away from work, become medically ill more often, suffer greater physical disability, and die at a younger age than the general population. Depressive symptoms, but not meeting the medical criteria for depression, are frequently seen in patients with other diseases and cause increased use of medical services as well as increased rates of morbidity and mortality. (World Health Organization, 2006)

In fact, patients who suffer from mild depression at least 2 years (mild chronic depression called dysthymia) can face more impairment in day-to-day life than other chronic diseases like diabetes, lung disorder, peptic ulcer, high blood pressure, back problems, and arthritis. Furthermore, dysthymia also doubles the risk of fatal heart disease. (Thase & Lang, 2004)

A projection of depression occurrences in developing countries suggests that, by the year 2020, it will be the number one ranking disease. (Murray & Lopez, 1997) Depression in these countries may be even worse, since the correlation of low socio-economic status, poor access to health care and mental disorders has been established in epidemiological studies. (Andrade et al., 2000) The prevalence of depression was particularly high in studies conducted in developing countries. In developing countries, social changes may also contribute to an increase in general psychiatric morbidity and depression in particular. (Licino & Wong, 2005)

Unfortunately, despite the seriousness of depression and all the associated consequences which can be effectively treated at any level of care all over the world, only 30% of cases with these disorders are properly diagnosed or treated. The situation is much worse in the Member Countries of SEAR (which Thailand is the one of them). (World Health Organization, 2006)

In a survey by the National Mental Health Association [NMHA] (2001), adults aged between 18 and 34 years made up the largest group (36%) of Americans who

went undiagnosed with common mental disorders, including depression and generalized anxiety disorders. (McCrone et al., 2007)

Primary health care professionals provide much of the mental health care in the United States, and 24% of frequent users of primary health care meet the criteria for a depressive mood disorder. (Karlsson, Lehtinen, & Joukamaa, 1995) Despite the high prevalence of depression in primary care, it often remains undiagnosed and inadequately treated. The rate of nondetection in depressed primary care patients ranges from 30% to 70%. (Liu et al., 2006)

In Thailand, depression is often undiagnosed although it is ranked by the Thai Ministry of Public Health as being the 4th most prominent disease in Thailand. The significance of this statistic signals a great impact to the country's socio-economical output. Depression surveys in Thailand indicate that approximately 5% or over 3 million people suffer from this disease; this figure excludes undiagnosed depressed patients. (Department of Mental Health, 2007)

Department of Mental Health indicated that depression is often neglected by the healthcare provider because:

1) Most of the patients seek professional advices from their general physicians regarding their somatic symptoms because they do not know that the change in their temperament is the sign of depressive disorder

2) Doctors often encounter with somatic illnesses cases each day, which in turns gestures their primary focus. This may leave depression symptoms undetected.

Probst et al. (2006) found that approximately 2.6 million rural adults suffer from depression. Although rural residents are more likely to experience circumstances that challenge health, including a greater likelihood of heavy alcohol consumption, and increased poverty, which is associated with greater morbidity and increase the prevalence of depression, little is known about this population.

Roi-Et province is located in the North-Eastern territory of Thailand. Most residents often face many health problems due to their socio-economic status. A further notable point from the statistics of the depressed patients from Roi-Et is that the density of such patients is quite low compare to those from nearby provinces in the same territory. Statistics of the depression rates from the Department of Mental

Health as of 2007 show such rates per 100,000 in Roi-Et, Khon Kaen and Mahasarakham to be 9.32, 177.70 and 58.44, respectively. However, suicide rate in Roi-Et is higher than the other aforementioned provinces (data from Department of Mental Health 2007 shows mortality per 100,000 due to suicide in Roi-Et, Khon Kaen and Mahasarakham to be 4.28, 4.11 and 3.74 respectively and suicide attempt rate per 100,000 to be 15.67, 5.71 and 7.59 respectively). These statistics opposes previous literatures that establish positive correlation between depression and suicide. So it can imply that most of the depression sufferers do not seek professional diagnostic advice, exacerbating the problem, and thereby influences adverse effects on the lifestyle quality of those patients.

From an annual report about quality of life of Roi-Et people in rural area, Phanomphrai district, the South-Eastern territory district of Roi-Et province, is one of the worst quality of life regard to 42 indicators in developmental plan. Moreover Phanomphrai district is also the biggest debts per household with 278,970 baht, amounting to 66,484 baht per person. (Community Development Department of Roi-Et province, 2009) Therefore, Phanomphrai people may have a risk to suffer from depression more than people in other district.

All aforementioned information might be concluded that rural adults in health care sector are one of the most risky group to get depression. To prevent the adverse outcomes in this area, diagnosis and timely intervention promise a reduction in morbidity and mortality as well as a decrease in the inappropriate use of health care services for this vulnerable population. (McCrone et al., 2007)

This study is conducted only in Phanomphrai district (Phanomphrai hospital), which is selected purposively from 17 district in Roi-Et province by the researcher.

1.2 Research Questions

—   (1) What is the prevalence of depression among Thai adult general OPD patients at Phanomphrai hospital, Roi Et province, Thailand?

—   (2) What are the factors related with depression among Thai adult general OPD patients at Phanomphrai hospital, Roi Et province, Thailand?

1.3 Objectives

(1) To explore the prevalence of depression among Thai adult general OPD patients at Phanomphrai hospital, Roi Et province, Thailand

(2) To determine the factors related with depression among Thai adult general OPD patients at Phanomphrai hospital, Roi Et province, Thailand

Conceptual Framework

Independent Variables   Dependent Variables

General Characteristics

- Age

- Gender

- Marital status

- Education

- Occupation

- Household income

- Religion

- Family member living with

Health Factors

- History of depression

- Depression in family

- Chronic illness

- Substance use

**Health – Related Self Report
(HRSR) Scale on Depression**

Psychosocial Factors

- Social support
(Intimacy, Social

Participation,

Responsibility,

Acceptability, Receive

Help)

- Stressful life events

Figure 1 Conceptual Framework
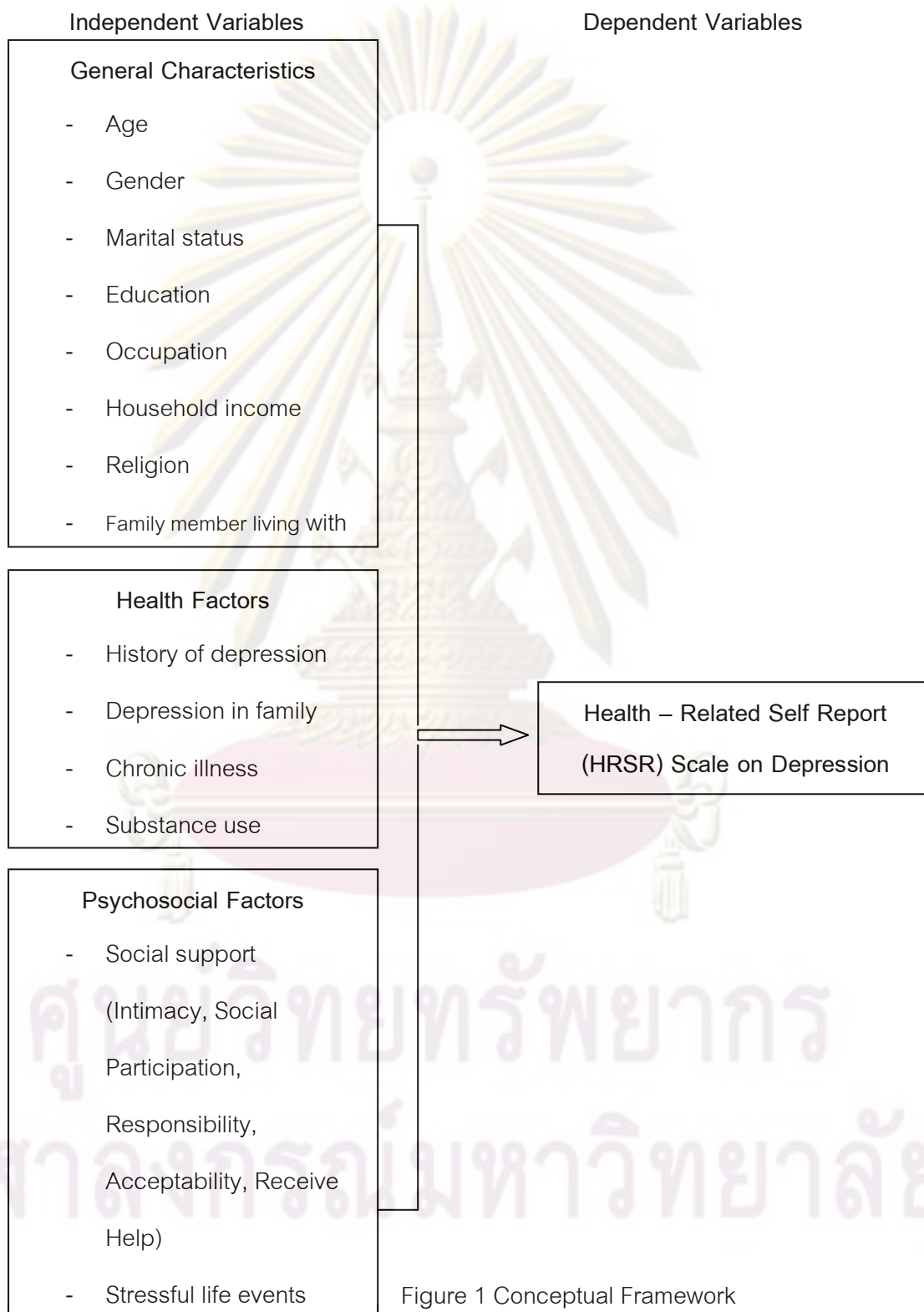
1.4 Operational Definitions

In this study, there are both independent and dependent variables.

    1.4.1 Independent Variables

    - Age refers to how old the patient is at the time of the data collection. The 18-59 years old adults are included in this study so as to avoid the problem of approval from participants' parents/care-takers if they are less than 18 years old.

    - Gender refers to male and female

    - Marital status refers to the current marital status of the patient. It is classified into married, single, widowed, and divorced/separated

    - Education refers to the highest year or education of the patient. It was divided into no education, primary education, secondary education, higher education

    - Occupation refers to present job that the patient relies on for his/her survival

    - Household income refers to the amount of money that the patient's household receive per month

    - Religion refers to the system of thought which includes a set of narrative symbols, beliefs and practices that give meaning to the practitioner's experience of life, usually with reference to higher powers or ultimate truth. (Geertz, 1966) It was divided into Christianity, Buddhism, Islam, Others (please indentify)

    - Family member living with refers to family member that patient currently living with

    - History of depression refers to whether patient had suffered from depression in the past (diagnose by physician)

    - Depression in family refers to whether patient's family suffers from depression -- both in the past and at the present (diagnose by physician)

    - Chronic illness refer to whether patient suffers from chronic illnesses such as cardiovascular disease, AIDS, respiratory disorders, cancer, diabetes, and neurological disorders (particular Parkinson's disease and stroke)

    - Substance use refers to alcohol consumption and tobacco use of patient

    - Social support refers to the physical and emotional comforts given to patient by his/her family, friends, co-workers and others

- Stressful life events refer to circumstances that stress patients such as business failure, job loss, death of spouse or loved ones, divorce, and serious financial problems

1.4.2 Dependent Variables

Depression is defined as a mental disorder characterized by sadness, loss of interest in activities and by decreased energy. Its symptoms are intense, prolonged, and interfere with the person's daily activities. These features differentiate depression from normal sadness.

In this study, depression is measured by **Health – Related Self Report (HRSR) Scale** : Diagnostic For Depression in **Thai, which contained 20 questions**.

CHAPTER II
REVIEW OF LITERATURE

2.1 Depression

2.1.1 Definition of depression

There are three definitions of depression, all of which classifies the effects in terms of negativity outcomes produced by symptoms of metamorphosed behaviors.

Duangjai Kasantikul (1993) defines depression as being "dysphoric mood, feeling sad, downhearted, tardy, lifeless, insomnia, lack of concentration, loss appetite, loss energy, weight loss, loss sex drive, thinking about suicide." These symptoms metamorphoses behaviors and affect social and occupation of sufferers. Isolation from others would also happen, which in turns decreases their job performances. (Duangjai Kasantikul, 1993)

Another definition by Chopetch Boutngern in 1995 suggests that depression is "emotional crises that are usually found to be the cause of metamorphosed behaviors". These crises often resulted from losses such as that from the loved ones; monetary, occupation, independence, and so on. Such losses often influence senses of severe disappointments, failures, melancholy, disenchanted, and hopelessness, whose prolongation is dependent on the surrounding. (Chopetch Boutngern, 1995)

Recently, the World Health Organization in 2007 defines depression as "a common mental disorder characterized by sadness, loss of interest in activities and by decreased energy". This definition differentiates depression from normal temperamental changes by the extent of its severity, symptoms and duration of disorder. (World Health Organization, 2007)

2.1.2 The severity of depression

There are 2 current diagnostic frameworks:

1) The International Classification of Diseases (ICD), Tenth Revision divided depression severity into 3 levels:

1.1 Mild depression

It usually causes symptoms that are detectable and impact upon patient daily activities. The sufferer will show a diminished interest in things which he or she

usually finds interesting or enjoyable. In terms of classification, both DSM-IV and ICD-10 have categories of mild depression where criteria for a depressive episode are met but the depressive symptoms are fewer and less severe. Sufferer may carry on with their normal lives, only appearing low in spirits and possibly less sharp in their thinking or in their interest. They may stop doing things they do not actually have to do, but will often continue with the essentials, such as going to work or caring for the family. However, they will tend not to be as conscientious about these things as previously, or will become upset because they feel they are not coping as well as they should because they feel too tired.

1.2 Moderate depression

It can cause difficulties with job or with everyday chores. More of the symptoms are present than are found in the mild depression form and they are usually more obvious. In a moderate episode of depression, the central features are low mood, lack of enjoyment, negative thinking and reduced energy, all of which lead to decreased social and occupational functioning.

1.3 Severe, or with psychotic features depression

As depressive disorders become more severe, all the features in depressive episode occur with greater intensity. There is complete loss of function in social and occupational spheres. People in this state are unable to lead any kind of normal life. The patients in attention to basic hygiene and nutrition may give rise to fears for his well being. In addition, certain distinctive features may occur in the form of delusions and hallucinations. (Depression-guide.com, Retrieved 14 October 2009)

2) The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) categorized depression into major 4 groups on the basis of severity:

2.1 Adjustment disorder with depressive mood

It is a normal reaction to major life stressors.

2.2 Minor depression (miD)

This is characterized by the presence of 2 to 4 depressive symptoms during a 2-week period, and requires one of these symptoms to be either depressed mood or loss of interest or pleasure. However, the authors of the DSM-IV concluded that there was insufficient information to include miD as a formal diagnosis.

2.3 Dysthemia

A less severe type of depression, dysthymic disorder , involves long-term (at least 2 years), chronic symptoms that do not disable, but keep one from functioning well or from feeling good.

2.4 Major depression (MDD)

It is requires a number of criteria, including the presence of 5 or more specified depressive symptoms for a period of at least 2 weeks. One of these symptoms should be either depressed mood or loss of interest or pleasure. (Fogel, 2006)

2.1.3 The cause of depression (Duangjai Kasantikul, 1993, 1999)

Can be categorized into 4 groups:

1) Intrapsychic models

Psychoanalyzers describe that sadness is the mood that result from the mix of several feelings such as fear, hate, angry, ashamed, and guilt. Angry is the most primitive mood, human can show this mood since they were babies. Guilt is the most sensitive and complicated mood, which can occur only in the person whose superego established.

2) Negative Cognition

Beck (1972) described the cause of depression that it is caused by negative thinking and pessimism, which lead to learned helplessness. Then, finally, sufferers try to kill themselves to avoid problems and suffering.

3) Behavioral models

There are 2 ideas:

1) Depression is caused by learned helplessness because sufferers always face failure and disappointment.

2) Depression result from absence of positive reinforcement because sufferers never get any praise, reward, support, or achievement, which make them loss motivation and unhappy in the end.

4) Biological models

They are divided into:

1) Heredity, which highly associated with major depression disorder especially in recurrent depression.

2) Neurotransmitter system is believed that depressed patient has lower norepinephrine and serotonin than normal. Moreover patient may have abnormality in some systems.

