# สถานะทางคลินิกและความสามารถทางหน้าที่การงาน ของผู้ป่วยโรคซึมเศร้าที่ได้รับการรักษาทางจิตเวชระยะเวลา 3 เดือน

นาย รณชัย คงสกนธ์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต
สาขาวิชาการพัฒนาสุขภาพ หลักสูตรการพัฒนาสุขภาพ
คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
พ.ศ. 2542

ISBN 974-333-451-3

# THE CLINICAL AND FUNCTIONAL STATUS OF DEPRESSIVE PATIENTS WITH 3-MONTH PSYCHIATRIC CARE

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A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Health Development
Program of Health Development
Faculty of Medicine
Chulalongkorn University
Academic Year 1999

ISBN 974-33-451-3

| | | |
|---|---|---|
| Thesis Title | : | The Clinical And Functional Status of Depressive Patients With 3-Month Psychiatric Care. |
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| Program | : | Health Development |
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รณชัย คงสกนธ์ : สถานะทางคลินิกและความสามารถทางหน้าที่การงานของผู้ป่วยโรคซึมเศร้าที่ได้รับการรักษาทางจิตเวชระยะเวลา 3 เดือน ( The Clinical And Functional Status of Depressive Patients With 3-Month Psychiatric Care.) คำสำคัญ : โรคซึมเศร้า, สถานะทางคลินิก, ความสามารถทางหน้าที่การงาน, การรักษาทางจิตเวช อ.ที่ปรึกษา รศ.พ.ญ.นันทิกา ทวิชาชาติ, อ.ที่ปรึกษาร่วม : ผศ.สมรัตน์ เลิศมหาฤทธิ์, 126 หน้า ISBN 974-333-451-3

**วัตถุประสงค์ของการศึกษา** : ศึกษา อัตราการตอบสนองต่อการรักษาทางจิตเวชระยะเวลา 3 เดือนของผู้ป่วยโรคซึมเศร้า ศึกษาความเปลี่ยนแปลงในความสามารถทางหน้าที่การงาน ของผู้ป่วยเปรียบเทียบก่อนและหลังการรักษา รวมทั้งความสัมพันธ์กับการเปลี่ยนแปลงทางคลินิก และศึกษา ปัจจัยที่สัมพันธ์กับการตอบสนองต่อการรักษาในระยะเวลา 3 เดือนและความพึงพอใจของผู้ป่วยต่อการรักษา

**วิธีการ** : Prospective descriptive study ศึกษาในผู้ป่วย โรคซึมเศร้า จำนวน 96 คน ที่มารับการรักษาแผนกจิตเวช โรงพยาบาลรามาธิบดี ตั้งแต่ 1 มิถุนายน พ.ศ. 2542 – 31 ธันวาคม พ.ศ.2542 ติดตามการรักษา 3 เดือน

**ผลการศึกษา** : อัตราการตอบสนองต่อการรักษาทางจิตเวชระยะเวลา 3 เดือน ร้อยละ 67.7 (95%C.I.=58.18-77.23) พบมีการสูญเสียความสามารถทางหน้าที่การงานของผู้ป่วยก่อนและหลังการรักษาอย่างชัดเจน ความสัมพันธ์ ระหว่าง อาการทางคลินิกที่ดีขึ้น กับ การเปลี่ยนแปลงในความสามารถทางหน้าที่การงาน ค่อนข้างน้อย ( Pearson correlation= 0.29) ปัจจัยที่สัมพันธ์ กับการตอบสนองต่อการรักษา คือ 1. รายได้ 2. ปัญหาข้อขัดแย้งในครอบครัว และ 3.การสูญเสียบุคคลที่ใกล้ชิดในช่วง 1 ปีที่ผ่านมา( Hosmer and Lemeshow Goodness-of-fit = 0.77) และการศึกษาความพึงพอใจของผู้ป่วยต่อการรักษา อยู่ในระดับดี

**สรุปผลการศึกษา** : โรคซึมเศร้า เป็นปัญหาทางสาธารณสุขที่สำคัญที่ผู้เกี่ยวข้องควรตระหนักถึงการสูญเสียความสามารถทางหน้าที่การงานทั้งก่อนและหลังการรักษาอย่างชัดเจน แต่เป็นโรคที่ให้การรักษาได้โดยมีอัตราการตอบสนองที่ดี และเป็นที่พึงพอใจของผู้ป่วยในระยะเวลา เพียง 3 เดือน ภายใต้การรักษาขบวนการทางจิตเวช

ภาควิชา...การพัฒนาสุขภาพ ลายมือชื่อนิสิต.....

สาขาวิชา การพัฒนาสุขภาพ ลายมือชื่ออาจารย์ที่ปรึกษา.....

ปีการศึกษา 2542 ลายมือชื่ออาจารย์ที่ปรึกษาร่วม.....