3) Neuroendocrine systems, which patient is founded to has abnormality in several systems such as too much cortisol releasing and low response to Dexamethasone and Growth hormone stimulation. In the other hand cortisol will be released less than normal when it is stimulated by Clonidine, Thyroid – stimulating hormone (TSH), Thyrotropin – releasing hormone (TRH).

Several studies indicated that depressed patient may have abnormal Limbic system, which related to mood and thinking. And also have abnormal hypothalamus, which related to control hormone releasing. Including abnormal biological pattern and basal ganglion, which related to psychomotor activity. (Tanawan Payungpon, 2002)

2.1.4 Depression Symptoms there are 2 frameworks ICD-10 and DSM-IV

Table 1   **Depression Symptoms**

	DSM IV	ICD-10 depressive disorder
Clinical significant	Symptoms cause clinically significant stress or impairment in social, occupational or other important areas of functioning.	Some difficulty in continuing with ordinary work and social activities, but will probably not cease to function completely in mild depressive episode; considerable difficulty in continuing with social, work or domestic activities in moderate depressive episode; considerable distress or agitation, and unlikely to continue with social, work, or domestic activities, except to a very limited extent in severe depressive episode.
Duration of symptoms	Most of day, nearly every day for at least 2 weeks.	A duration of at least 2 weeks is usually required for diagnosis for depressive episodes of all three grades of severity.
Severity	Five or more of following symptoms; at least one symptom is either depressed mood or loss of interest or pleasure: (1) Depressed mood (2) Loss of interest (3) Significant weight loss or gain or decrease or increase in appetite (4) Insomnia or hypersomnia (5) Psychomotor agitation or retardation (6) Fatigue or loss of energy (7) Feelings of worthlessness or excessive or inappropriate guilt (8) Diminished ability to think or concentrate, or indecisiveness (9) Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or suicide attempt or a specific plan	Depressed mood, loss of interest and enjoyment, and reduced energy leading to increased fatigability and diminished activity in typical depressive episodes; other common symptoms are: (1) Reduced concentration and attention (2) Reduced self-esteem and self-confidence (3) Ideas of guilt and unworthiness (even in mild type of episode) (4) Bleak and pessimistic views of the future (5) Ideas or acts of self-harm or suicide (6) Disturbed sleep (7) Diminished appetite Typical examples of "somatic" symptoms are: loss of interest or pleasure in activities that are normally enjoyable; lack of emotional reactivity to normally pleasurable surroundings and events; walking in the morning 2 hours or more before the usual time; depression worse in the morning; objective evidence of definite psychomotor retardation or agitation; marked loss of appetite; weight loss; marked loss of libido. For mild depressive episode, two of most typical symptoms of depression and two of the other symptoms are required. If four or more of the somatic symptoms are present, the episode is diagnosed: With somatic symptoms. For moderate depressive episode, two of three of most typical symptoms of depression and at least three of the other symptoms are required. If four or more of the somatic symptoms are present, the episode is diagnosed: With somatic symptoms. For severe depressive episode, all three of the typical symptoms noted for mild and moderate depressive episodes are present and at least four other symptoms of severe intensity are required.

2.1.5 Consequences of depression

1) Suicide

The most disturbing consequence of depression is death by suicide. Depression not only leads 15% of its victims to committing suicide, it kills them at a younger age. (World Health Organization, 2006)

Depression is the precursor of a vast majority of suicides. Depressed individuals are the single group most at risk for this irreversible harm. While suicide occasionally occurs in the absence of depression and the large majority of depressed people do not commit suicide, depression is a strong predisposing factor to suicide. An estimated 80% of suicidal patients are significantly depressed. Depressed patients ultimately commit suicide at a rate that is at least twenty-five times as high as control populations (Pokorny, 1964; Flood & Seager, 1968; Robins & Guze, 1972)

2) Disability or die from various medical disorders

Depressed people also tend to suffer more from various medical disorders, and die prematurely. Thus it has been reported that patients above the age of 55 with depression had a death rate four times higher than those without depression. Most of these deaths occurred from heart disease or stroke. (World Health Organization, 2006)

3) High cost in medical services

Depressed people tend to use medical services more often, as they suffer from various medical disorders from time to time, thus raising the cost of medical services to the community at large.

4) Low quality of life

Depressed people not only have to pay more cost of medical services, but they also loss their energy to work and loss their enjoyment. So they may become poorer and poorer and have a bad health that leads them to low quality of life.

2.2 Measurement tools

- Depression measurement

Depression measurements are divided into two major groups:

1) Self-rating scale such as Health-Related Self Report (HRSR) Scale: The Diagnostic Test for Depression in Thai Population, Beck's Depression Inventory

(BDI), Zung's self-rating depression scale, and The Center for Epidemiologic Studies Depression Scale (CES-D).

2) Physician-rating scale such as The Hamilton Rated scale for Depression

Health-Related Self Report (HRSR) Scale was selected to measure depression in this study due to many reasons based on a study by Manote Lotrakul & Pramote Sukanich (1999). The reasons composed of:

- It is a culturally concerned instrument for measuring the severity of depression.

- It was a satisfactory tool for measuring severity of depression (The mean HRSR score correlated significantly with the Hamilton Rating Scale for Depression ($p<0.0001$, F=13.15).

- Every item was constructed based not only on theoretical concepts of symptomatology but also on common manifestations and idioms of distress among Thai depressed subjects.

- The concurrent validity of this tool when compared with the Hamilton Rating Scale for Depression was 0.7188 ($p<0.0001$), which indicates that the HRSR adequately reflected the severity of depression.

Questionnaire contains 20 items divided into 4 aspects vegetative, motivation, cognitive, and psychological. HRSR Scale was created by Duangjai Kasantikul et al. (1997) and use to compare the scores of the four psychological disorder categories as defined by the American Psychology Association (DSM IIIR)--anxiety, major depression, depressive neurosis, and schizophrenia. Then the result showed that major depression group have highest median scores (39.00±11.58), anxiety group have lowest scores (21.6±9.82), depressive neurosis group was in the middle (28.8±8.76) and normal group has 13.6±7.33 scores. Scores were only a little different between females and males. So this tool have power to diagnose depressed people (Cronbach's alpha = 0.91), which has cut-off score 30 for major depression (specificity 90.2%, sensitivity 85.3%) cut-off score 25 for mild to moderate depression (specificity 93.4%, sensitivity 75.1%). (Supavinee Pramoulvong, 2005)

A study conducted by Tanawan Payungpon (2002) used HRSR scale to measure depression in OPD patients of social security service of King Chulalongkorn

memorial hospital, the result showed that the prevalence of depression were 24.6%. The severity of the depression was classified as mild to moderate 16.4% and severe 8.2%. Sex and job were statistically significant related with depression $p<0.001$, income was statistically significant related with depression $p<0.01$ and diagnosis of current disease was statistically significant related with depression $p<0.05$. Sex, Stressful life events and Social support were predicted factors that leading to depression at the statistical level of $p<0.001$. (Tanawan Payungpon, 2002)

Supavinee Pramoulvong (2005) used HRSR scale to measure depression in patients with diabetes mellitus at outpatient department community hospitals in Nakornpathom province, the findings demonstrated that prevalent rate of depression 12.3%, the related factors to depression that significant at the level of .01 and .05 as follows are older than 60 years old, divorce, widows, lower salary and heart disease, has complication, family and economic problems. (Supavinee Pramoulvong, 2005)

- Social support measurement

There are several tools used to measure social support such as Interpersonal Support Evaluation List, Social Support Scales, Personal Resource Questionnaire, Norbeck Social Support Questionnaire, Cost and Reciprocity Index, Inventory of Socially Supportive Behaviors (ISSB), and the Profile of Mood States.

Personal Resource Questionnaire 85 (PRQ85) Part 2 was used to measure social support in this study due to it is primarily evident that the following three instruments are rigorous psychometric testing of social support in nursing (Norbeck Social Support Questionnaire, Personal Resources Questionnaire, and Interpersonal Relationship Inventory). (Langford et al., 1997; Underwood, 2000) Furthermore, in Thailand, PRQ85 has been widely used to measure perceived level of social support which reliability is acceptable (such as Nittaya Sinsuksai's study (1998) equal 0.89, Tassanee Prasopkittikun's study (2001) equal 0.81, Narumon Vipuro's study (2007) equal 0.82). Additionally, it is correlated with depression, the construct validity was satisfactory when testing with Beck Depression Inventory (BDI) (r=-0.42, $p<0.001$).

Weinert & Brandt (1987) developed this tool from idea of Weiss then they took it to check validity of scale by expert in social science and tested reliability by test-retest method in people with age 30-37 years old 100 persons (reliability = .93).

In this study the PRQ85 was translated by Chomnard Wannapornsiri (1992). Content validity was checked by expert to fit with Thai then reliability was tested in 20 nurses of Maharatnakorn Chiangmai hospital (Cronbach's alpha = .87). (Tanawan Payungpon, 2002)

Study by Tanawan Payungpon (2002) conducted to find factors related to depression in OPD patients of social security service of King Chulalongkorn memorial hospital. The PRQ85 was used to measure social support and HRSR Scale was used to measure depression severity, the result showed that social support was statistically negative correlated with depression (r=-0.163, p< 0.01) and social support also were predicted factor that leading depression at the statistically significant level of p<0.001

- Stressful life events measurement

The exist measurement tools of stress such as the Perceived Stress Questionnaire (PSQ), the Life Events Inventory (LEI), The Perceived Stress Scale (PSS), and the Social Readjustment Rating Scale (SRRS) which known more commonly as the Holmes and Rahe Stress Scale.

In this study used a tool that was developed by Somjit Nakarapanich (1988) according to Social Readjustment Rating Scale (SRRS, developed by Holmes & Rahe, 1967) (Tanawan Payungpon, 2002). The SRRS was found correlation between stress scale scores and illness, which was sufficient to support the hypothesis of a link between life events and illness while several studies unveiled relationship between illness and depression (Hankin & Abramson, 2001; Mulder, 2002). Therefore, this tool should found correlation between stress scale and depression as well. Moreover the scale was also tested cross-culturally, comparing Japanese and Malaysian groups with American populations. (Orawan Churoek, 2005) Thus it might be appropriate to use in Thai subjects, too.

The questionnaire in Thai was adjusted to fit with Thai people contained 43 items divided into 5 parts—health, family, economic, work and social. Six of the questions concentrated on health history, twelve on familial history, a further six on economical status, ten on work, and eight on social. Score in each item was given by 20 experts according to Thurstone method which gave score range 1-11. The least

severe events will have 1 point and more severe will have 2, 3, 4, 5, 6, 7, 8, 9, 10, or 11 respectively. Then median scores were calculated from all scores and became a score of each item. Reliability was tested by gave the same questionnaire to same experts to give score again and new median scores were calculated. Result showed there was reliability score = .97 then Somjit Nakarapanich took this tool to test reliability of whole questionnaire with sample in childbirth department of Chulalongkorn hospital. Result showed reliability score of whole questionnaire = .99. (Tanawan Payungpon, 2002)

Study by Tanawan Payungpon (2002) about factors related to depression (mearsured by HRSR Scale) in OPD patients of social security service of King Chulalongkorn memorial hospital. Stressful life events questionnaire was used to measure stress level and result showed that stress in life was statistically significant positive correlated with depression (r=0.337, p<0.001) and stress in life were predicted factor that leading to depression at the statistical level of p<0.001.

2.3 Review of studies on depression

Several studies indicated the factors related with depression that consist of many factors:

1) Individual factors

1.1 Age

Several studies indicated that age is a significant predictor of depression. But there is a variation in the results gathered.

The prevalence of major depression has been found to decrease with age (Blazer et al., 1994). But depressive symptoms have shown some positive association with age (Le´pine et al., 1997; Salokangas & Poutanen, 1998; Aluoja et al., 2004).

Romanoski, Folstein, Nestadt, Chahal, Merchant, Brown, et al. (1992) found that there is a decline in the prevalence of major depression with age but an increase in the prevalence of "minor depression" symptoms.

In contrast, study of Beekman et al. (1995) about depression in later life (divided age into 3 groups, 55-64, 65-74, and 75-85 years), found that the

prevalence of major depression increased with age, while the prevalence of minor depression fluctuated around the level of the youngest age group (55-64 years).

Guttentag et al. (1980); Arber & Ginn (1993); Lai (2004a); Kuo & Guan (2006) found that there is a positive correlation among prevalence of depression and age.

On the other hand, Casado & Leung (2001); Lai (2000, 2005); McCrone et al. (2007) found that the variable that predicted depression was younger age.

1.2 Gender

Most studies indicated that gender is a factor related to depression. But there are some studies that are in rebuttal.

The prevalence of depression was twice as high in female. (Aneshensel et al., 1981; Boyd & Weissman, 1981; Kivela et al., 1988; Beekman et al., 1995; Cho et al., 1998; Sompop Ruangtrakul, 2000; Ohayon & Schatzberg, 2003) This is the most consistent finding in cross-national studies and the ECA and NCS. (Weissman et al., 1996) The lifetime prevalence is estimated to be 25% for women against 12% for men. (Kessler et al., 1993, 1994; Sompop Ruangtrakul, 2000)

It has been propose that social rather than biological differences are the key factors that lead to the predominance of depression in women (Harris et al., 1991; Maier et al., 1999), and that the negative cognitive styles and low self-esteem which are more commonly found among women may be attributed to their social and cultural roles. (Jack, 1993; Kearney-Cooke, 1999, Stoppard, 2000)

However, in some studies, the gender effect associated with depression disappeared when the influences of the demographic and social variables were controlled in regression analyses. Consequently, gender differences related to depression might be attributable to gender-related psychosocial and contextual factors (e.g., socioeconomic status, education, acculturation) rather than inherent characteristics associated with gender differences (e.g., biological or physiological predispositions). (Harris et al., 1991; Maier et al., 1999; Blazer, 2003; Kuo & Guan, 2006; McCrone et al., 2007)

1.3 Marital status

A marital relationship is one of the most important human relationships that, in a positive case, can protect from depression, while long-lasting marital discord or conflicts can make individuals vulnerable to depression (Henderson et al., 1979; Goering et al., 1983; Hurry et al., 1983; Weissman, 1987; Brugha et al., 1990).

Depression often founded in those who were divorced, separated, or single. The prevalence of depression in single men is higher than married men. (Beekman et al., 1995; Pang, 1995; Duangjai Kasantikul, 1993, 1999; Aluoja et al., 2004; van der Wurff et al., 2004)

In addition, the works of Lai (2005); Wu et al. (2004) specifically found that being single predicted depression in regression analyses.

Life (1978) studied about relationship between depression and marital status. Depression was measured by 29-item of psychiatry symptom. The result indicated that the highest prevalent of depression was founded in the divorced 27% and widowed 21%.

Divorced or separated compared to married or never married individuals have a two-fold increase in the prevalence of depression (Cho, Nam, & Suh, 1998; Weissman, 1987; Pahkala et al., 1995); these conditions also increase the odds for the occurrence of a first depression episode. (Coryell, Endicott, & Keller, 1992)

Wu et al. (2004) found that unmarried predicted depression in older Chinese American women but not in older Chinese American men. In contrast, Duangjai Kasantikul (1999) found that the prevalence of depression is lower in single women than married women.

Several studies demonstrated that divorced, widowed, and separated is a risk factor of depression. While being single is no consensus risk factor of depression and there is gender difference.

1.4 Education

McKinlay et al. (1987) studied about the correlation of the level of education to sadness. The result was shown that women with low education, divorced,

or separated have the most likelihood of temperamental depression especially in mid-age women.

Pang (1995) and Stokes et al. (2001) shown that older Asian Americans with less than a high school education were more at risk for depression than those with an education of high school or above. Moreover, Lai (2004a) unveiled a greater number of individuals with lower education attainment among the depressed group of Chinese Canadian older adults than the nondepressed group in his study. These findings are in consensus with Jang, Kim, and Chiriboga's (2005) study of older Korean Americans.

In a systematic review of observational studies on depression in primary care, lower education levels are identified as risk factors for the persistence of depression (Gilchrist & Gunn, 2007). This agrees with the study of McCrone et al. (2007) which indicates that education level prognosticates depression occurrences.

Conversely, an opposite effect was revealed in Mui's (1998) investigation of older Chinese Americans, in that more education predicted higher levels of depression.

1.5 Income

Study of Siriwan Siriboon (1996) demonstrated that those who loss their job and have to depend on others financially will have higher mental health problem than those who have their own income.

Aluoja et al. (2004) reported that low socioeconomic status (measured by the level of education, income or occupation) was related to depression.

One study by Lai (2004a) demonstrated that older Chinese Canadians who were depressed tended to report having lower income than those who were not depressed. Other studies also discovered that poorer financial status (i.e., lower adequacy of finances, less satisfaction with economic status) was a significant correlate and/or predictor of depression (Kuo & Guan, 2006; Lai, 2004a, 2004b, 2005).

In study of McCrone et al. (2007), unemployment (no income) was the strongest predictor of depression.

2) Health factors

2.1 History of depression

The risk for developing a depressive episode is significantly higher in individuals with a prior history of depression. About 60% of individuals who experienced one episode of depression will experience a second one. (American Psychiatric Association, 2000)

A 15-year naturalistic observational prospective study (Keller & Berndt, 2002; Mueller et al., 1999; Pincus et al., 2001) of the course of depression indicated that 85% of individuals with a prior history of major depression experienced a recurrence of symptoms over a period of 15 years.

2.2 Depression in family

The risk of being depressed increases two- to three-fold in first-degree relatives of individuals with major depression when compared to controls. (Klerman & Weissman, 1989) Major depression seems to be a familial disorder that is mostly based on genetic influences, though the influence of the environment on specific individuals may be etiologically significant. (Sullivan, Neale, & Kendler,2000)

Relatives of individuals with early-onset recurrent major depression have a higher risk of depression (17.4%) than relatives of individuals with a single episode and late age of onset (3.4%). (Bland & Newman, 1986) Similar results were reported in other studies (Alloy et al., 1999; Weissman et al., 1984; Kupfer et al., 1989). Disease severity also seems to be correlated with disease risk among relatives. Relatives of individuals with mild depression (14.7%) have a lower risk than relatives of individuals with severe depression (16.4%); relatives of control subjects had a rate of 5.1% (comparable to the general population). (Weissman et al., 1984; Aneshensel, Frerichs, & Clark, 1981)

2.3 Chronic illness

The prevalence of depression is estimated to be higher in primary care patients, as many as 16% had subsyndromal symptoms. (William, Kerber, Mulrow, Medina, Aguilar, 1995) Between 5 and 10% of primary care patients meet DSM criteria for depression, and 7.8% meet criteria for dysthemia. (Spitzer et al., 1995) The rates of depression have been reported to be higher among patients with

several medical illnesses, such as cardiovascular disease, AIDS, respiratory disorders, cancer, diabetes and neurological disorders (particular Parkinson's disease and stroke) (Hankin & Abramson, 2001; Mulder, 2002) There is a strong association between depression and increased ischemic heart disease morbidity and mortality. (Roose, 2001; Musselman et al., 1998; Glassman & Shapiro, 1998)

It is important to note that several drugs have the potential ability to cause symptoms of depression. (Patten & Love, 1997; Reus et al., 2001; Anon, 2002)

2.4 Substance use

Alcohol and drug use have also been associated with a higher prevalence of depression. (Patten, Sedmak, & Russell, 2001)

Wiesbeck et al. (2008) studied about Tobacco Smoking and Depression - Results from the WHO/ISBRA Study. The results demonstrated that the highest rate of depressives was found in current smokers (23.7%), the lowest rate in never smokers (6.2%), while the rate of those who had quit smoking (14.6%) was between both. The association between smoking and depression has statistically significant. This study adds supportive evidence to the argument that smoking is linked to depression.

3) Psychosocial factors

3.1 Stressful life events

Holmes & Rahe (1967) defined life stress event as a social stressors, which can change the way of life of stressor. (Tanawan Payungpon, 2002)

Although some life events that are associated with the precipitation of a major depressive episode are not necessarily recognized as adverse events (such as a job promotion, geographical relocation or childcare responsibilities), the majority of acute and chronic psychosocial factors linked to depression are. (Licino & Wong, 2005)

The main psychological factors associated with depression include poverty, childhood neglect or trauma (particularly sexual abuse), death of spouse or loved one, divorce, job loss, financial dependence or difficulties, combined work and domestic duties. (Brown & Moran, 1997; Stoppard, 2000; Eaton et al., 2001) Adverse

childhood events have been associated with the early onset of depression. (Alloy et al., 1999) The important of these factors varies with gender, age and ethnicity. Events related to family or close social networks represent a greater impact to women, while issues related to work, legal, and divorce matters affect more men. (Kendler, Gardner, Neale, & Prescott, 2001; Kendler, Thornton, & Gardner, 2001) Increased incidence of depression has been noted when several life events occur simultaneous (Kendler & Roy, 1995) in the month prior to the episode.

Tanawan Payungpon (2005) unveiled that stressful life events statistically significance positive correlated with depression.

Janis (in Yuppadee Trepattanasuwan, 1996) divided stress into 3 levels:

- Mild stress occur and exist only in a short time (only a minute or hour) associated with little irritating circumstance in daily life
- Moderate stress occur and exist in longer time than mild stress (several hours and days) and more intense may result from mild illness and overtasked work
- Severe stress can exist in week or month or year may result from death of loved ones and disability

3.2 Social support

Cobb (1976) stated that social support is the perceiving of individuals as they are a part of their social networks, which each person's responsibilities are in concurrence from a general agreement.

Benjamas Titana (1999) defined social support as intimacy, monetary assistance, and social participation.

Tanawan Payungpon (2002) concluded that social support is the social basic need of person that related with interaction among person or group of persons.

Therefore social support can be defined as the physical and emotional comforts given to patient by his/her family, friends, co-workers and others.

Weiss (in Sukjai Charoensuk, 1996) has categorized social supporting behaviors into 5 kinds:

- Intimacy provides safety and warmth, and abolishing loneliness feelings. Social Participation will provide information experience and idea to share. Those who lack of social participation tend to isolate themselves and feel boring

- Social Participation provides information experience and idea to share. Those who lack of social participation tend to isolate themselves and feel bored

- Responsibility defines purpose and precluding emptiness

- Acceptability from social role: if people do not have acceptability, they will have low self-confidence

- Receiving help can occur due to close relationship. Not receiving any assistance at times of difficulty results in worrying and feeble feelings.

House (in Israel, 1985) has categorized social supporting behaviors into 4 classes:

- Emotional support such as giving praise, love, sincerity

- Appraisal support such as giving feed back

- Information support such as giving advice, suggestion, information

- Instrumental support such as giving money, thing, labour, time

Social support was assessed in terms of family versus extra-familial interpersonal sources, representing an essential risk factor for depression (George, 2004)

A study of Monroe (1983) and Windle (1992) reported that deficits in social support increase the risk for depression. The same result was found in studies of Lewinsohn et al. (1994); Sheeber, Hops, Alpert, Davis, & Andrews (1997); Slavin & Rainer (1990); Stice & Bearman (2001); Stice, Ragan, & Randall (2004) which demonstrated that deficits in perceived support have predicted future increases in depressive symptoms during adolescence.

Tanawan Payungpon (2002) shown that social support statistically significance negative correlated with depression.

The literature review process saw only a few studies that have been carried out in regarding the prevalence and factors associated with depression in adult OPD patients in the rural area of Thailand in particular. **This study is thus intended to fill in this knowledge gap and attempt to investigate the prevalence and factors**

associated with depression in adult OPD patients at PhanomPhrai hospital, Roi-Et Province, Thailand.

CHAPTER III

METHODOLOGY

3.1 Research Design

This study is a cross-sectional study to assess the prevalence of and factors associated with depression in Thai adult general OPD patients (age 18-59 years) at Phanomphrai hospital, Roi-Et Province, Thailand

3.2 Study Area

The study area is Phanomphrai hospital, Phanomphrai district, Roi-Et province, Thailand

3.3 Study Period

In third of March to nineteenth March 2010

3.4 Study Population

The study population is Thai adult general OPD patients (age 18-59 years) at Phanomphrai hospital, Roi-Et Province, Thailand

3.5 Sampling Technique

Purposive sampling method was used to choose study area. 425 subjects were selected randomly based on hospital registration records. It revealed that there were general OPD patients about 200 persons per day. And because of a limit of time, researcher had only 17 days to collect data. Thus, the formula of a systematic random sampling was:

$$\frac{200 \times 17}{425} = 8$$

Above formula indicated that participants would be chosen from every 8 general OPD patients. Subjects were the last patients in each interval. If chosen patients were not meet the criteria in this study, previous patients in the same interval were chosen instead.

3.5.1 Inclusion criteria of the subjects are 1) Thai general OPD patients both male and female 2) age between 18-59 years 3) who have been living in Phanomphrai district, Roi-Et province for at least six months 4) can communicate in Thai, and 5) are willing to participate in the research.

Considered to age of subjects, although depression in the older age group is significant for a variety of reasons (World Health Organization, 2006), a limit of time and resources of the study made it's difficult to cover people in this group. Hence, researcher chosen only patients aged 18-59 years to study.

3.5.2 Exclusion criteria of the subjects are 1) foreign patients 2) age less than 18 or more than 59 years 3) who have been living in Phanomphrai district, Roi-Et province for less than six months 4) those who have difficulties to communicate in Thai 5) who refuse to give informed consent, and 6) those who are seeking the general physician for other purposes such as an annual health check-up, vaccination and seeking a doctor's certificate.

3.6 Sample Size

Sample size in this research is calculated by the following formula that is created by Daniel, (Daniel, 2005) p.189:

$$n = \frac{z^2\,pq}{d^2}$$

n = sample size

z = standard value for 95% confidence interval = 1.96

d = error allowance = 0.05

p = the proportion of the prevalence of depression in OPD patients = 0.5

q = 1 - p = 1 - 0.5 = 0.5

$$n = \frac{z^2\,pq}{d^2}$$

$$n = \frac{(1.96)^2\,(0.5)\times(0.5)}{(0.05)^2} = 384$$

Sample size = 384. A total of 425 patients (10% add-up) will be made to cover missing values and losing subjects.

3.7 Measurement Tools – structured face-to-face interviews consist of:

3.7.1 General information consist of: gender, age, marital status, education, occupation, monthly household income, religion, medical illness, history of depression, depression in family and substance use, which contain 15 questions

3.7.2 Personal Resource Questionnaire 85 (PRQ85) Part 2 developed by Chomnard Wannapornsiri (1992) translated from Weinert & Brandt (1987)

(Cronbach's alpha = 0.93) according to Weiss' idea. This tool was verified content validity to fit with Thai by expert. There are 25 questions (Cronbach alpha = 0.87) contained 5 aspects Intimacy, Social Participation, Responsibility, Acceptability, and Receive Help. Questions are divided into positive 20 questions and negative 5 questions. (Tanawan Payungpon, 2002) Principle to rate score is:

Table 2   Rate of Social Support score

Response	Points for response to "Positive" Question	Points for response to "Negative" Question
Strongly Agree	7	1
Agree	6	2
Mildly Agree	5	3
Unsure / Not decided	4	4
Mildly Disagree	3	5
Disagree	2	6
Strongly Disagree	1	7

Social support has score in the range of 25 – 175 which higher scores indicated higher levels of perceived social support. Point ranges are divided into low, medium, and high level. If the score lies within one standard deviation of the mean, it will be designated as a medium score. Scores that lie in the extremes are attributed to high and low scores, respectively (Tanawan Payungpon, 2002). In this study social support score had mean equal 129.96 standard deviation equal 17.82, thus score could classify into low (66.00-112.13), medium (112.14-147.78), and high (147.79-166.00).

3.7.3 Stressful life events use to investigate stress events in the past one year as developed by Somjit Nakarapanich (1988). This set of questionnaire follows idea of Holmes and Rahe, and contain 43 questions (Cronbach's alpha = .99). It divides life events into 5 parts—health, family, economic, work and social. Six of the questions concentrated on health history, twelve on familial history, a further six on

economical status, ten on work, and eight on social. Scores are in the range of 0.00-342.02 and divided into high, medium, and low scores in the same nature as that done in PRQ85 questionnaires which higher scores indicated higher levels of stressful life events in the past 1 year of patients (Tanawan Payungpon, 2002). In this study stress life events score had mean equal 39.37 standard deviation equal 22.09, thus score could classify into low (0.00-17.27), medium (17.28-61.46), and high (61.47-102.05).

3.7.4 Health Report (HRSR) Scale: The Diagnostic Screening Test for Depression in Thai Population developed by Duangjai Kasantikul et al. (1997) contained 20 questions (Cronbach's alpha = 0.91; specificity 90.2%, sensitivity 85.3% for major depression cut off 30 points; specificity 93.4% , sensitivity 75.1% for mild to moderate depression cut off 25 points) is used to measure depression in OPD patients. The 3 positive questions are included in this tool, which can separate depressed people from normal people.

Score will start with 0 – 3 (0 = never, 1 = sometimes, 2 = quite often, 3 = often). But in 5th, 10th, and 15th score will be inverted. In 20th score will be only 0 and 3 (0 = no, 3 = yes). The range of score 0-24 indicated no depression, 25-29 indicated mild to moderate depression and 30 or more indicated severe depression. (Duangjai Kasantikul et al., 1997)

3.8 Pre-testing

Some parts of the face-to-face interviews were pre-tested among 30 Thai adult general OPD patients at community hospital in Yasothon province who had the same characteristics as the selected population. The reliability of the measurement tools was calculated by using Cronbach's alpha coefficient. Each scale's reliability was as follows:

1   Social Support (25 items): Alpha coefficient value = 0.71

2   Health Report (HRSR) Scale: The Diagnostic Screening Test for Depression in Thai Population (20 items): Alpha coefficient value = 0.90

General information and stress life events were not tested for reliability due to they asked about the facts which no need to test reliability.

3.9 Data Collection

Data was collected by structured face-to-face interviews to participants by the researcher and two research assistants, who are nurse of Phanomphrai hospital.

The researcher contacted with the staff of hospital. Then, recruitment of two nurses who had been working in the hospital and training was followed. In the four-hour period, the researcher thoroughly explained the components of the structured face-to-face interviews and the technique how to approach participants and research assistances were made fully aware of the purpose of this study. Additionally, the research assistants had four hours of field practice under the researcher's supervision.

Prior to face-to-face interview, the researcher or the research assistants had the responsibility of explaining the purpose of the study. Objectives and information about the study include the fact that all information from this study is strictly confidential, and how the interview would be conducted in terms of format and length of time (about 30-45 minutes) would then be explained to the subjects who were systematically random based on hospital registration records. Next, researcher or research assistants explained to potential participants that their participation was voluntary, that there was no compensation for it, and that they could withdraw from the study at any time without any negative consequences as the participants would still receive normal care. Then subjects would be asked for their consent prior to starting the interviewing.

After interviewing, the researchers would check the items of the structured face-to-face interviews which were required to be answered completely. If missing data was found, interview was repeated with the same respondent.

Participant's medical records (which accessibility was permitted by hospital director) were filled in the interview form by researcher as diagnosis of disease after all process was completed in each day. If there were more than one disease in medical records, only one main disease was chosen.

A nurses' lounge in the hospital was used to conduct face-to-face interview in this study because of privacy, convenience and quietness.

3.10 Data Analysis

SPSS v 17 software for windows was used for quantitative data analysis

Descriptive statistics of frequency, percentage, mean, and standard deviation were calculated for describe the subject characteristics

Inferential statistics: used Chi-square test, Independent t-test and Pearson's Correlation Coefficient to analyze correlation of several factors with depression

3.11 Ethical Consideration

Before conducting the research, approval from the Ethical Committee of Chulalongkorn University (through the College of Public Health Sciences) would be obtained as COA no. 16/2010 issued on 1 February 2010. Before data collection, the researcher would give clear verbal explanation to each potential participant on the purposes and procedures of the study. Each potential participant would also be informed that participation in the study was completely voluntary and that they could withdraw at anytime which would not affect them by all means. The informed consents would then be obtained from the participants who were willing to participate in the study.

The welfare and the safety of the participant would be protected in this study. The information that the participant provided would be highly confidential and would only be used for the purpose of this study. In addition, the results from this study would be presented on total picture, thus, no identifying information would be gathered and so this protected the anonymity of the participant. No procedure would be performed on participants so they should not have any kind of side effects as a result. Moreover, if participants were found to have score that indicated depression, researcher would contact them to go to see a physician for scrupulous diagnosis and getting advice to take care themselves appropriately.

3.12 Limitations

This study was conducted only in Phanomphrai hospital, Phanomphrai district, Roi-Et province, Thailand. Thus, it might not be a representative of all adult general OPD patients in Thailand.

There is also a limitation of time for the research.