RONNACHAI KONGSAKON : THE CLINICAL AND FUNCTIONAL STATUS OF DEPRESSIVE PATIENTS WITH 3-MONTH PSYCHIATRIC CARE.
KEY WORD: DEPRESSION, CLINICAL STATUS, FUNCTIONAL STATUS, PSYCHAITRIC CARE.
THESIS ADVISOR: ASSOC. PROF. NUNTIKA TAVICHACHART, MD.,M.SC. CO-ADVISOR : ASST.PROF. SOMRAT LERTMAHARIT, M.MED.STAT. 126 PP. ISBN 974-333-451-3

Objective: The purpose of this research is to obtain data about the clinical and functional status of the depressive patients with 3 months of supposedly acceptable psychiatric care and find out if there is any correlation between improvement of clinical and functioning status.The study would also look for the predictive factors to clinical response of the depressive patients with 3 months of supposedly acceptable psychiatric care.

Method: A prospective descriptive study were conducted and three instruments for the measurement were developed to assess 96 depressive patients with follow up for 3 months.

Results: The response rate of depressive patients with 3-month psychiatric care is 67.7%( 95% C.I.=58.18-77.23). There is prominent functional disability with depressive patients and the correlation between improvement of clinical status, and functioning status has the same direction but the correlation is very low (Pearson correlation=0.29). The predictive factors to clinical response of the depressive patients are income factor, stress from family problems and bereavement with the Hosmer and Lemeshow Goodness-of-fit = 0.77. The patients show good satisfaction with the psychiatric care.

Conclusion: It is recommended that important health care resources should be preferentially allocated to a condition like depressive disorder. Depressive disorder is associated with limitations in psychological and role functioning of people and is treatable with a very good response rate and good patients' satisfaction in such a short period (3 months of psychiatric care).

ภาควิชา...การพัฒนาสุขภาพ ลายมือชื่อนิสิต.....
สาขาวิชา การพัฒนาสุขภาพ ลายมือชื่ออาจารย์ที่ปรึกษา.....
ปีการศึกษา 2542 ลายมือชื่ออาจารย์ที่ปรึกษาร่วม.....

# ACKNOWLEDGEMENTS



This study was completed with the support and assistance of many helpful people.

I wish to express my sincere gratitude and appreciation to Professor Chitr Sitthi-amorn, Associate Professor Nuntika Tavichachart, Lecturer Somrat Lertmaharit who guided and gave valuable comments throughout the process of this study.

I would like to acknowledge the assistance of the staff and my colleagues at the Department of Psychiatry, Ramathibodi Hospital for their help on the data collection process and Asist.Prof. Chatchawan Silapakit who took time to give me helpful comments during the study, also the nursing team at the Out Patient Department of Psychiatry who assisted in the data collection.

My special thanks to my brother in law Asist. Prof. Teerakiat Chareonsettasis who gave me a lot of help and good suggestions for my study.

I would like to extend my special thanks to the staff of Chulalongkorn Research center and staff of the Dep. Of Psychiatry ,Chulalongkorn Hospital for their help in administrative work and the valuable information in preparing the study.

The Faculty of Medicine, Ramathibodi Hospital, Mahidol Universiy gave me a great opportunity and all financial assistance to allow me to complete this Master degree study.

I am most grateful to Professor Nongpagna Limsuwan for her kindness in giving permission for this further study.

Beside my professor, colleagues and staff, I would like to give my deep thanks to my wife Dr. Titiya Kongsakon and my two sons for their continuous support and encouragement.

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# CHAPTER 1

# INTRODUCTION & BACKGROUND

## 1.1 INTRODUCTION AND BACKGROUND

Depression is a common and disabling psychiatric disorder with a lifetime prevalence in the community estimated at 17%(1).Outcome studies show that depressive disorders often recur and may become chronic in up to 25% of patients(2).

The Global burden of Disease study(3) by the World Health Organization (WHO) recently concluded that depression is one of the most debilitating health problems in the world. In 1990, depression ranked fourth among all diseases. The WHO researchers predicted that , by the year 2020. Depression will rank second after heart disease , accounting for 15% of the disease burden in the world. So depression has been the focus of intense clinical, research, and policy concern in both general medical and mental health specialty practices.

For these patients the issue is whether they can reasonably expect to recover completely, while the challenge for clinicians is to recognize the course of the disorder and to manage it appropriately.

Depressive symptoms are found to be uniquely associated with limitations in well-being and functioning . The clinical course of depression has been shown to be associated with functional outcomes (disability days) in a previous study(4).

The medical outcomes study collated data from 11,242 outpatients in the United States(5, 6). It showed that depressive symptoms, with or without major depressive disorder impaired functional ability and well-being as much as the most common chronic medical conditions such as diabetes, chronic lung disease, hypertension, and heart disease.

The clinical outcome study(7) showed that adequate antidepressive treatment is effective in at least 65%-80% of patients and that the return of these patients to normal function saves the considerable costs associated with untreated depression(5). Depression has considerable mortality and morbidity, and significant numbers of patients respond inadequately to the treatment approach. It would be useful to know whether, and for which patients, the method approach might increase compliance, reduce dropout, or increase speed, spectrum, or impact of the therapeutic effect.

Therefore the treatment outcome in the Thai psychiatric setting with depressive patients is a crucial question, especially with the acute treatment in order to gather information on the course of the illness.