3.13 Expected Benefits & Applications

- To give the baseline data on the prevalence of depression in Thai adult general OPD patients at Phanomphrai hospital, Roi-Et province, Thailand
- To assess the factors related with depression in Thai adult general OPD patients at Phanomphrai hospital, Roi-Et province, Thailand
- To pursue strategies to promote quality of life of the targeted patients

CHAPTER VI
RESULTS

This study was conducted in Phanomphrai hospital, Roi-Et Province, Thailand during 3rd-19th March 2010. Total of 425 Thai adult general OPD patients were interviewed face-to-face for all data about general information, psychosocial factors and depression of the Thai adult general OPD patients. This chapter demonstrates the main findings of the analysis and is divided into 4 parts consist of:

Part 1 Socio-demographic characteristics of respondents

Part 2 Prevalence of depression of Thai adult general OPD patients at
Phanomphrai hospital

Part 3 Psychosocial data

Part 4 Relationship between personal factors, health factors, and psychosocial factors
on the depression in Thai adult general OPD patients at Phanomphrai hospital

Part 1   **Socio-demographic characteristics of respondents**

Table 3   **Number and percentage of respondents by personal factors (n=425)**

Personal Factors	Number	Percentage
Gender		
Male	203	47.8
Female	222	52.2
Age (years)		
18-28	55	12.9
29-39	67	15.8
40-50	149	35.1
51-59	154	36.2
$\overline{X}$ = 43.93 S.D. = 11.39		
Religion		
Buddhism	425	100.0
Marital status		
Single	48	11.3
Married	357	84.0
Widowed	13	3.1
Divorced	5	1.2
Separated	2	0.5
Education		
Primary school	203	47.8
Intermediate school	64	15.1
Junior high school	25	5.9
Senior high school	62	14.6
Vocational certificate	8	1.9
Higher vocational certificate	4	0.9
Higher vocational diploma	4	0.9
Bachelor's degree	55	12.9

Table 3 (Continued) Number and percentage of respondents by personal factors (n=425)

Personal Factors	Number	Percentage
Family member living with		
Spouse	244	57.4
Children	50	11.8
Relatives	41	9.6
Parents	9	2.1
Friends	8	1.9
Alone	1	0.2
Spouse & children	48	11.3
Spouse & relatives	7	1.6
Parents & spouse	5	1.2
Parents & relatives	3	0.7
Parents & children	2	0.5
Children & relatives	2	0.5
Parents & spouse & children	5	1.2
Occupation		
Farmer	183	43.1
General employee	79	18.6
Merchandising	71	16.7
Government official	46	10.8
Personal business	30	7.1
State enterprise	5	1.2
Company employee	4	0.9
Unemployed	1	0.2
More than 1 occupation	6	1.4

Table 3 **(Continued) Number and percentage of respondents by personal factors (n=425)**

Personal Factors	Number	Percentage
Monthly household income (baht)		
≤10,000	70	16.5
10,001-20,000	298	70.1
≥20,001	57	13.4
Median = 15,000 Minimum 5,000 baht Maximum 50,000 baht		

According to the results from table 3, the socio-demographic characteristics in Thai adult general OPD patients were:

Gender

Adult general OPD patients in this study were female 52.2% and male 47.8%.

Age

Most of patients were 51-59 years old (36.2%) follow by 40-50 years old (35.1%), 29-39 years old (15.8%), and 18-28 years old (12.9%) respectively. Mean of age was 43.93 years old and standard deviation was 11.39.

Religion

All of patients were Buddhism (100%)

Marital status

Most of patients were married (84%) follow by single (11.3%), widowed (3.1%), divorced (1.2%), and separated (0.5%) respectively.

Education

Most of patients graduated in primary school (47.8%) follow by intermediate school (15.1%), senior high school (14.6%), Bachelor's degree (12.9%), junior high school (5.9%), vocational certificate (1.9%), and higher vocational certificate equal to higher vocational diploma (0.9%) respectively.

Family member living with

Most of patients had been living with spouse (57.4%) follow by children (11.8%), spouse & children (11.3%), relatives (9.6%), parents (2.1%), friends (1.9%), spouse & relatives (1.6%), spouse & parents equal to spouse & parents & children

(1.2%), parents & relatives (0.7%), parents & children equal to children & relatives (0.5%), and alone (0.2%) respectively.

Occupation

43.1% of patients were farmer, 18.6% were general employee, 16.7% were merchandising, 10.8% were government official, 7.1% were personal business, 1.4% had more than one occupation, 1.2% were state enterprise, 0.9% were company employee, and 0.2% were unemployed.

Monthly household income

Most of patients had household income per month 10,001-20,000 baht (70.1%) follow by equal or less than 10,000 (16.5%), and more than 20,000 (13.4%) respectively. Median of monthly household income was 15,000 baht, minimum was 5,000 baht, and maximum was 50,000 baht.

Table 4   Number and percentage of respondents by health factors (n=425)

Health Factors	Number	Percentage
Chronic illness		
None	245	57.6
Have	180	42.4
Family's medical illness		
None	311	73.2
Have	114	26.8
Depression in family		
None	415	97.6
Have	10	2.4
History of depression		
None	418	98.4
Have	7	1.6

Table 4 **(Continued) Number and percentage of respondents by health factors (n=425)**

Health Factors	Number	Percentage
Alcohol		
None	277	65.2
Ever	44	10.4
Drink	104	24.5
Tobacco		
None	297	69.9
Ever	12	2.8
Smoke	116	27.3
Diagnosis of disease		
Endocrine system	132	31.1
Skeletal and muscular system	59	13.9
Respiratory system	45	10.6
Nervous and brain system	41	9.6
Cardiovascular system	31	7.3
Dental	31	7.3
Digestive system	17	4.0
EENT	14	3.3
Reproductive system	11	2.6
Excretory system	11	2.6
Accident	11	2.6
Atopic dermatitis	10	2.4
Mental	6	1.4
Immune system	6	1.4

According to the results from table 4, the health factors in Thai adult general OPD patients were:

Chronic illness

57.6% of patients had no chronic illness and 42.4% of patients had chronic illness.

Family's medical illness

73.2% of patients didn't have family's medical illness and 26.8% of patients had family's medical illness.

Depression in family

97.6% of patients had no depression in their family and 2.4% had depression in their family.

History of depression

98.4% of patients had no history of depression and 1.6% had history of depression.

Alcohol consumption

65.2% of patients had been never drunk alcohol, 24.5% currently drink alcohol, and 10.4% ever drunk alcohol but already given up.

Tobacco use

69.9% of patients had been never smoked, 27.3% currently smoke, and 2.8% ever smoked but already given up.

Diagnosis of disease

Most of patients had disease in endocrine system (such as diabetes and hyperthyroidism) (31.1%) follow by skeletal and muscular system (such as muscular pain) (13.9%), respiratory system (such as common cold and asthma) (10.6%), nervous and brain system (such as migraine) (9.6%), cardiovascular system (such as hypertension) equal to dental (such as tooth decay) (7.3%), digestive system (such as gastritis) (4%), EENT (such as sore eye and sinusitis) (3.3%), reproductive system (such as pregnancy and sexual transmitted disease) equal to excretory system (such as hemorrhoids and diarrhea) and accident (such as animal biting and bleeding head) (2.6%), atopic dermatitis (such as rash) (2.4%), and mental (such as anxiety and obsessive-compulsive disorder) equal to immune system (such as SLE and cancer) (1.4%) respectively.

For the question item 15 which asked about patient's reason for seeking the physician's advice (such as muscle pain and dizziness), was not used to analyze in this study because most of patients sought physician's advice according to several symptoms. Thus, it might not suitable to use this variable for analysis its correlation with depression. In contrast, diagnosis of disease taken from the subjects' medical records would provide a more accurate analysis of the patients' current health status and its correlation with depression as well.
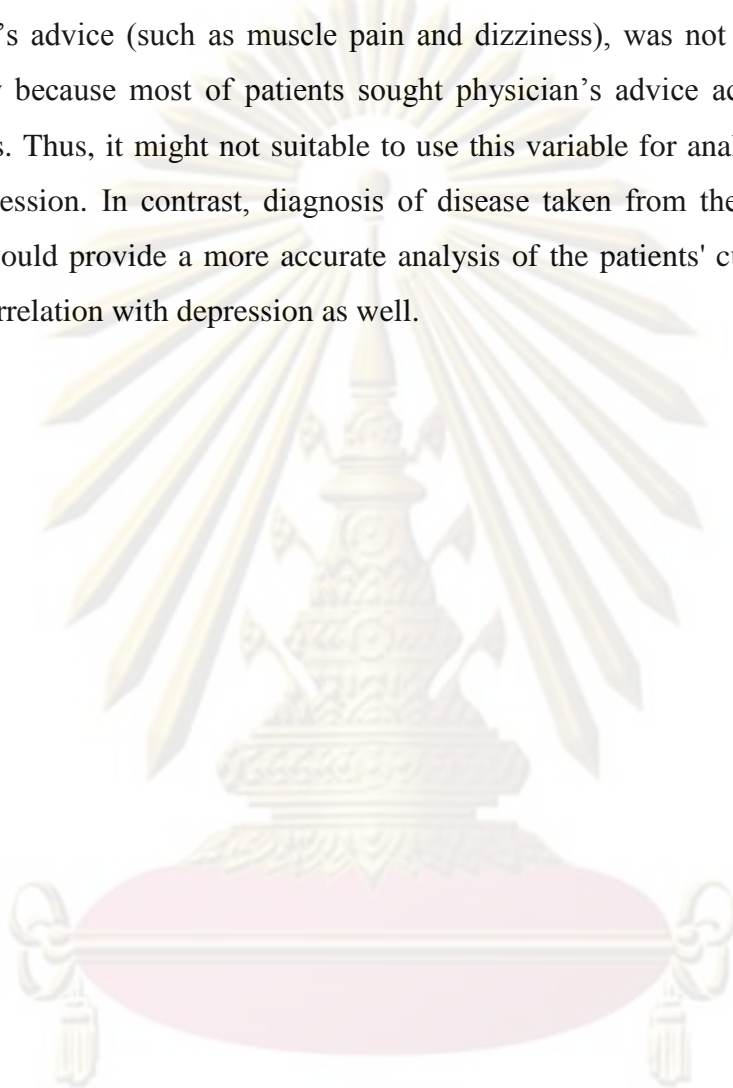
Part 2   Prevalence of depression in Thai adult general OPD patients at   Phanomphrai hospital

Depression in adult general OPD patients was measured by Health Report (HRSR) Scale: The Diagnostic Screening Test for Depression in Thai Population, which can divide the severity of depression into 3 levels:

Score 0-24   indicated that those patients had no depression
Score 25-29   indicated that those patients had mild to moderate depression
Score 30 or more   indicated that those patients had severe depression

Table 5   Prevalence of depression in adult OPD patients (n=425)

Depression level	Number	Percentage
No depression	376	88.5
Depression	49	11.5
Mild to moderate	34	8.0
Severe	15	3.5
Total	**425**	**100**

As can be seen from table 5, the prevalence of depression in adult general OPD patients were 11.5%, which divided into mild to moderate depression 8% and severe depression 3.5%. In addition, patients with no depression were 88.5%.

Part 3   **Psychosocial data**

Table 6   **Number and percentage of psychosocial factors divided into social support and stress life events in past 1 year in adult OPD patients (n=425)**

Psychosocial factors		Number	Percentage
Social Support			
Low	(score 66.00-112.13)	76	17.9
Medium	(score 112.14-147.78)	283	66.6
High	(score 147.79-166.00)	66	15.5
Mean = 129.96 S.D. = 17.82 Minimum score = 66 Maximum score = 166			
$\overline{X} \pm$ S.D. = 129.96 $\pm$ 17.82			
Stress life events			
Low	(score 0.00-17.27)	53	12.5
Medium	(score 17.28-61.46)	296	69.6
High	(score 61.47-102.05)	76	17.9
Mean = 39.37 S.D. = 22.09 Minimum score = 0 Maximum score = 102.05			
$\overline{X} \pm$ S.D. = 39.37 $\pm$ 22.09			

From table 6, the mean of social support score in adult general OPD patients was 129.96 and standard deviation was 17.82 (total score was 175). After divided social support score into 3 levels (low, medium and high), there were patients who had social support score in medium level 66.6%, low 17.9%, and high 15.5% respectively.

For stress life events, there were mean of score equal 39.37 and standard deviation was 22.09 (total score was 342.02). After divided stress life events score into 3 levels (low, medium and high), there were patients who had stress life events score in medium level 69.6%, high 17.9%, and low 12.5% respectively.

Part 4 **Relationship between personal factors, health factors, and psychosocial factors on the depression in adult general OPD patients at Phanomphrai hospital**

Table 7 **Relationship between personal factors and depression in adult general OPD patients (n=425)**

Personal factors	No depression		Depression		X^2	df	p-value
	Number	Percentage	Number	Percentage			
Gender					5.069	1	.024*
Male	187	(92.1)	16	(7.9)			
Female	189	(85.1)	33	(14.9)			
Age					2.318	3	.509
18-28	52	(94.5)	3	(5.5)			
29-39	59	(88.1)	8	(11.9)			
40-50	130	(87.2)	19	(12.8)			
51-59	135	(87.7)	19	(12.3)			
Marital status					17.479	2	.000***
Single	45	(93.8)	3	(6.3)			
Married	319	(89.4)	38	(10.6)			
Widowed, divorced, or separated	12	(60.0)	8	(40.0)			
Education					6.745	3	.080
Primary	228	(85.4)	39	(14.6)			
Secondary	82	(94.3)	5	(5.7)			
Vocational	15	(93.8)	1	(6.3)			
Bachelor's	51	(92.7)	4	(7.3)			

*$p<0.05$, ***$p<0.001$,

Table 7   **(Continue) Relationship between personal factors and depression in adult general OPD patients (n=425)**

Personal factors	No depression		Depression		X^2	df	p-value
	Number	Percentage	Number	Percentage			
Living with					33.420	3	.000***
Spouse	223	(91.4)	21	(8.6)			
Children	32	(64.0)	18	(36.0)			
Relatives, friends, parents, or alone	54	(91.5)	5	(8.5)			
Mixed	67	(93.1)	5	(6.9)			
Occupation					10.511	4	.033*
Merchant, or business	96	(95.0)	5	(5.0)			
Government, state E.[1]	44	(86.3)	7	(13.7)			
Farmer	153	(83.6)	30	(16.4)			
CompanyE.[2], general E.[3], unemployed	78	(92.9)	6	(7.1)			
Mixed	5	(83.3)	1	(16.7)			
M.H. income[4]					12.772	2	.002**
≤10,000	54	(77.1)	16	(22.9)			
10,001-20,000	267	(89.6)	31	(10.4)			
≥20,001	55	(96.5)	2	(3.5)			

*p<0.05, **p<0.01, ***p<0.001

[1]State Enterprise, [2]Company Employee, [3]General Employee,

[4]Monthly Household income

According to the results from table 7, marital status, family member living with were statistically significant related with depression (p<0.001), household income was statistically significant related with depression (p<0.01), gender and occupation were statistically significant related with depression (p<0.05). On the

other hand, other factors consisted of age and education were not related with depression in adult general OPD patients.

Table 8   **Relationship between health factors and depression in adult general OPD patients (n=425)**

Health factors	No depression		Depression		X^2	df	p-value
	Number	Percentage	Number	Percentage			
C. illness[1]					.996	1	.318
None	220	(89.8)	25	(10.2)			
Have	156	(86.7)	24	(13.3)			
F.M. illness[2]					3.109	1	.078
None	270	(86.8)	41	(13.2)			
Have	106	(93.0)	8	(7.0)			
Depress F.[3]					****	-	.019*
None	370	(89.2)	45	(10.8)			
Have.	6	(60.0)	4	(40.0)			
H. depress[4]					****	-	.000***
None	375	(89.7)	43	(10.3)			
Have	1	(14.3)	6	(85.7)			
Alcohol					2.087	2	.352
None	241	(87.0)	36	(13.0)			
Ever	39	(88.6)	5	(11.4)			
Drink	96	(92.3)	8	(7.7)			
Tobacco					2.198	2	.333
None	264	(88.9)	33	(11.1)			
Ever	9	(75.0)	3	(25.0)			
Smoke	103	(88.8)	13	(11.2)			

*$p<0.05$, ***$p<0.001$, ****Fisher's Exact Test

[1]Chronic illness, [2]Family's Medical illness, [3]Depression in Family, [4]History of depression

Table 8 **(Continue) Relationship between health factors and depression in adult general OPD patients (n=425)**

Health factors	No depression		Depression		X^2	df	p-value
	Number	Percentage	Number	Percentage			
D. disease[1]					10.502	5	.062
Respiratory, EENT, or dental	83	(92.2)	7	(7.8)			
Digestive, mental, or excretory	29	(85.3)	5	(14.7)			
Ske&mus[2], dermatitis, accident	75	(93.8)	5	(6.3)			
Nervous[3]	31	(75.6)	10	(24.4)			
Cardio[4], Reproduct[5], immune	42	(87.5)	6	(12.5)			
Endocrine	116	(87.9)	16	(12.1)			

[1]Diagnosis of disease, [2]Skeletal & muscular system, [3]Nervous & brain system
[4]Cardiovascular system, [5]Reproductive system

According to the results from table 8, history of depression was statistically significant related with depression ($p<0.001$) and depression in family was statistically significant related with depression ($p<0.05$). On the other hand, other factors consisted of chronic illness, family's medical illness, alcohol consumption, tobacco use, and diagnosis of disease were not related with depression in adult general OPD patients.

Table 9   Relationship between psychosocial factors and depression in adult general OPD patients (n=425)

Psychosocial factors	No depression		Depression		X^2	df	P-value
	Number	Percentage	Number	Percentage			
Social support					108.142	1	.000***
Low	41	(53.9)	35	(46.1)			
Medium, or high	335	(96.0)	14	(4.0)			
Stress Life E.[1]					85.371	2	.000***
Low	52	(46.9)	1	(6.1)			
Medium	280	(94.6)	16	(5.4)			
High	44	(57.9)	32	(42.1)			

***$p<0.001$

[1]Stress Life Events

From table 9, social support and stress life events were statistically significant related with depression ($p<0.001$).

Table 10   Pearson Correlation of psychosocial factors and depression in adult general OPD patients at Phanomphrai hospital

Variable	Pearson Correlation (r)	P-value
Social support	-.647	.000***
Stress life events	.648	.000***

***$p<0.001$

As can be seen from table 10, social support score was statistically significant negative correlated with depression score (r=-.647, p<0.001). Stress life events score was statistically significant positive correlated with depression score (r=.648, $p<0.001$).

Table 11   **Compare mean of psychosocial score by independent t-test (divided into social support and stress life events in past 1 year) in adult general OPD patients who had no depression and had depression**

Psychosocial factors	No depression (n=376)		Depression (n=49)		t-value	df	p-value
	$\overline{X}$	S.D.	$\overline{X}$	S.D.			
Social support	132.81	15.88	108.10	16.84	10.174	423	.000***
Stress life events	35.99	20.00	65.37	20.13	-9.665	423	.000***

*** $p<0.001$

From table 11, adult general OPD patients who had no depression had social support score higher than adult general OPD patients who had depression ($\overline{X}$ = 132.81 and 108.10) with statistically significant ($p<0.001$). Moreover, adult general OPD patients who had no depression had stress life events score lower than depressed group ($\overline{X}$ = 35.99 and 65.37) with statistically significant ($p<0.001$).

CHAPTER V

SUMMARY, DISCUSSION AND CONCLUSIONS

5.1   Summary

A cross-sectional study was carried out in 425 Thai adult general OPD patients (age 18-59 years old) to find out the prevalence of depression and its relationship with related factors in Phanomphrai hospital, Roi-Et Province, Thailand.

Subjects in this study were Thai adult general OPD patients both male and female (age between 18-59 years) who had been living in Phanomphrai district, Roi-Et province for at least six months, could communicate in Thai, and were willing to participate in the research. Researcher collected data by interviewing 425 participants between third of March to nineteenth March 2010. When data collection was done, SPSS v. 17 for Windows would be used to analyze socio-demographic characteristics of subjects and relationship of several factors with depression.

Statistic that was used to analyze data composed of frequency, percentage, standard deviation, mean, t-test, Chi-square and Pearson Correlation. The results were:

5.11   Personal factors

All participants were Buddhism. When compared with other choices in the same variable, most of participants were: female (52.2%) age between 51-59 years old (36.2%), married (84%), graduated in primary school (47.8%), living with spouse (57.2%), were farmer (43.1%), had household income per month 10,001-20,000 baht (70.1%).

5.12   Health factors

When compared with other choices in the same variable, most of patients had no chronic illness (57.6%), didn't have family's medical illness (73.2%), had no depression in family (97.6%), had no history of depression (98.4%), had been never drunk alcohol (65.2%), and had been never smoked (69.9%). Of the 14 groups of disease, patients come to hospital with disease in endocrine system (such as diabetes and hyperthyroidism) more than other groups of disease (31.1%).

5.13   Psychosocial factors

Composed of social support and stress life events

Social support

It revealed that most of adult general OPD patients had medium score (66.6%) follow by low score (17.9%) and high score (15.5%).

Stress life events

From the study found that most of adult general OPD patients had medium score (69.6%) follow by high score (17.9%) and low score (12.5%).

5.14   Prevalence of depression

Prevalence of depression in 425 Thai adult general OPD patients at Phanomphrai hospital by using Health-Related Self Report (HRSR) Scale: Diagnostic Screening For Depression in Thai as a depression tool, which divided depression into 3 levels (no depression, mild to moderate depression and severe depression) shown that prevalence of depression was 11.5%, classified into mild to moderate depression 8% and severe depression 3.5%.

5.15   Relationship between personal factors, health factors, and psychosocial factors on the depression in adult general OPD patients

Personal factors

The results demonstrated that marital status, family member living with were statistically significant related to depression ($p<0.001$), household income was statistically significant related to depression ($p<0.01$), gender and occupation were statistically significant related with depression ($p<0.05$). On the other hand, other factors consisted of age and education were not related to depression in adult general OPD patients.

Health factors

The results shown that history of depression was statistically significant related with depression ($p<0.001$) and depression in family was statistically significant related with depression ($p<0.05$). On the other hand, other factors consisted of chronic illness, family's medical illness, alcohol consumption,

tobacco use, and diagnosis of disease were not related to depression in adult general OPD patients.

Psychosocial factors

Both social support and stress life events were found to be highly correlated to depression (tested by Chi-square, *p*<0.001). Pearson Correlation shown a negative correlation between social support and depression (*r*=-.647, *p*<0.001), while stress life events was positively correlated with depression (*r*=.648, *p*<0.001). Moreover, analysis by independent t-test demonstrated that social support score and stress life events score in depressed patients was different from none depressed patients with statistically significant (p<0.001).

5.2   Discussion

5.21   Prevalence of depression in adult general OPD patients

From the study, prevalence of depression in 425 Thai adult general OPD patients at Phanomphrai hospital was 11.5% divided into mild to moderate depression 8% and severe depression 3.5%. This result was lower than the result from a study by Tanawan Payungpon (2002) about prevalence of depression in OPD patients of social security service of King Chulalongkorn Memorial Hospital, which used the same depression tool (Health-Related Self Report (HRSR) Scale: Diagnostic Screening For Depression in Thai). It shown that prevalence of depression in patients was 24.6% divided into mild to moderate depression 16.4% and severe depression 8.2%. However, subjects in Tanawan Payungpon's study also covered patients aged over 59 years while present study was not. So, comparison of result must be made carefully. In contrast, there was quite similar result in a study by Supavinee Pramoulvong (2005) about prevalence of depression in patients with diabetes mellitus at OPD community hospitals in Nakornpathom Province (which use the same depression tool as well), that found prevalence of depression in patients equal 12.3% divided into mild to moderate depression 6.7% and severe depression 5.6%. Nevertheless, the different result also could be seen in a study about depression in primary care in Belgium and Luxemburg by Ansseau et al. (2005), they found that the prevalence of

depression (diagnosed by DSM-IV criteria) in patients was 2.1%. Moreover, a study by McCrone et al. (2007) about depression in a rural free clinic providing primary care (measured by Beck Depression Inventory), 39% of patients were found to be depressed at moderate to severe level.

After reviewed several related studies and considered to prevalence of depression, the result had a various trend depended on different socio-demographic characteristics, environment, society, culture, politics and the way of life including different sample size, data collection and depression tool.

For this study, subjects were patients at community hospital which located in rural area of Thailand (Phanomphrai district, Roi-Et province), which most area were agriculture lands, most of people were farmer, had low social status (low education and low income) and tended to face many health problems. Therefore, they were a risk group to get depression as can be seen from prevalence of depression equal 11.5%.

5.22   Factors related to depression

In this study found that depression in adult general OPD patients related to personal factors and psychosocial factors.

Personal factors

Personal factors that statistically significant related to depression in this study were:

1) Marital status (p<0.001)

2) Family member living with (p<0.001)

3) Monthly household income (p<0.01)

4) Gender (p<0.05)

5) Occupation (p<0.05)

On the other hand, other factors consisted of age and education were not related with depression in adult general OPD patients.

Marital status

Divorced, separated, or widowed patients had the highest rate to get depression follow by married and single (40%, 10.6%, and 6.3% respectively). It was

the same result as a study by Beekman et al. (1995); Pang (1995); Duangjai Kasantikul (1993, 1999); Aluoja et al. (2004); van der Wurff et al. (2004), which found that depression often founded in those who were divorced, separated, or single (although there were some part different). And it also conformed with a study by Life (1978) that found the highest prevalent of depression in the divorced (27%) and widowed (21%). Moreover, study by Cho, Nam, & Suh (1998), Supavinee Pramoulvong (2005), and Engjai Chantamool (1996) had the same result as well.

Thus, it might be concluded that a disrupted marriage (being divorced, separated, and widowed) could make people tended to get depression.

Family member living with

It was contrasted with study by Tanawan Payungpon (2002) that didn't found relationship between family member who living with patients and depression. In this study, it indicated that patients who lived with children had a trend to get depression more than patients who lived with others. It might be that most of patients who lived with their children only, often had some problems with their spouse. Some of them loose their spouses, some of them divorced or separated with their spouses and some of them were separated from their spouses for a significant period of time for reasons such as overwork. This result was consistent with several studies which found that a positive marital relationship can protect from depression, while long-lasting marital discord or conflicts can make individuals vulnerable to depression (Henderson et al., 1979; Goering et al., 1983; Hurry et al., 1983; Weissman, 1987; Brugha et al., 1990). Furthermore, some of them had younger unemployed children which effectively places more burden on them to support their families. This, in turn, enhanced the levels of stress, eventually resulting in more advanced levels of depression.

Monthly household income

It found that the range of monthly household income in subjects is very wide (50,000-5,000) which might attribute to number of moneymaking members in each house and their occupation. Nevertheless, median of monthly household income of subjects (15,000) indicated lower monthly household income when compared with mean of monthly household income of Roi-Et people in rural area (18,500). (Community Development Department of Roi-Et province, 2009)

Regarding to analysis of relationship, Chi-square test revealed relationship between household income and depression ($p<0.01$). In addition, more finding from the Pearson product-moment correlation analysis conducted for the household income and the depression prevalence yielded a negative correlation with 5% standard error ($r=-.110$, $p<0.05$) (see Appendix A). It converged from inferences of other studies in the literatures. Tanawan Payungpon (2002) and Supavinee Pramoulvong (2005) were 2 of those studies which found correlation between income and depression ($p<0.01$ and $p<0.05$ respectively). Furthermore, other studies also discovered that poorer financial status (i.e., lower adequacy of finances, less satisfaction with economic status) was a significant correlate and/or predictor of depression (Kuo & Guan, 2006; Lai, 2004a, 2004b, 2005).

Gender

In this study found that female patients got depression more than male patients (female 7.8% male 3.8%). It was the same result as study by Aneshensel et al. (1981); Boyd & Weissman (1981); Kivela et al. (1988); Beekman et al. (1995); Cho, Nam, & Suh (1998); Sompop Ruangtrakul (2000); Ohayon & Schatzberg (2003) which found that the prevalence of depression was twice as high in female. Moreover, it was consistent with a study by Engjai Chantamoon (1996) and Tanawan Payungpon (2002) that found depression in female more than male (female 2.7% and 18.2% male 1.9% and 6.4% respectively). This is attributable to the fact that, women residents in the country are traditionally anticipated to care for the other family, with some taking additional jobs to help support their family. These burdens thus instill an enhanced level of stress, which thereby advances the female depression prevalence in general. Furthermore, researches had shown that the amount of monoamine oxidase was more abundant in women, whose substance influences depression. (Wijarn Wichaiya, 1990)

Occupation

Patients who had more than one occupation tended to be depression more than others (16.7%), which resembled to patients who were farmer (16.4%). This result may be attributable to the fact that occupation had high relationship with income and these two groups were found to be low income people. It made them had to work very hard as they were monetary supporter of their families. Consequently, they had to face

a high level of unavoidable stress and tiredness. Study by Aluoja et al. (2004) supported this result. Their study indicated that low socioeconomic status (measured by the level of education, income or occupation) was related to depression.

Health factors

　　Personal factors that statistically significant related to depression in this study were:

1) History of depression (p<0.001)
2) Depression in family (p<0.05)

　　On the other hand, other factors consisted of chronic illness, family's medical illness, substance use and diagnosis of disease were not related with depression in adult general OPD patients.

　　History of depression

　　Patients who used to suffer from depression in the past tended to get depression more than patients who were never suffer from depression. This result conformed with a study by American Psychiatric Association (2000) which demonstrated that the risk for developing a depressive episode was significantly higher in individuals with a prior history of depression. But the percentage of patients who experienced repeated depression was lower than this study (about 60% versus 85%). This result may be attributable to the fact that the sample size of those with a depression diagnosis is small (7 persons). This, combining with the small prevalence in the present-case depression cases (6 cases), would result in a higher ratio of the reported repeated-occurrence depression cases over those reported in the literatures. Further investigation is needed to ascertain the validity of this inference. In addition, this might indicate that an absence from receiving punctual appropriate treatments were the main cause of suffocating from recurrent depression.

　　Depression in family

　　Patients who had depressed members in their families tended to get depression more than patients who had none depressed members in their families. It was the same result as a study by Klerman & Weissman (1989) which found that the risk of

being depressed would increase in first-degree relatives of individuals with major depression when compared to controls.

Psychosocial factors

In this study composed of

1) Social support
2) Stress life events

Social support

Analysis by Chi-square demonstrated that social support related to depression ($p<0.001$). In addition, Pearson Correlation unveiled the statistically significant negative correlated between social support and depression ($r=-.647$, $p<0.001$). Moreover, result from independent t-test shown different mean of social support score between depressed and none depressed patients with statistically significant ($p<0.001$). These results indicated that lacking for support from surrounding people especially families and friends related to higher prevalence of depression. The same results were seen in a study by Tanawan Payungpon (2002) which shown that social support was statistically significant negative correlated with depression. And consistent result also found in studies of Monroe (1983) and Windle (1992) which reported that deficits in social support increased the risk for depression. Furthermore, Lewinsohn et al. (1994); Sheeber, Hops, Alpert, Davis, & Andrews (1997); Slavin & Rainer (1990); Stice & Bearman (2001); Stice, Ragan, & Randall (2004) found that deficits in perceived support had predicted future increases in depressive symptoms, too.

Stress life events

Analysis by Chi-square demonstrated that stress life events related to depression ($p<0.001$). In addition, Pearson Correlation revealed the statistically significant positive correlated between stress life events and depression ($r=.648$, $p<0.001$). Moreover, result from independent t-test shown different mean of stress life events score between depressed and none depressed patients with statistically significant ($p<0.001$). Therefore, it might conclude that patients who had several stress life events (such as loosed job, divorced, sick, and had insufficient income in

successive occurrences) tended to have higher depression score. This result was the same as a study by Tanawan Payungpon (2002) which found positive relationship between stress life events and depression. Additionally, a study by Licino & Wong (2005) also shown that the majority of acute and chronic psychosocial factors such as stress life events linked to depression. Furthermore, studies of Brown & Moran (1997); Stoppard (2000); Eaton et al. (2001) demonstrated that the main psychological factors associated with depression include several stress life events such as poverty, job loss, or divorce. And Kendler & Roy (1995) found that increased incidence of depression had been noted when several life events occur simultaneous in the month prior to the episode.

5.3 Conclusion

11.5% of adult general OPD patients at Phanomphrai hospital are found to be depressed divided into mild to moderate 8.0% and severe 3.5%. This statistic quite not high when compared with other studies conducted in health care center, which various results might attribute to difference of several factors of subjects in each study. However, this study is a cross-sectional study. There are limitation of time and resources, hence result might vary, depend on a period of data collection.