Measures of disease status alone are insufficient to describe the burden of illness; quality of life factors such as pain, apprehension, depressed mood, and functional impairment must also be considered(8).

After two years' follow up approximately 40% of patients with major depression were still affected and functionally impaired, while those with chronic minor depression (dysthymia) had the worst outcome 54% had had a major depressive episode during this period(6).

Social functioning in relation to mental illness is important as it can limit the ability to function independently and because it may vary separately from symptoms. Mental disorders in general are strongly associated with social dysfunctioning, particularly in depressive disorders. For a long time social dysfunctioning was considered an epiphenomenon and just a part of the disease process.

There is growing evidence(9) that the courses of symptomatology and social dysfunctioning may vary relatively independently: social disablement of a patient may be characterized much more by social disabilities than by persistent psychiatric symptoms.

There is no consensus regarding which clinical and psychosocial variables are associated with recovery.

After searching information in Thai medical journals and discussing with Thai psychiatrists, there is no information regarding the outcome measures in the treatment of depressive disorder and the relationship between different outcome variables in Thai psychiatric settings.

Therefore I am interested in looking at the clinical and functional status of depressive patients with psychiatric care in a Thai setting. What is the clinical response and functional ability after a period of psychiatric care ? What are the improvements in clinical status and functional ability ? Is there any correlation between symptom improvement and social functioning ? What is the impact on burden and patients' burden and quality of life after a period of treatment in supposedly acceptable psychiatric care?

The above questions have led me to conduct an observational study to obtain preliminary data about the outcome of the clinical status and the burden of the depressive patients in a Thai psychiatric setting, so that the information thus gathered can be used for a better understanding of the course of depressive disorder and the impact of treatment. In addition we can learn about the correlation between demographic data and the outcome measure as well as the relationship between outcome variables.

## 1.2 RESEARCH OBJECTIVE

1. To obtain data about the clinical and functional status of the depressive patients with 3 months of supposedly acceptable psychiatric care.
2. To find out whether there is any correlation between improvement of clinical and functioning status.

3. To find out what are the predictive factors to clinical response of the depressive patients with 3 months of supposedly acceptable psychiatric care.
4. To examine patients' satisfaction with the treatment.

## 1.3 RESEARCH QUESTIONS

### 1.3.1 PRIMARY QUESTION

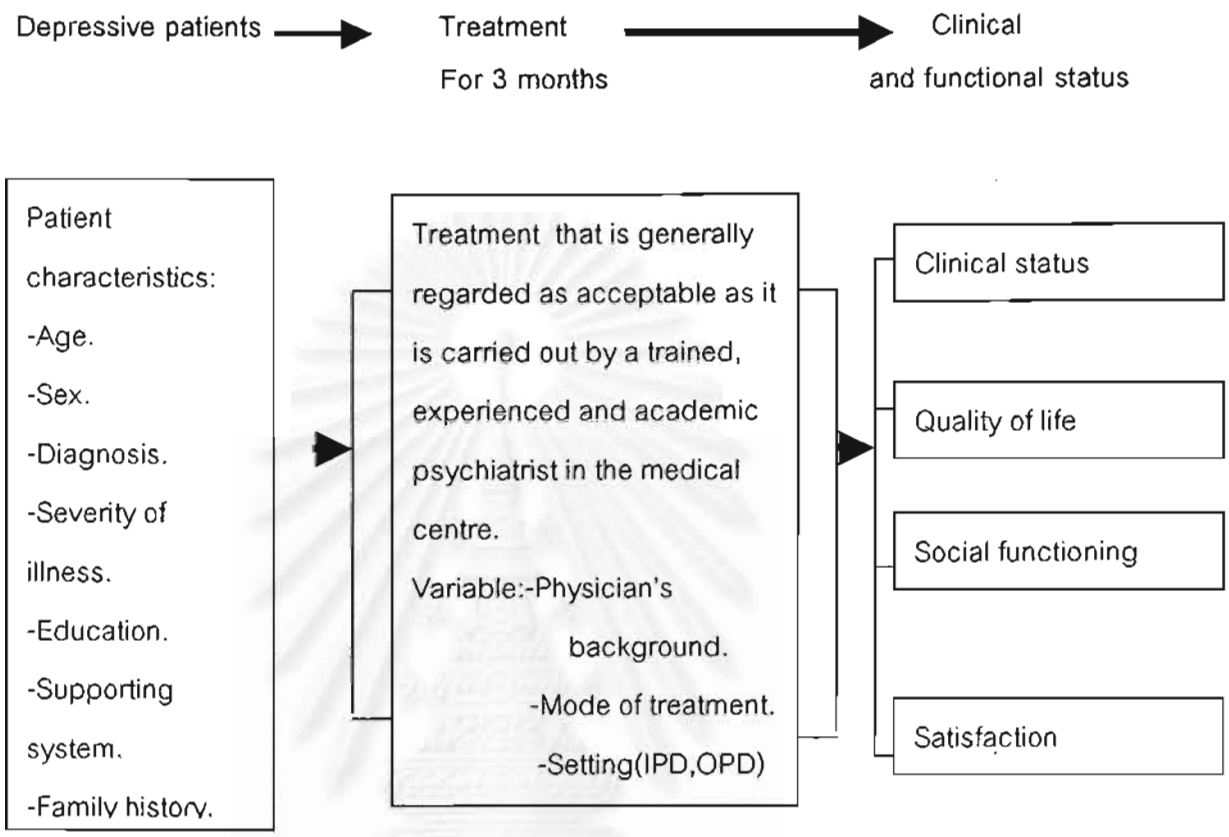
What is the clinical response rate of depressive patients who have undergone 3- month psychiatric treatment in a supposedly acceptable medical center?

### 1.3.2 SECONDARY RESEARCH QUESTIONS

1. What are the functional status of depressive patients who have undergone 3- month psychiatric treatment in a supposedly acceptable medical center?
2. Is there any correlation between improvement of clinical and functioning status?
3. What are the predictive factors to the response rate of depressive patients who have undergone 3- month psychiatric treatment in a supposedly acceptable medical center?
4. Are patients satisfied with the treatment?

## 1.4 CONCEPTUAL FRAMEWORK

Figure 1 Conceptual framework of the study




## 1.5 KEY WORDS

Depressive disorder, psychiatric care, clinical status , functioning ,observational study.

## 1.6 OPERATIONAL DEFINITION

1.6.1 Depressive disorder : This includes Major Depressive Disorder , Dysthymic Disorder , Depressive Disorder Not Otherwise Specified with DSM IV criteria(10).

1.6.2 Supposedly acceptable psychiatric care: Treatment that is generally regarded as acceptable as it is carried out by a trained, experienced and academic psychiatrist in the medical

centre.

1.6.3 Clinically response to the treatment: Reduction of the HAM-D score 50% from the baseline(11).

## 1.7 ETHICAL CONSIDERATIONS

This study is an observational study so there will be no the ethical problem with this study. To minimize the stigmatization of the mental patients, only verbal consent will be obtained.

# CHAPTER 2

## REVIEW OF THE RELATED LITERATURE

The Department of Psychiatry, Ramathibodi Hospital, Mahidol University is one of the 13 departments in this Faculty of Medicine. The Department consists of three sections:

1. administrative office.
2. out-patient unit.
3. in-patient unit.

Its main functions are teaching, service and research. The Education role is emphasized most. (Then it can be a medical center as the objective defined.) Therefore I have chosen this medical center to be the study site. The Department of Psychiatry, Ramathibodi Hospital consists of 13 psychiatrists, 3 psychologists, and 2 social workers. There are 2 psychiatric residency training programs:- general psychiatry, child and adolescent psychiatry.There are 11 residents training in the program at this moment.

With these services, the annual number of patients who came to the services at the Out Patient Unit of Psychiatry were 18852 cases. The depressive disorder cases were 3124 cases ( 21.49%) within 14540 cases who had final diagnosis by the year 1998.

I have searched in the MEDLINE using "Depression and Outcome" and reviewed literatures at the library with the topic of depressive disorder. The results are:

Depressive disorders are a chronic, recurrent, and severe burden to both patients and their families. Depressive disorders represent a major national public health problem, ranking within the top 10 most costly diseases in the United States. In 1990,

depressive disorders afflicted at least 11 million Americans and cost the U.S. economy an estimated $44 billion. In addition, depressive disorders are associated with increased accident rates, increased rates of substance abuse (especially alcoholism), increased medical hospitalization, and an increase in somatic illnesses and outpatient medical utilization. Despite their ranking as a major health problem, depressive disorders are often underdiagnosed and undertreated(12).

The Global Burden of Disease study(3) by the World Health Organization (WHO) recently concluded that depression is one of the most debilitating health problems in the world. In 1990, depression ranked fourth among all diseases. The WHO researchers predicted that , by the year 2020. Depression will rank second after heart disease , accounting for 15% of the disease burden in the world.

The published prevalence rates of depressive disorders have steadily increased during the last 20 years .The point prevalence and also the period prevalence within one year have generally increased by a factor 10 to 20 during the last 20 years ( Table 1)

Table 1. True prevalence of depressive disorders(13)

| | Point Prevalence | Life Times Prevalence |
|---|---|---|
| Sorensen et al. (1961) | 3.9% | |
| Essen-Moller et al.(1961) | | |
| Psychotic Depression | | 1% |
| All Depression | | 14% |
| Silverman,(1968) | | |
| Psychotic Depression | 0.1% | |
| Depressive Neurosis | 0.2-0.3% | |
| Lehmann,(1971) | 2-3% | |
| Henderson et al.,(1979) | 4.6% | |
| Weissman et al.,(1978) | 6.8% | 18% (27%) |
| Weyerer et al.,(1984) | 6.3% | |

There were some epidemiological studies carried out in Thailand. Most were carried out in a specific community and reported in a Thai local Journal. For example, Sitasuwan et al(14). used Feighner criteria for a psychiatric epidemiological survey among subjects aged 31-50 year in a community in Bangkok and found that 47.5 percent had a psychiatric problem, and the survey study of Otrakul et al (15) for the year 1993 showed that the prevalence of elderly depression in Din-Deng area was 38 per cent and in the Banpodpisai areas was 67.4 per cent of the studied group.