In this study, there are various factors related to depression. It should be noted that factors with high correlation with depression ($p<0.001$) often related to relationship among patients and surrounding people (marital status, family's member living with, social support, and stress life events). These findings indicated that relationship with others is significant factors as preventive (if satisfied) or risk factors (if unsatisfied) of depression. Of the aforementioned factors, social support and stress life events seem to be improvable factors that should be paid attention to development of depressive prevention. Additionally, occurrence of depression in the past was found high correlation with current depression ($p<0.001$) which might indicate receiving of inappropriate treatments in this group. Thus, suitable taking care and follow up process might be needed to prevent recurrent depression.

In case of social support and stress life events score, there are few subjects in high level of social support score and few subjects in low level of stress life events

score. When consider to previous literatures which found negative correlation between social support and depression and positive correlation between stress life events and depression, these results seem to be unsatisfactory. Therefore, appropriate management to satisfy the results should be concerned.

5.4   Recommendations

From the study, it unveil that there are some general OPD patients at Phanomphrai hospital get depression. Hence, there needs to be expressive collaborations between the all relevant parties towards a solution. To improve the quality of life in adult general OPD patients at Phanomphrai hospital and people in community, the following recommendations are presented:

1) Patients who were found to be depression should be referred to further investigation and taken care appropriately. Moreover, continuous follow-up also should be done.

2) Vulnerable group to depression such as patients who had history of depression or recently disrupted marriage should be looked after specially.

3) Main responsible organizations especially Phanomphrai District Health Office and Phanomphrai hospital should disseminate knowledge about depression to community officers in order to make them perform with depressed patients suitably.

4) Community surveys on depression in further studies should be conducted in order to find prevalence of depression in Phanomphrai district. If high prevalence was found, depression surveillance should be promoted in order to treat depressed people promptly and systematically.

5) Spread knowledge about depression to patients and people in community via uncomplicated way such as brochures with cartoon pictures or community radio programs.

6) Promote anti-depression activities in the community, which emphasize to increase social support and reduce stress such as a walking activity that encourage people to walk together 30 minutes per day at the park which's easy to do. Moreover, it's not only a stress reliever activity, but it's also

raise relationship among people in community with no expense and can promote physical health as well. In addition, listening to a sermon or meditation are interesting activities. They're not only none expense activities, but they're also fit with the way of life in Thai people that are difficult to separate from temple. Furthermore, they can gather attentive people in the same activities to meet each other, which building up of social support should be occurred.

Additionally, further studies such as comparison between adult patients in urban area and rural area, longitudinal studies, analytic studies which confounding factors are removed, should be done in order to increase understanding about risk factors and protective factors to depression.

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Appendices

Appendix A

Pearson Correlation of monthly household income and depression in adult general OPD patients at Phanomphrai hospital

Variable	Pearson Correlation (γ)	P-value
Monthly household income	-.110	.023*

*$p<0.05$
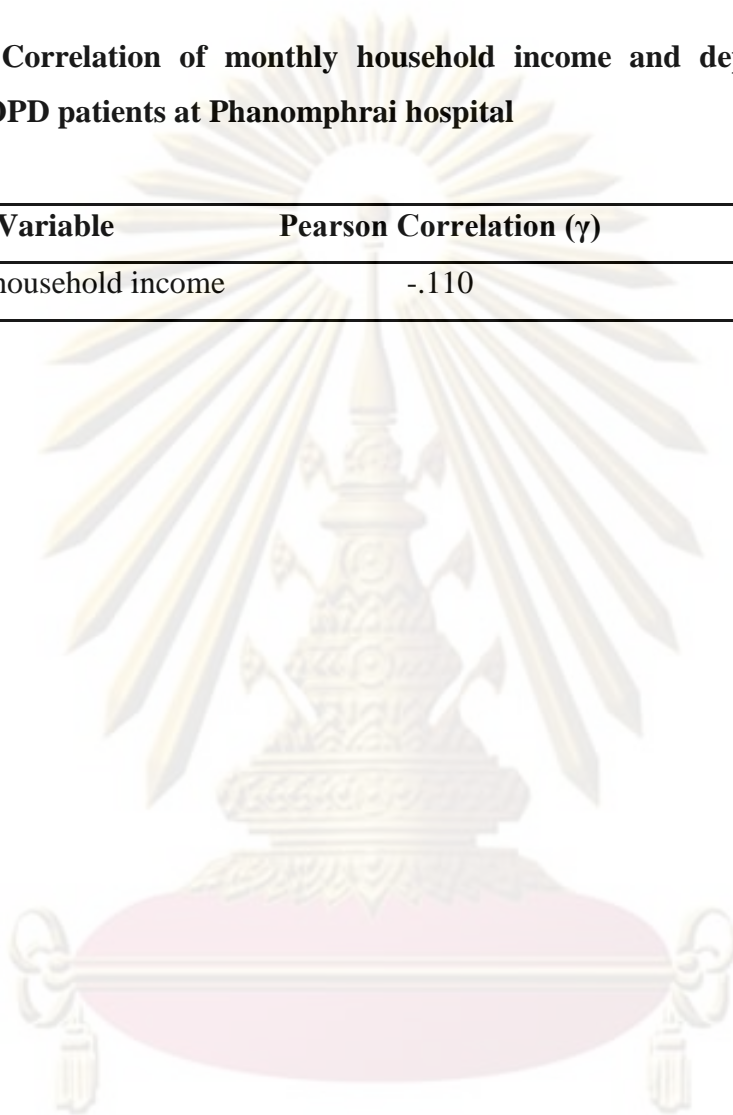
Appendix B

Structured face-to-face interview

PART ONE   **General Information**

1. Gender

    ( ) 1. Male   ( ) 2. Female

2. Age _____ years _____months

3. Religion

    ( ) 1. Buddhism   ( ) 2. Christianity

    ( ) 3. Islam   ( ) 4. Others (please state)_____

4. Marital status

    ( ) 1. Single   ( ) 2. Married

    ( ) 3. Widowed   ( ) 4. Divorced

    ( ) 5. Separated

5. Highest level of Education

    ( ) 1. Primary School   ( ) 2. Intermediate School   ( ) 3. Junior High School

    ( ) 4. Senior High School   ( ) 5. vocational certificate   ( ) 6. Vocational Diploma.

    ( ) 7. Higher Vocational Diploma   ( ) 8. Diploma

    ( ) 9. Bachelor Degree   ( ) 10. Masters Degree

    ( ) 11. Others (please state) ....

6. Family member currently living with (please tick)

    ( ) 1. Spouses   ( ) 2. Children   ( ) 3. Relatives   ( ) 4. Friends

    ( ) 5. Others (please state) ....

7. Occupation

    ( ) 1. Merchandising   ( ) 2. Government Official

    ( ) 3. Personal Business owner   ( ) 4. State enterpriser

( ) 5. Farmers   ( ) 6. Company employee

( ) 7. Others (please state) ....

8. Household income .... Baht

9. Do you have a personal ongoing illness which is not entirely cured?

( ) 1. No   ( ) 2. Yes (Illness's name ....)

Duration of the illness...

Medication ....

10. Do any of your relatives or members of the family have a personal ongoing illness

that has not been entirely cured?

( ) 1. No   ( ) 2. Yes (The Illness's name ....)

11. Do any of your relatives or members of the family have a depression (diagnosed by

physician)?

( ) 1. No   ( ) 2. Yes

12. Do you ever diagnosed by physician to have a depression?

( ) 1. No   ( ) 2. Yes

13. Have you ever consumed alcohol?

( ) 1. No

( ) 2. Yes, but I have already given up on alcohol

(Duration of consumption .... years)

Frequency of alcohol consumption .... days/week

( ) 3. Yes, and I am still currently consuming alcohol.

(frequency of alcohol consumption .... days)

14. Have you ever smoked?

( ) 1. No

( ) 2. Yes, but I have already given up on smoking

(smoking duration .... years)

Number of Cigarettes per day........................ cigarettes

( ) 3. Yes, and I am still smoking. (Number of cigarettes............................ cigarettes)

15. You are seeking the physician's advice regarding (please state the symptoms you currently experience) ....

<u>Part Two</u>   Information regarding the social support

Instructions: Please circle the number that most apply to you. There will be no correct or incorrect responses. These numbers are designated as follows:

7   Most Strongly Agree

6   Strongly Agree

5   Mildly Agree

4   Unsure/ Undecided

3   Mildly Disagree

2   Strongly Disagree

1   Most Strongly Disagree

1. You feel safe whenever you have somebody accompanying you 7 6 5 4 3 2 1

2. You feel influential to your relatives and surrounding   7 6 5 4 3 2 1

3. Someone else usually tells *you* that your housekeeping

    chores are well done   7 6 5 4 3 2 1

4. Whenever you have problems *you* cannot rely on

    someone else to help you*   7 6 5 4 3 2 1

5. You have enough opportunities to meet with

    people that makes you feel special   7 6 5 4 3 2 1

6. You spend time with people who shares the same

    interests as you   7 6 5 4 3 2 1

7. You have a very limited opportunity to help and looking

    after other people*   7 6 5 4 3 2 1

8. Other people always let you know that they

   like working with you (work, meeting, and projects)   7 6 5 4 3 2 1

9. You can always find someone to help you whenever you need   7 6 5 4 3 2 1

10. You don't have anyone that correctly describe your feelings*   7 6 5 4 3 2 1

11. In your circle of friends, everyone always help

   each other out whenever the others have problems   7 6 5 4 3 2 1

12. You have a chance to encourage people   7 6 5 4 3 2 1

13. Your family makes you feel important around them   7 6 5 4 3 2 1

14. You have a relative or a friend that will lend assistance

   to you, even though he/she knows that you may not repay

   him/her back in kind.   7 6 5 4 3 2 1

15. When you *are* having a bad temperament, there is

   always someone who you can always share your feelings with   7 6 5 4 3 2 1

16. You feel that there's no one else who's got the same

   feelings as you do*   7 6 5 4 3 2 1

17. You like to do some little extra things to spice up other people   7 6 5 4 3 2 1

18. You feel that other people likes you   7 6 5 4 3 2 1

19. You have someone that loves you and cares for your well being   7 6 5 4 3 2 1

20. You have someone to share opinions and participate in events   7 6 5 4 3 2 1

21. You have a responsibility in supporting and helping people   7 6 5 4 3 2 1

22. Whenever you need an advice to solve problems,

   they will be there for you   7 6 5 4 3 2 1

23. You feel wanted (to other people)   7 6 5 4 3 2 1

24. Your friends harbour an impression that

you *are* not a good friends to them, although

your impression is otherwise*   7 6 5 4 3 2 1

25. Whenever you are sick, there will be someone

who gives you a "Do-It-Yourself" health advice   7 6 5 4 3 2 1

PART 3   Stressful life events evaluation form. Please tick next to the choice that most applies to you for the events of the past year

Health

1. You had to be admitted to a Hospital for some severe sickness   ( ) Yes   ( ) No

2. You had a serious illness in the past year, although not

    admitted to a hospital, but you had to temporarily terminate

    work   ( ) Yes   ( ) No

3. You have frequently consumed alcoholic and caffeine

    drinks and/or smoke   ( ) Yes   ( ) No

4. You have had a constant change of sleep patterns   ( ) Yes   ( ) No

5. You have harboured excessive body exercises

    (for example, work in jobs that require excessive amount

    of bodily force)   ( ) Yes   ( ) No

6. You have not taken any relaxation and/or entertainment

    (for example, watch television)   ( ) Yes   ( ) No

7. You came into contact with people who is suffering

    from contagious diseases (**Tuberculosis** and AIDS)   ( ) Yes   ( ) No

Family (If you are single please answer only 15-18)

8. Your spouse had passed away   ( ) Yes   ( ) No

9. You had separated or divorced from your spouse   ( ) Yes   ( ) No

10. Your spouse had been seriously ill   ( ) Yes   ( ) No

11. You had a loss of your children (please skip if no child)   ( ) Yes   ( ) No

12. Your children had been seriously ill (please skip if no child)   ( ) Yes   ( ) No

13. You and your spouse had been participating

    in a series of extensive quarrels from sources

such as adultery	( ) Yes	( ) No
14. You and your spouse had sexual intercourse problems	( ) Yes	( ) No
15. At least one of your parents had been seriously ill	( ) Yes	( ) No
16. You had lost at least one of your parents in the past year	( ) Yes	( ) No
17. There is a new addition of another member of a relative into the family	( ) Yes	( ) No
18. There had been a case of relocation	( ) Yes	( ) No
19. You had to be separated from your spouse for at least six months	( ) Yes	( ) No

Economics / Financial

20. You cannot afford/barely able to afford the basic living needs	( ) Yes	( ) No
21. You or your spouse have been declared financially insoluble	( ) Yes	( ) No
22. You or your family have to pay on mortgages for a property	( ) Yes	( ) No
23. Your family's property has been confiscated and/or your family has been driven out of the current residential place	( ) Yes	( ) No
24. Your business has become financially insoluble	( ) Yes	( ) No
25. You have to support your own family financially, alone.	( ) Yes	( ) No

Work (If you are single please skip 28, 30, 35)

26. You had begun working outside of home for the first time	( ) Yes	( ) No
27. You had been fired from work and had your work discontinued	( ) Yes	( ) No
28. Your spouse had been fired from work and had his/her work discontinued	( ) Yes	( ) No
29. You had been unemployed	( ) Yes	( ) No
30. Your spouse had been unemployed	( ) Yes	( ) No

31. You had a lot of job responsibilities and burden that

you have no time for the family ( ) Yes ( ) No

32. You had to work in the condition that put your health at risk ( ) Yes ( ) No

33. You changed an occupation and this required

some time of getting used to ( ) Yes ( ) No

34. You had quarrelled with your boss ( ) Yes ( ) No

35. Your spouse had an increased occupational

responsibility that there was no time for the family ( ) Yes ( ) No

Social (If you are single please skip 38, 40)

36. Your family had encountered national disasters

which entirely damaged your properties ( ) Yes ( ) No

37. You have been imprisoned and/or detained

for a period of less than three months ( ) Yes ( ) No

38. Your spouse had been imprisoned and/or detained

for a period of less than three months ( ) Yes ( ) No

39. You had been physically and extensively harmed ( ) Yes ( ) No

40. Your spouse had been physically and/or extensively harmed ( ) Yes ( ) No

41. There had been a loss of your best friend ( ) Yes ( ) No

42. You or your spouse had a loss in credential

and/or reputation (for example, had been publicly condemned) ( ) Yes ( ) No

43. Your resident had no safely for the life and/or property

(excessive amount of thievery, vandalism in the area;

loudness from the surrounding) ( ) Yes ( ) No

Points stressful life events in the past year

1. You had to be admitted to a Hospital for some severe sickness	8.25 Points
2. You had a serious illness in the past year, although not admitted to a hospital, but you had to temporarily terminate work	6.25 Points
3. You have frequently consumed alcoholic and caffeine drinks and/or smoke	5.50 Points
4. You have had a constant change of sleep patterns	5.17 Points
5. You have harboured excessive body exercises (for example, work in jobs that require excessive amount of bodily force)	5.00 Points
6. You have not taken any relaxation and/or entertainment (for example, watch television)	4.17 Points
7. You came into contact with people who is suffering from contagious diseases (**Tuberculosis** and AIDS)	6.83 Points

<u>Family</u>

8. Your spouse had passed away	10.94 Points
9. . You had separated or divorced from your spouse	10.67 Points
10. Your spouse had been seriously ill	10.67 Points
11. You had a loss of your children	9.75 Points
12. Your children had been seriously ill	10.67 Points
13. You and your spouse had been participating in a series of extensive quarrels from sources such as adultery	8.30 Points
14. You and your spouse had had sexual intercourse problems	8.33 Points
15. At least one of your parents had been seriously ill	9.50 Points
16. You had lost at least one of your parents in the past year	10.73 Points

17. There is a new addition of another member of a relative

    into the family   4.25 Points

18. There had been a case of relocation   5.17 Points

19. You had to be separated from your spouse for at least six months   7.17 Points

<u>Economics / Financial</u>

20. You cannot afford/barely able to afford the basic living needs   7.67 Points

21. You or your spouse have been declared financially insoluble   8.88 Points

22. You or your family have to pay on mortgages for a property   6.90 Points

23. Your family's property has been confiscated and/or

    your family has been driven out of the current residential place   8.63 Points

24. Your business has become financially insoluble   8.79 Points

25. You have to support your own family financially, alone.   8.64 Points

<u>Work</u>

26. You had begun working outside of home for the first time   5.17 Points

27. You had been fired from work and had your work discontinued   8.30 Points

28. Your spouse had been fired from work and had his/her

    work discontinued   8.83 Points

29. You had been unemployed   8.63 Points

30. Your spouse had been unemployed   8.70 Points

31. You had a lot of job responsibilities and burden that

    you have no time for the family   7.00 Points

32. You had to work in the condition that put your health at risk   7.50 Points

33. You changed an occupation and this required

    some time of getting used to   7.88 Points

34. You had quarrelled with your boss   6.90 Points

35. Your spouse had an increased occupational responsibility

    that there was no time for the family   7.75 Points

Social

36. Your family had encountered national disasters which

    entirely damaged your properties   9.32 Points

37. You have been imprisoned and/or detained

    for a period of less than three months   8.83 Points

38. Your spouse had been imprisoned and/or detained

    for a period of less than three months   9.50 Points

39. You had been physically and extensively harmed   8.79 Points

40. Your spouse had been physically and/or extensively harmed   8.63 Points

41. There had been a loss of your best friend   7.17 Points

42. You or your spouse had a loss in credential

    and/or reputation (for example, had been publicly condemned)   8.79 Points

43. Your resident had no safely for the life and/or property

    (excessive amount of thievery, vandalism in the area;

    loudness from the surrounding)   7.50 Points

        These score was taken from the tool that was developed by Somjit Nakarapanich (1988) according to Social Readjustment Rating Scale (SRRS, developed by Holmes & Rahe, 1967) and translate in Thai by adjustment to fit with Thai people contained 43 items. Score in each item was given by 20 experts according to Thurstone method which gave score range 1-11. The least severe events will have 1 point and more severe will have 2, 3, 4, 5, 6, 7, 8, 9, 10, or 11 respectively. Then median scores were calculated from all scores and became a score of each item. Reliability was tested by gave the same questionnaire to same experts to give score again and new median

scores were calculated. Result showed there was reliability score = .97 then Somjit Nakarapanich took this tool to test reliability of whole questionnaire with sample in childbirth department of Chulalongkorn hospital. Result showed reliability score of whole questionnaire = .99. (Payungpon, 2002) Then the score was set in each item as mentioned.