Jaisin (16) used SCL-90 in a survey in a community and found that 30 percent of the sample had a mental health problem. By using the Children's Depression Inventory, Thai version, the study of Trankasombat A. et al.(17) revealed 40.8 per cent of 1,264 students aged 10-17 years with the mean age of 14.0 years in Bangkok as having

significant depressive symptoms (total CDI score greater than/15) and 13.3 per cent as having marked depressive symptoms (total CDI score greater than/21). 711 elderly people aged over 60 from Bangkok and Uthaithaini province representing urban and rural areas were surveyed and studied by Tavichachat et al.(18) The study was performed by using the questionnaires to find out the prevalence of depression. The prevalence of depression was 82.28 per cent among the total studied population, 80.3 per cent in Bangkok and 84.8 per cent in Uthaithani province. With the epidemiological study in Thailand the lifetime prevalence of depression is about 19.9% according to Tavichachat et al(19).

## 2.1 DEPRESSION

### 2.1.1 GENERAL CHARACTERISTICS

Depression is a term with meanings ranging from the transient dips in mood that are characteristic of life itself, to a clinical syndrome of substantial severity, duration, and associated signs and symptoms that is markedly different from normal grief, or bereavement encompasses the features of a depressive syndrome but is usually less pervasive and more limited in duration.

The clinical features of depression fall into four broad categories:

1. Mood (affect): sad, blue, depressed, unhappy, down-in-the-dumps, empty, worried, irritable.

2. Cognition: loss of interest, difficulty concentrating, low self-esteem, negative thoughts, indecisiveness, guilt, suicidal ideation, hallucinations, delusions.

3. Behavior: psychomotor retardation or agitation, crying, social withdrawal, dependency, suicide.

4. Somatic (physical): sleep disturbance (insomnia or hypersomnia), fatigue, decreased or increased appetite, weight loss or gain, pain, gastrointestinal upset, decreased libido.

### 2.1.2 RECOGNITION

When many of the above-mentioned symptoms are prominent, depression is easily recognized. This is not always the case, however, because patients may present with prominent somatic manifestations while minimizing or denying the mood and cognitive components. Studies have found that over 50% of clinically important depression goes (1) in primary care. Diagnosis is further complicated in the presence of medical illnesses and medication side effects that may produce "pseudodepressive" manifestations (e.g., insomnia secondary to pain, weight loss from malignancy, lethargy caused by medication).

### 2.1.3 IMPACT

#### Mortality

Depression is a potentially lethal disorder: about 15% of individuals with a primary mood disorder eventually kill themselves. Approximately 50% of persons who commit suicide have a primary diagnosis of depression (20). Factors associated with an early (defined as within 1 year of interview) increased suicide risk in depressed patients include panic attacks, psychic anxiety, severe loss of interest and pleasure (i.e., anhedonia), difficulty concentrating, substance abuse, and marked insomnia (21). Long-term risk factors (i.e., 1 to 5 years after interview) include hopelessness, suicidal ideation, and prior suicide tendences. Needless to say, all depressed individuals must be carefully assessed for suicidality, both initially and during treatment.

There is also evidence that comorbid depression increases the likelihood of death from other medical illnesses such as cardiovascular disease and cancer.

#### Morbidity

According to the Medical Outcome Study, depression had a greater adverse impact on individuals than did other chronic conditions such as hypertension, diabetes,

arthritis, and lung disease, as measured across the dimensions of physical functioning, role functioning, social functioning, number of days in bed due to poor health, perceived current health, and bodily pain(22).

Financial

The economic impact of depression includes the costs of treatment (i.e., direct costs) and the costs of lost productivity due to illness or death (i.e., indirect costs). Based on economic data from 1980, the annual financial cost of depression in the United States was estimated to be $16.3 billion (5). More recently, the estimate has grown to $43.7 billion ($12.4 billion in direct costs, $7.5 billion in mortality costs, and $23.8 billion in morbidity costs)(23).

### 2.1.4 NOSOLOGY

Standardized diagnostic criteria of mood disorders not only assist in the detection and recognition of disorders but also provide estimation of their prevalence. Moreover, reliable diagnostic criteria can be used to systematically evaluate treatment modalities, identify risk factors leading to development of a mood disorder, and herald preventive measures. The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (10) has updated the classification of mood disorders.

The DSM-IV section on mood disorders is divided into three parts, with the first part describing mood episodes, including major depressive, manic, mixed, and hypomanic episodes. The second part sets criteria for mood disorders, including depressive and bipolar disorders, mood disorder due to a general medical condition, and substance-induced mood disorder. The third part includes the specifiers that describe either the most recent mood episode or the course of recurrent episodes.

The major depressive disorders have severity, psychotic, and remission specifiers; additional categories include catatonic, melancholic, and atypical features,

as well as postpartum onset. The recurrent major depressive disorders have longitudinal course specifiers (with and without inter-episode recovery), as well as specifications for seasonal pattern and rapid cycling.

The depressive disorder not otherwise specified has been expanded to include premenstrual dysphoric disorder, minor depressive disorder (depressive symptoms subthreshold in severity to major depression), recurrent brief depressive disorder (episodes that occur at least once a month for 12 months, lasting from 2 days to 2 weeks), postpsychotic depressive disorder of schizophrenia, and major depressive disorder superimposed on psychotic disorders.

## 2.2 MAJOR DEPRESSIVE EPISODE

Diagnosis

The DSM-IV diagnostic criteria(24) for a major depressive episode are :

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

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

(1) depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful). (Note: In children and adolescents, can be irritable mood.)

(2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others)

(3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or a decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gains.)

(4) insomnia or hypersomnia nearly every day

(5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)

(6) fatigue or loss of energy nearly every day

(7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)

(8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

(9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

B. The symptoms do not meet the criteria for a Mixed Episode.

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

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

E. The symptoms are not better accounted for by bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation

### 2.2.1 MAJOR DEPRESSIVE DISORDER

#### Diagnosis

Major depressive disorder is identified by the presence of one or more major depressive episodes (see above) in the absence of a history of mania or hypomania.

#### Epidemiology

Major depressive disorder is one of the more common psychiatric disorders: the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) study,

based on a survey of over 18,000 adults in five United States communities, found a 1-month prevalence of 1.6% and a lifetime prevalence of 4.4%(25, 26). The mean age at onset was 27 years, with little difference according to sex. Studies have shown that individuals born in recent decades appear to have both an earlier age at onset and an increased rate of depression. The reasons for this birth cohort effect are not known (Cross-National Collaborative Group 1992). The greater recognition of major depressive disorder in children and adolescents reflects not only the earlier age at onset but also greater acceptance that the disorder occurs in these age groups. In general, adult diagnostic criteria can be reliably applied to children and adolescents. Because bipolar disorder often begins during adolescence, an illness that begins with a major depressive episode may remain diagnostically ambiguous until one or more further mood episodes occur. The prevalence of depression in women is uniformly higher than in men, with most studies finding major depression to be twice as common(25).

Clinical Course

According to DSM-IV, an episode of major depressive disorder must have a minimum duration of 2 weeks; an average untreated episode, however, lasts 6 or more months. The onset and termination of a major depressive episode may be gradual or abrupt. Although a return to the premorbid state either spontaneously or with treatment is the rule, a chronic outcome is not rare(27). it was found that 21% of 97 patients studied had not recovered after 2 years and that most had the persistence of severe depressive symptoms (major depressive disorder without full interepisode recovery according to DSM-IV). Those subjects whose chronic symptoms were less severe were considered to be in partial remission. Subsequently, with the sample size expanded to 431, it was noted at a 5-year follow-up that although 50% had recovered within 6 months, 12% were still ill at 5 years (treatments were often less than optimal)(28). Risk factors for chronicity included long duration of illness prior to evaluation, history of alcoholism and other nonaffective psychiatric disorders, and low family income.

Major depressive disorder is usually a recurrent disorder. The likelihood of a single episode is well under 50%, and once recurrence is established, the risk of further episodes increases with subsequent attacks (29). The pattern of recurrence is variable and generally unpredictable. Months, and even years, may separate episodes.

Comorbidity

Major depressive disorder commonly coexists with other psychiatric conditions. Patients with dysthymic disorder usually have superimposed episodes of major depression (so-called double depression)(30). and a 68% lifetime prevalence of major depression was found among dysthymic patients. In the ECA study a 27% lifetime prevalence of alcohol and other substance abuse was found in patients with major depression (31). Anxiety disorders also coexist with major depressive disorder. A person with a major depressive episode was estimated to be at a 9 to 19 times increased risk of having an anxiety disorder(32).

Comorbidity does not imply causality, and whether major depressive disorder and another condition coexist as entirely separate entities or are products of a common diathesis, or whether one is caused by the other, remains to be determined. What is clear is that comorbidity confounds diagnosis and influences outcome adversely.

## 2.2.2 DYSTHYMIC DISORDER

Diagnosis

According to DSM IV, the "essential feature" of dysthymic disorder is "a chronic disturbance of mood involving depressed mood (or possibly an irritable mood in children and adolescents), for most of the day more days than not, for at least two years (one year for children and adolescents)". In addition to depression, two or more of the following symptoms are necessary: decreased appetite or overeating, hypersomnia or

insomnia, fatigue, poor self-esteem, impaired concentration or difficulty with decision making, and feelings of hopelessness.

Diagnostic criteria for Dysthymic Disorder

A. Depressed mood for most of the day, for more days than not, as indicated either by subjective account or observation by others, for at least 2 years. (Note: In children and adolescents, mood can be irritable and duration must be at least 1 year.)

B. The presence, while depressed, of two (or more) of the following:

(1) poor appetite or overeating

(2) insomnia or hypersomnia

(3) low energy or fatigue

(4) low self-esteem

(5) poor concentration or difficulty making decisions

(6) feelings of hopelessness

C. During the 2-year period (1 year for children or adolescents) of the disturbance, the person has never been without the symptoms in Criteria A and B for more than 2 months at a time.