Part 4 Health Questions

Please tick in front of the choice that most applies to you and/or their feelings in the past fortnight. (Often = Almost everyday, Quite often = 2-3 times a week, Sometimes = Less than once a week)

1. You lost your appetite.

( ) Often   ( ) Quite Often   ( ) Sometimes   () Never

2. You had not been able to sleep or had trouble sleeping

( ) Often   ( ) Quite Often   () Sometimes   ( ) Never

3. You feel extremely fatigued

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

4. You had been worrying too much

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

5. You had been feeling contented and happy*

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

6. You had been feeling bored and lacking a desire to talk

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

7. You had been feeling absent-minded and could not concentrate

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

8. You had been wanting to be alone and do nothing

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

9. You had been feeling sad and melancholy

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

10. You had been feeling that the future is worth living for*

(1) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

11. You had been crying or wanting to cry

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

12. You could not arrive at a decision for even a small issue

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

13. You had been feeling that life is unhappy

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

14. You had been feeling downhearted every morning after getting up.

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

15. You had been feeling that you were still worthy*

(1) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

16. You criticized and condemned yourself

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

17. Your boredom had creep onto every single aspects of your life

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

18. You wanted out of this world

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

19. Your relatives and friends had been saying that you looked sad and unhappy

( ) Often   ( ) Quite Often   ( ) Sometimes   ( ) Never

20. You had been attempting suicide

( ) Yes   ( ) No

Note: Scoring system: For every questions except those in multiple of five: Never = 0 points, Sometimes = 1 point, Quite Often = 2 points, and Often = 3 points.

For the 5th, 10th, and 15th questions, scoring convention is inverted so that Never = 3 points, Sometimes = 2 points, Quite Often = 1 point, and Often = 0 points

The last question has only two scores: No = 0 points and Yes = 3 points.

Evaluation: 0-24 points = No depression

25-29 = First Stage of depression

30+ = Severe depression

Thank you very much for taking part in this research.

Appendix C

Structured face-to-face interview (Thai version)

แบบสัมภาษณ์

<u>ส่วนที่ 1</u>　　　ข้อมูลทั่วไป

1. เพศ

　( ) 1. ชาย　　　　　( ) 2. หญิง

2. อายุ .... ปี .... เดือน

3. ศาสนา

　( ) 1. พุทธ　　　　　( ) 2. คริสต์

　( ) 3. อิสลาม　　　　( ) 4. อื่นๆ โปรดระบุ ....

4. สถานภาพ

　( ) 1. โสด　　　　　( ) 2. แต่งงาน

　( ) 3. หม้าย　　　　( ) 4. หย่า

　( ) 5. แยก

5. ระดับการศึกษาสูงสุด

　( ) 1. ประถมต้น　　( ) 2. ประถมปลาย　　( ) 3. มัธยมต้น　　( ) 4. มัธยมปลาย

　( ) 5. ปวช.　　　　( ) 6. ปวส.　　　　( ) 7. ปวท.　　　　( ) 8. อนุปริญญา

　( ) 9. ปริญญาตรี　　( ) 10. ปริญญาโท　　( ) 11. อื่นๆ โปรดระบุ

　　　　　　　　　　　　　　　　　..

6. ปัจจุบันท่านอาศัยอยู่กับ

　( ) 1. คู่สมรส　　　　( ) 2. บุตร　　　　( ) 3. ญาติพี่น้อง　　　　( ) 4. เพื่อน

　( ) 5. อื่นๆ โปรดระบุ ....

7. อาชีพ

　( ) 1. ค้าขาย　　　　( ) 2. ข้าราชการ　　　( ) 3. ธุรกิจส่วนตัว

( ) 4. รัฐวิสาหกิจ   ( ) 5. เกษตรกร   ( ) 6. พนักงานบริษัท

( ) 7. อื่นๆ โปรดระบุ ....

8. รายได้ของครัวเรือนต่อเดือน .... บาท

9. ท่านมีโรคประจำตัว

   ( ) 1. ไม่มี   ( ) 2. มี (ป่วยเป็นโรค ....)

                          เป็นมานาน ....

                          ได้รับยา ....

10. บุคคลในครอบครัวหรือญาติพี่น้องท่านมีโรคประจำตัว

   ( ) 1. ไม่มี   ( ) 2. มี (ป่วยเป็นโรค ....)

11. ท่านมีญาติพี่น้องหรือสมาชิกในครอบครัวของท่านป่วยเป็นโรคซึมเศร้า (วินิจฉัยโดยแพทย์)

   ( ) 1. ใช่   ( ) 2. ไม่ใช่

12. ท่านเคยถูกแพทย์วินิจฉัยว่าเป็นโรคซึมเศร้า

   ( ) 1. ใช่   ( ) 2. ไม่ใช่

13. ท่านดื่มสุรา

   ( ) 1. ไม่ดื่ม

   ( ) 2. เคยดื่มแต่ปัจจุบันเลิกแล้ว (ระยะเวลาที่ดื่ม .... ปี)

                         ความถี่ที่ดื่มต่อสัปดาห์ .... วัน

   ( ) 3. ดื่ม (ความถี่ที่ดื่มต่อสัปดาห์ .... วัน)

14. ท่านสูบบุหรี่

   ( ) 1. ไม่สูบ

   ( ) 2. เคยสูบแต่ปัจจุบันเลิกแล้ว (ระยะเวลาที่สูบ .... ปี)

                         ปริมาณที่สูบต่อวัน .... มวน

   ( ) 3. สูบ (ปริมาณที่สูบต่อวัน .... มวน)

15. วันนี้ท่านมาตรวจเนื่องจากมีอาการ

....

ส่วนที่ 2   ข้อมูลเกี่ยวกับการสนับสนุนทางสังคม

คำชี้แจง ทำเครื่องหมายวงกลมล้อมรอบตัวเลขที่ท่านคิดว่าตรงกับความรู้สึกของท่านมาก
ที่สุด คำตอบนี้จะไม่มีถูกหรือผิด เลขหมายเหล่านี้มีความหมายดังนี้

7	เห็นด้วยอย่างยิ่ง
6	เห็นด้วยมาก
5	เห็นด้วยเล็กน้อย
4	ไม่แน่ใจ
3	ไม่เห็นด้วยเล็กน้อย
2	ไม่เห็นด้วยมาก
1	ไม่เห็นด้วยอย่างยิ่ง

1. ท่านมีคนที่เมื่ออยู่ใกล้ชิดแล้วท่านรู้สึกปลอดภัย   7 6 5 4 3 2 1

2. ท่านรู้สึกเป็นคนมีความสำคัญกับคนรอบข้าง   7 6 5 4 3 2 1

3. คนอื่นมักจะบอกให้ท่านรู้ว่าท่านทำงานได้ดี (งานและการดูแลบ้าน)   7 6 5 4 3 2 1

4. เมื่อท่านมีปัญหาท่านไม่สามารถที่จะพึ่งพาใครให้ช่วยเหลือได้*   7 6 5 4 3 2 1

5. ท่านมีโอกาสมากเพียงพอในการพบปะกับคนที่ทำให้ท่าน
   มีความรู้สึกว่าท่านเป็นคนพิเศษ   7 6 5 4 3 2 1

6. ท่านใช้เวลากับคนที่มีความสนใจตรงกับท่าน   7 6 5 4 3 2 1

7. ท่านมีโอกาสน้อยมากในชีวิตที่จะให้ความช่วยเหลือและดูแลคนอื่น*   7 6 5 4 3 2 1

8. คนอื่นทำให้ท่านรู้ว่าพวกเขาชอบทำงานกับท่าน
   (งาน, การประชุม, โครงการ)   7 6 5 4 3 2 1

9. ท่านพอจะหาคนช่วยท่านได้ถ้าท่านต้องการ   7 6 5 4 3 2 1

10. ท่านไม่มีใครที่พอจะบอกได้ว่าท่านรู้สึกอย่างไร*   7 6 5 4 3 2 1

11. ในกลุ่มเพื่อนของท่านมีการช่วยเหลือซึ่งกันและกัน   7 6 5 4 3 2 1

12. ท่านมีโอกาสที่จะส่งเสริมให้กำลังใจคนอื่น   7 6 5 4 3 2 1

13. ครอบครัวของท่านทำให้ท่านรู้สึกว่ามีความสำคัญ

ในการใช้ชีวิตครอบครัว   7 6 5 4 3 2 1

14. ท่านมีญาติหรือเพื่อนที่จะให้ความช่วยเหลือแก่ท่าน

แม้เขาจะรู้สึกว่าท่านไม่อาจจะตอบแทนเขาได้   7 6 5 4 3 2 1

15. เมื่อท่านอารมณ์ไม่ดีจะมีบางคนที่ท่านสามารถระบาย

ความรู้สึกให้ฟังได้   7 6 5 4 3 2 1

16. ท่านคิดว่าไม่มีใครมีปัญหาเหมือนท่าน*   7 6 5 4 3 2 1

17. ท่านชอบที่จะทำอะไรเป็นพิเศษเล็กๆน้อยๆ

เพื่อให้คนอื่นรู้สึกมีชีวิตชีวา   7 6 5 4 3 2 1

18. ท่านคิดว่าคนอื่นรู้สึกนิยมชอบในตัวท่าน   7 6 5 4 3 2 1

19. บางคนรักและห่วงใยท่าน   7 6 5 4 3 2 1

20. ท่านมีคนที่จะแลกเปลี่ยนความคิดเห็นและ

ร่วมทำกิจกรรมต่างๆ   7 6 5 4 3 2 1

21. ท่านมีหน้าที่รับผิดชอบในการให้ความช่วยเหลือ

ในสิ่งที่คนอื่นต้องการ   7 6 5 4 3 2 1

22. เมื่อท่านต้องการคำแนะนำจะมีคนช่วยวางแผน

ที่จะจัดการกับปัญหานั้น   7 6 5 4 3 2 1

23. ท่านมีความรู้สึกว่าท่านเป็นที่ต้องการของคนอื่น   7 6 5 4 3 2 1

24. มีคนคิดว่าท่านไม่ใช่เพื่อนที่ดีทั้งที่ท่านคิดว่าท่านเป็นเพื่อน

ที่ดีของเขา*   7 6 5 4 3 2 1

25. เมื่อท่านไม่สบายจะมีคนมาแนะนำวิธีการดูแลตัวเอง   7 6 5 4 3 2 1

<u>ส่วนที่ 3</u> **แบบวัดเหตุการณ์ความเครียดในชีวิตในช่วงหนึ่งปีที่ผ่านมา ทำ**
เครื่องหมาย / ในช่องที่ตรงกับเหตุการณ์ที่เกิดขึ้นในชีวิตท่าน ในช่วงหนึ่งปีที่ผ่านมา

<u>**สุขภาพ**</u>

1. ท่านเจ็บป่วยมากถึงต้องเข้ารับรักษาพยาบาลในโรงพยาบาล ( ) ใช่ ( ) ไม่ใช่

2. ท่านเจ็บป่วยไม่ถึงกับต้องเข้าโรงพยาบาล แต่ต้องหยุดงานหรือ
   หยุดทำกิจกรรมตามปกติ ( ) ใช่ ( ) ไม่ใช่

3. ท่านดื่มเหล้า กาแฟ หรือสูบบุหรี่เป็นประจำ ( ) ใช่ ( ) ไม่ใช่

4. ท่านมีการเปลี่ยนแปลงเกี่ยวกับการนอนเป็นประจำ (เช่น นอน
   ไม่หลับ เวลานอนไม่แน่นอน...........) ( ) ใช่ ( ) ไม่ใช่

5. ท่านมีการใช้กำลังแรงงานมากกว่า*ปกติ* (เช่น ออกกำลังกาย
   มากกว่าปกติ ทำงานออกแรงมากกว่าปกติ.........) ( ) ใช่ ( ) ไม่ใช่

6. ท่านไม่มีการผ่อนคลายอารมณ์เลย (เช่น ดูโทรทัศน์) ( ) ใช่ ( ) ไม่ใช่

7. ท่านเกี่ยวข้องกับผู้เป็นโรคติดต่อร้ายแรง (เช่น วัณโรค โรคเอดส์) ( ) ใช่ ( ) ไม่ใช่

<u>**ครอบครัว**</u> (หากท่านยังโสดโปรดตอบเฉพาะข้อ 15-18)

8. สามีหรือภรรยาเสียชีวิต ( ) ใช่ ( ) ไม่ใช่

9. หย่า แยก ( ) ใช่ ( ) ไม่ใช่

10. สามีหรือภรรยาเจ็บป่วยหนัก ( ) ใช่ ( ) ไม่ใช่

11. บุตรเสียชีวิต ( ) ใช่ ( ) ไม่ใช่

12. บุตรเจ็บป่วยหนัก ( )ใช่ ( ) ไม่ใช่

13. ท่านและสามีหรือภรรยามีเรื่องบาดหมางกัน
    (เช่น นอกใจ ชอบเที่ยว......) ( ) ใช่ ( ) ไม่ใช่

14. ท่านและสามีหรือภรรยามีปัญหาเรื่องเพศสัมพันธ์ ( )ใช่ ( ) ไม่ใช่

15. บิดาหรือมารดาของท่านเจ็บป่วยหนัก ( ) ใช่ ( ) ไม่ใช่

16. บิดาหรือมารดาของท่านเสียชีวิต ( ) ใช่ ( ) ไม่ใช่

17. มีสมาชิกใหม่ในครอบครัว (เช่น มีญาติมาพักอาศัยด้วย.....)   ( ) ใช่   ( ) ไม่ใช่

18. มีการโยกย้ายที่อยู่   ( ) ใช่   ( ) ไม่ใช่

19. ท่านและสามีหรือภรรยาต้องจากกันนานๆ (6 เดือนขึ้นไป)   ( ) ใช่   ( ) ไม่ใช่

เศรษฐกิจ

20. การใช้จ่ายเพื่อปัจจัยสี่ในครอบครัวขัดสน ฝืดเคือง   ( ) ใช่   ( ) ไม่ใช่

21. ท่านหรือสามีหรือภรรยามีหนี้สินล้นพ้นตัว   ( ) ใช่   ( ) ไม่ใช่

22. ท่านหรือครอบครัวต้องผ่อนส่งของที่มีราคาสูง (เช่น บ้าน ที่ดิน...)   ( ) ใช่   ( ) ไม่ใช่