D. No Major Depressive Episode has been present during the first 2 years of the disturbance (1 year for children and adolescents); i.e., the disturbance is not better accounted for by chronic Major Depressive Disorder, or Major Depressive Disorder, In Partial Remission.

Note: There may have been a previous Major Depressive Episode provided there was a full remission (no significant signs or symptoms for 2 months) before development of the Dysthymic Disorder. In addition, after the initial 2 years (1 year in children or adolescents) of Dysthymic Disorder, there may be superimposed episodes of Major Depressive Disorder, in which case both diagnoses may be given when the criteria are met for a Major Depressive Episode.

E. There has never been a Manic Episode , a Mixed Episode , or a Hypomanic Episode , and criteria have never been met for Cyclothymic Disorder.

F. The disturbance does not occur exclusively during the course of a chronic Psychotic Disorder, such as Schizophrenia or Delusional Disorder.

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

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

Specify if:

Early Onset: if onset is before age 21 years

Late Onset: if onset is age 21 years or older

Specify (for most recent 2 years of Dysthymic Disorder):

With Atypical Features

If symptoms resembling dysthymic disorder evolve from an episode of major depressive disorder, the more appropriate diagnosis would be major depressive disorder, partial remission. On the other hand, if dysthymic disorder has been present for 2 years (1 year in children and adolescents) and major depressive disorder becomes superimposed, both diagnoses should be made (the term "double depression" is often used to describe this situation) (33). Prior to the creation of the category of dysthymia in DSM-III, there existed a great number of diagnostic entities, including depressive neurosis, depressive personality, and chronic minor depression, that may or may not have accurately represented dysthymia.

In DSM-IV, a distinction is made between early-onset (i.e., before the of age 21) and late-onset (i.e., age 21 or older) dysthymia, but the usefulness of such a distinction is under debate(34). For the time being, however, one can rather simplistically consider dysthymia to be a chronic low-grade depression that, according to Murphy (35), is "an ill-defined and non-specific diagnostic `catch-all', with limited useful clinical application".

Epidemiology

In the ECA study a 3% lifetime prevalence of dysthymia was found in the adult population, with women being affected 1.5 to 3 times more often than men. Dysthymia

was also "more common in women under the age of 65, unmarried persons, and young persons with low income and was associated with the greater use of general health and psychiatric services and psychotropic drugs"(26).

Dysthymic disorder usually has an insidious onset at an early age and runs a chronic course. It is common for a dysthymic patient to say "I've been depressed for as long as I can remember."

Comorbidity

Dysthymic disorder seldom exists alone. The ECA study found that over 75% of persons with dysthymia had other conditions, the most common of which was major depressive disorder. Also overrepresented were panic disorder, any other anxiety disorder, and substance abuse, but not bipolar disorder. Other studies have found an increased comorbid incidence of attention-deficit disorder, conduct disorder, and personality disorder(36).

Etiology

The etiological theories of dysthymic disorder are usually extrapolations of those proposed for major depressive disorder (see foregoing discussion). Dysthymic disorder, a condition that has not been extensively studied, suffers from definitional boundary blurring and is usually associated with other psychiatric disorders. Howland and Thase (37) reviewed the biological studies of dysthymia and found mixed and ambiguous results as well as some similarities and differences among dysthymic subjects, subjects with major depressive disorder, and normal control subjects.

### 2.2.3 DEPRESSIVE DISORDER NOT OTHERWISE SPECIFIED

The Depressive Disorder Not Otherwise Specified category includes disorders with depressive features that do not meet the criteria for Major Depressive Disorder,

Dysthymic Disorder, Adjustment Disorder With Depressed Mood , or Adjustment Disorder With Mixed Anxiety and Depressed Mood . Sometimes depressive symptoms can present as part of an Anxiety Disorder Not Otherwise Specified . Examples of Depressive Disorder Not Otherwise Specified include

1. Premenstrual dysphoric disorder: in most menstrual cycles during the past year, symptoms (e.g., markedly depressed mood, marked anxiety, marked affective lability, decreased interest in activities) regularly occurred during the last week of the luteal phase (and remitted within a few days of the onset of menses). These symptoms must be severe enough to markedly interfere with work, school, or usual activities and be entirely absent for at least 1 week postmenses.

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

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

4. Postpsychotic depressive disorder of Schizophrenia: a Major Depressive Episode that occurs during the residual phase of Schizophrenia.

5. A Major Depressive Episode superimposed on Delusional Disorder, Psychotic Disorder Not Otherwise Specified, or the active phase of Schizophrenia.

6. Situations in which the clinician has concluded that a depressive disorder is present but is unable to determine whether it is primary, due to a general medical condition, or substance induced.

### 2.2.4 TREATMENT PRINCIPLES AND ALTERNATIVES

#### 2.2.4.1GENERAL ISSUES IN PLANNING AND INSTITUTING TREATMENT

Successful treatment of patients with depression is promoted by a thorough assessment of the patient's symptoms; past general medical and psychiatric history;

psychological makeup and conflicts; life stressors; family, psychosocial, and cultural environment; and preference for specific treatments or approaches.