23. ครอบครัวของท่านถูกยึดหรือไล่ที่   ( ) ใช่   ( ) ไม่ใช่

24. กิจการของท่านหรือครอบครัวขาดทุนหรือล้มเลิกกิจการไป   ( ) ใช่   ( ) ไม่ใช่

25. ท่านต้องหาเลี้ยงครอบครัวแต่ผู้เดียว   ( ) ใช่   ( ) ไม่ใช่

การงาน (หากท่านยังโสดโปรดข้ามข้อ 28, 30, 35)

26. ท่านเริ่มทำงานนอกบ้านเป็นครั้งแรก   ( ) ใช่   ( ) ไม่ใช่

27. ท่านถูกให้ออกจากงาน   ( ) ใช่   ( ) ไม่ใช่

28. สามีหรือภรรยาให้ออกจากงาน   ( ) ใช่   ( ) ไม่ใช่

29. ท่านตกงาน   ( ) ใช่   ( )ไม่ใช่

30. สามีหรือภรรยาตกงาน   ( ) ใช่   ( ) ไม่ใช่

31. ท่านต้องรับผิดชอบการงานมากขึ้นจนไม่มีเวลาให้ครอบครัว   ( ) ใช่   ( ) ไม่ใช่

32. ท่านต้องทำงานที่ต้องเสี่ยงต่อภาวะสุขภาพ   ( ) ใช่   ( ) ไม่ใช่

33. ท่านเปลี่ยนงานใหม่ซึ่งต้องมีการปรับตัว   ( ) ใช่   ( ) ไม่ใช่

34. ท่านทะเลาะกับนายจ้างหรือผู้บังคับบัญชา   ( ) ใช่   ( ) ไม่ใช่

35. สามีหรือภรรยาต้องรับผิดชอบการงานมากขึ้น

     จนไม่มีเวลาให้ครอบครัว   ( ) ใช่   ( ) ไม่ใช่

สังคม (หากท่านยังโสดโปรดข้ามข้อ 38, 40)

36. ครอบครัวของท่านประสบอุบัติภัยจนทรัพย์สินเสียหาย

     (เช่น ไฟไหม้บ้าน น้ำท่วมบ้าน .....)   ( ) ใช่   ( ) ไม่ใช่

37. ท่านต้องโทษ (สถานเบา โดยไม่ถูกคุมขัง หรือถูกขัง

ไม่เกิน 3 เดือน)   ( ) ใช่   ( ) ไม่ใช่

38. สามีหรือภรรยาต้องโทษ (สถานเบา โดยไม่ถูกคุมขัง หรือถูกขัง

ไม่เกิน 3 เดือน)   ( ) ใช่   ( ) ไม่ใช่

39. ท่านถูกทำร้ายร่างกายจนบาดเจ็บ   ( ) ใช่   ( ) ไม่ใช่

40. สามีหรือภรรยาถูกทำร้ายร่างกายจนบาดเจ็บ   ( ) ใช่   ( )ไม่ใช่

41. เพื่อนสนิทของท่านเสียชีวิต   ( ) ใช่   ( ) ไม่ใช่

42. ท่านหรือสามีหรือภรรยาเสื่อมเสียชื่อเสียงเกียรติยศ

(เช่น ก่อการทะเลาะวิวาท ถูกประจาน...........)   ( ) ใช่   ( ) ไม่ใช่

43. สถานที่อยู่อาศัยของท่านหรือครอบครัวไม่มีความปลอดภัยในชีวิต

หรือทรัพย์สิน (เช่น มีการลักขโมยบ่อยๆ มีเสียงดังรบกวน...)   ( ) ใช่   ( ) ไม่ใช่

คะแนนเหตุการณ์ความเครียดในชีวิต 1 ปีที่ผ่านมา

1. ท่านเจ็บป่วยมากถึงต้องเข้ารับรักษาพยาบาลในโรงพยาบาล   8.25   คะแนน

2. ท่านเจ็บป่วยไม่ถึงกับต้องเข้าโรงพยาบาล แต่ต้องหยุดงานหรือ
หยุดทำกิจกรรมตามปกติ   6.25   คะแนน

3. ท่านดื่มเหล้า กาแฟ หรือสูบบุหรี่เป็นประจำ   5.50   คะแนน

4. ท่านมีการเปลี่ยนแปลงเกี่ยวกับการนอนเป็นประจำ (เช่น นอน
ไม่หลับ เวลานอนไม่แน่นอน...........)   5.17   คะแนน

5. ท่านมีการใช้กำลังแรงงานมากกว่าปกติ (เช่น ออกกำลังกาย
มากกว่าปกติ ทำงานออกแรงมากกว่าปกติ.........)   5.00   คะแนน

6. ท่านไม่มีการผ่อนคลายอารมณ์เลย (เช่น ดูโทรทัศน์)   4.17   คะแนน

7. ท่านเกี่ยวข้องกับผู้เป็นโรคติดต่อร้ายแรง (เช่น วัณโรค โรคเอดส์)   6.83   คะแนน

<u>ครอบครัว</u>

8. สามีหรือภรรยาเสียชีวิต   10.94   คะแนน

9. หย่า แยก   10.67   คะแนน

10. สามีหรือภรรยาเจ็บป่วยหนัก   10.67   คะแนน

11. บุตรเสียชีวิต   9.75   คะแนน

12. บุตรเจ็บป่วยหนัก   10.67   คะแนน

13. ท่านและสามีหรือภรรยามีเรื่องบาดหมางกัน
(เช่น นอกใจ ชอบเที่ยว......)   8.30   คะแนน

14. ท่านและสามีหรือภรรยามีปัญหาเรื่องเพศสัมพันธ์   8.33   คะแนน

15. บิดาหรือมารดาของท่านเจ็บป่วยหนัก   9.50   คะแนน

16. บิดาหรือมารดาของท่านเสียชีวิต   10.73   คะแนน

17. มีสมาชิกใหม่ในครอบครัว (เช่น มีญาติมาพักอาศัยด้วย.....)   4.25   คะแนน

18. มีการโยกย้ายที่อยู่   5.17   คะแนน

19. ท่านและสามีหรือภรรยาต้องจากกันนานๆ (6 เดือนขึ้นไป)   7.17   คะแนน

เศรษฐกิจ

20. การใช้จ่ายเพื่อปัจจัยสี่ในครอบครัวขัดสน ฝืดเคือง   7.67   คะแนน

21. ท่านหรือสามีหรือภรรยามีหนี้สินล้นพ้นตัว   8.88   คะแนน

22. ท่านหรือครอบครัวต้องผ่อนส่งของที่มีราคาสูง (เช่น บ้าน ที่ดิน...)   6.90   คะแนน

23. ครอบครัวของท่านถูกยึดหรือไล่ที่   8.63   คะแนน

24. กิจการของท่านหรือครอบครัวขาดทุนหรือล้มเลิกกิจการไป   8.79   คะแนน

25. ท่านต้องหาเลี้ยงครอบครัวแต่ผู้เดียว   8.64   คะแนน

การงาน

26. ท่านเริ่มทำงานนอกบ้านเป็นครั้งแรก   5.17   คะแนน

27. ท่านถูกให้ออกจากงาน   8.30   คะแนน

28. สามีหรือภรรยาให้ออกจากงาน   8.83   คะแนน

29. ท่านตกงาน   8.63   คะแนน

30. สามีหรือภรรยาตกงาน   8.70   คะแนน

31. ท่านต้องรับผิดชอบการงานมากขึ้นจนไม่มีเวลาให้ครอบครัว   7.00   คะแนน

32. ท่านต้องทำงานที่ต้องเสี่ยงต่อภาวะสุขภาพ   7.50   คะแนน

33. ท่านเปลี่ยนงานใหม่ซึ่งต้องมีการปรับตัว   7.88   คะแนน

34. ท่านทะเลาะกับนายจ้างหรือผู้บังคับบัญชา   6.90   คะแนน

35. สามีหรือภรรยาต้องรับผิดชอบการงานมากขึ้น

    จนไม่มีเวลาให้ครอบครัว   7.75   คะแนน

สังคม

36. ครอบครัวของท่านประสบอุบัติภัยจนทรัพย์สินเสียหาย

    (เช่น ไฟไหม้บ้าน น้ำท่วมบ้าน .....)   9.32   คะแนน

37. ท่านต้องโทษ (สถานเบา โดยไม่ถูกคุมขัง หรือถูกขัง

    ไม่เกิน 3 เดือน)   8.83   คะแนน

38. สามีหรือภรรยาต้องโทษ (สถานเบา โดยไม่ถูกคุมขัง หรือถูกขัง

ไม่เกิน 3 เดือน)   9.50   คะแนน

39. ท่านถูกทำร้ายร่างกายจนบาดเจ็บ   8.79   คะแนน

40. สามีหรือภรรยาถูกทำร้ายร่างกายจนบาดเจ็บ   8.63   คะแนน

41. เพื่อนสนิทของท่านเสียชีวิต   7.17   คะแนน

42. ท่านหรือสามีหรือภรรยาเสื่อมเสียชื่อเสียงเกียรติยศ

(เช่น ก่อการทะเลาะวิวาท ถูกประจาน...........)   8.79   คะแนน

43. สถานที่อยู่อาศัยของท่านหรือครอบครัวไม่มีความปลอดภัยในชีวิต

หรือทรัพย์สิน (เช่น มีการลักขโมยบ่อยๆ มีเสียงดังรบกวน...)   7.50   คะแนน

     คะแนนในที่นี้ได้มาจากแบบวัดเหตุการณ์ความเครียดในชีวิตของสมจิตร์ นคราพานิช

(2531) ซึ่งสร้างโดยอาศัยแนวทาง Holmes & Rahe (1967) และนำมาปรับให้เหมาะสมสอดคล้อง
กับสภาพชีวิตความเป็นอยู่ของสังคมไทย ประกอบด้วยคำถามจำนวน 43 ข้อ การกำหนดคะแนน
แต่ละข้อกระทำโดยการนำแบบวัดที่แก้ไขเรียบร้อยแล้วไปให้ผู้ทรงคุณวุฒิ 20 ท่าน กำหนดคะแนน
แต่ละข้อด้วยวิธีการของ Thurstone คือกำหนดคะแนนเป็น 1-11 คะแนน เหตุการณ์ที่รุนแรงน้อย
ที่สุดให้ 1 คะแนน ที่รุนแรงมากขึ้นให้คะแนน 2, 3, 4, 5, 6, 7, 8, 9, 10 หรือ 11 ตามลำดับ นำ
คะแนนของข้อความที่ผู้ทรงคุณวุฒิทั้ง 20 ท่าน ให้ มาหาค่ามัธยฐานซึ่งจะเป็นคะแนนความรุนแรง
ของเหตุการณ์ในชีวิตข้อนั้นๆ และได้หาค วามเที่ยงโดยนำแบบวัดชุดเดิมไปให้ผู้ทรงคุณวุฒิเดิม ให้
คะแนนอีกครั้งหนึ่งแล้วหาค่ามัธยฐานใหม่ นำค่ามัธยฐานแต่ละข้อในแต่ละระยะเวลาทั้งสองครั้ง
มาหาค่าความเชื่อถือได้ของคะแนน ได้เท่ากับ   .97 สมจิตร์ นคราพานิช นำไปทดลองใช้กับกลุ่ม
ตัวอย่างประชากรที่แผนกสูติกรรม โรงพยาบาลจุฬาลงกรณ์ โดยการทดสอบซ้ำ (Test Retest) ได้
ค่าคะแนนความเชื่อถือของทั้งฉบับเท่ากับ   .99   จึงสรุปคะแนนความเครียดรายข้อออกมาได้
ดังกล่าว

<u>ส่วนที่ 4</u>   แบบสัมภาษณ์ปัญหาสุขภาพ

ทำเครื่องหมาย / หน้าข้อที่ตรงกับสุขภาพหรือความรู้สึกของท่าน ในช่วง   2 สัปดาห์นี้ (บ่อยๆ = เกือบทุกวัน, ค่อนข้างบ่อย = 2-3 วัน/สัปดาห์, บางครั้ง = น้อยกว่า สัปดาห์ละครั้ง)

1. รู้สึกเบื่ออาหาร

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

2. นอนไม่หลับหรือต้องใช้ยาช่วยให้หลับ

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

3. รู้สึกอ่อนเพลีย เหนื่อยง่าย

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

4. คิดมาก กังวล

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

5. รู้สึกสบายใจ*

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

6. รู้สึกเบื่อ ไม่อยากพูดคุย

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

7. ใจลอย ไม่มีสมาธิ

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

8. อยากอยู่เฉยๆ ไม่อยากทำอะไร

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

9. รู้สึกเศร้า หดหู่ใจ

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

10. ชีวิตอนาคตยังน่าอยู่ มีความหมาย*

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

11. ร้องไห้หรืออยากร้องไห้

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

12. ตัดสินใจไม่ได้แม้เรื่องเล็กๆน้อยๆ

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

13. ชีวิตไม่มีความสุข

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

14. รู้สึกเศร้าซึมเมื่อตื่นนอนตอนเช้า

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

15. รู้สึกตัวเองมีคุณค่า*

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

16. ตำหนิหรือกล่าวโทษตนเอง

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

17. เบื่อหน่ายเกือบทุกอย่าง

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

18. คิดอยากตาย

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

19. คนอื่นทักว่าคุณดูเครียด ซึมหรือหมองคล้ำ

( ) บ่อยๆ   ( ) ค่อนข้างบ่อย   ( ) บางครั้ง   ( ) ไม่เลย

20. พยายามฆ่าตัวตาย

( ) เคย   ( ) ไม่เคย

<u>หมายเหตุ</u> คิดคะแนนตอบ ไม่เลย 0, บางครั้ง 1, ค่อนข้างบ่อย 2, บ่อยๆ 3 คะแนน

ข้อที่ 20 ไม่เคย 0, เคย 3 คะแนน

ข้อที่ 5,10, 15 กลับคะแนนเป็น ไม่เลย 3, บางครั้ง 2, ค่อนข้างบ่อย 1, บ่อยๆ 0 คะแนน

คะแนน 0-24 ไม่มีภาวะซึมเศร้า

คะแนน 25-29 มีภาวะซึมเศร้าเล็กน้อยถึงปานกลาง

คะแนนตั้งแต่ 30 คะแนนขึ้นไปมีภาวะซึมเศร้ารุนแรง

ขอบคุณที่ให้ความร่วมมือในการให้สัมภาษณ์ครั้งนี้

Appendix D

Budget

No.	Activities	Unit	Price (Baht)	Unit (Number)	Total Budget (Baht)
1	Pre-testing				
	Photocopy	Quest.	6	30	180
	Stationery	Set	400/set	1	400
2	Data Collection				
	Photocopy Quest.	Quest.	0.5/page	6 x 425	1,275
	Training of interviewers	Person	200/day	2 prs x 1 day	400
	Interviewers per diem	Person	200/day	3 prs x 17 days	10,200
	Transportation cost	Trip/day	400/day	1 prs x 2 days	800
	Accommodation costs	Room/day	450/day	1 prs x 17 days	7,650
	DATA COLLECTION PROCESS			**SUBTOTAL**	**20,905**
3	Document Printing				
	Paper + Printing	Page	5/page	800 pages	4,000
	Photocopy (exam + final submit)	Page	0.5/page	12 x 400	2,400
	Stationery	Set	400/set	1	400
	Binding Paper (exam)	Set	150/set	6	900
	Binding Paper (submit)	Set	200/set	6	1,200
	THESIS DOCUMENT PROCESS			**SUBTOTAL**	**8,900**
	GRAND TOTAL				**29,805**

Appendix E

Time Schedule

	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Apr 10	May 10
1.Literature review	▓									
2. Writing thesis proposal		▓	▓							
3. Submission for proposal exam			▓							
4. Proposal exam				▓						
5.Ethical consideration from Chulalongkorn University (CPHS)				▓	▓	▓				
6.Pretest questionaire						▓				
7. Field preparation and data collection							▓	▓		
8. Data analysis								▓		
9. Thesis and article writing								▓	▓	
10. Final thesis exam									▓	
11. Submission of article for publication									▓	
12. Submission of thesis										▓

VITAE

Name	: Ms. Punchanit Nuntatikul
Date of Birth	: 3rd November 1987
Place of Birth	: Bangkok, Thailand
Educational Achievement	: Bachelor of Science (Psychology)
	Chulalongkorn University, Bangkok, Thailand
Research Experience	: The relationship between five-factor personality and
	normality evaluations