The psychiatrist's task is both to effect and to maintain improvement. Treatment consists of an acute phase, during which remission is induced, a continuation phase, during which remission is preserved, and a maintenance phase, during which the susceptible patient is protected against the recurrence of subsequent depressive episodes. Depression is a very common symptom encountered in general practice and its most significant cause is depressive illness. The treatment with antidepressant drugs is very effective in almost all of the cases(38).Psychiatrists initiating treatment of a major depressive episode have at their disposal a variety of psychotherapeutic approaches, a number of medications, electroconvulsive therapy, and light therapy. These various interventions may be used alone or in combination. Furthermore, the psychiatrist must decide whether to conduct treatment on an outpatient, partial hospitalization, or inpatient basis.

2.2.4.2 PSYCHOTHERAPEUTIC INTERVENTIONS

There are a range of psychotherapeutic interventions that may be useful in depressive disorder. In practice, psychiatrists use a combination or synthesis of various approaches and strategies; these in turn are determined by and individually tailored to each patient on the basis of that person's particular conditions and coping capabilities. Furthermore, in actual application the techniques and the therapist-patient relationship are powerfully intertwined.

1. Psychotherapeutic management

Psychotherapeutic management (sometime referred to as ``supportive psychotherapy'') consists of a number of complex activities that are essential in the treatment of depression. The establishment and maintenance of a supportive therapeutic relationship, wherein the therapist empathically obtains information and gains the confidence of the patient and is available in times of crisis, is crucial in the

treatment of depression. Other essential features include maintaining vigilance toward the emergence of destructive impulses directed toward the self or others; providing a therapeutic rationale or explanation for the patient's symptoms and illness and a prescription for relief that is acceptable and mutually agreed on; providing ongoing education, knowledge, and feedback in regard to the patient's illness, prognosis, and treatment; guiding the patient in reference to the patient's environment including interpersonal relationships, work, living conditions, and other medical or health related needs; assisting the patient in scheduling absences from work or other responsibilities as required; discouraging the patient from instituting major life changes that might be predicated on the depressive state; helping to bolster the patient's morale by strengthening expectations of help and hope for the future; enlisting the support of others in the patient's social network and supporting them as well if need be; setting realistic, attainable, and tangible goals; and encouraging the patient to seek new success experiences, however small, including greater engagement with the outside world (e.g., vocational, social, and religious activities). The actual delivery of psychotherapeutic management must be skillfully improvised and individually tailored within the framework of a helpful and trusting doctor-patient relationship.

2. Psychodynamic psychotherapy and psychoanalysis

A number of psychotherapeutic interventions are now subsumed under the terms ``psychodynamic psychotherapy'' and ``psychoanalysis.''

These therapies acknowledge some debt to Freud's original conceptualization of the psychodynamics of depression, in which central importance was ascribed to a relationship with a lost object that is highly ambivalent, resulting in repressed self-directed rage, increased self-criticism, and self-destructive impulses.

The efficacy of long-term psychodynamic psychotherapy or psychoanalysis in either the acute or maintenance phase of major depression, either in conjunction with pharmacotherapy or alone, has not been subjected to controlled studies.

3. Brief therapy

Brief psychodynamic psychotherapy may be used in the acute-phase treatment of depression, especially as an adjunct to pharmacologic treatment. The efficacy of brief psychodynamic psychotherapy as a single modality in the treatment of major depression has not been conclusively demonstrated by controlled studies; Although it has been shown to be more effective than a waiting list control (31), the latter is considered a less than satisfactory control condition. Its effectiveness in comparison to other psychotherapeutic approaches requires further research. Research on combined pharmacotherapy and brief psychodynamic psychotherapy (39) is equally sparse and inconclusive. The efficacy of brief therapy in the continuation or maintenance phase is not known.

4. Interpersonal therapy

Interpersonal therapy seeks to recognize and explore depressive precipitants that involve interpersonal losses, role disputes and transitions, social isolation, or deficits in social skills.(40)It maintains that losses must be mourned and related affects appreciated, that role disputes and transitions must be recognized and resolved, and that deficits in social skills must be overcome in order to permit the acquisition of social supports. There is some evidence in controlled studies that interpersonal therapy as a single agent is effective in reducing depressive symptoms in the acute phase of nonmelancholic major depressive episodes of lesser severity(41). and that it is especially effective in ameliorating vocational and social aspects of the patient's dysfunction. For the pharmacotherapy-responsive patient, the role of added interpersonal therapy as a maintenance treatment is still under study(42).

Nevertheless, there is evidence that interpersonal therapy during the maintenance phase can have a useful effect, especially for patients with recent psychosocial conflicts or with work or marital difficulties. Interpersonal therapy alone is an alternative maintenance treatment for patients who are clearly nonresponsive to or intolerant of trials of various medications.

5. Behavior therapy

Behavior therapy of depression is based on a functional analysis of behavior theory and/or social learning theory. The techniques involve activity scheduling , self-control therapy, social skills training, and problem solving.

Behavior therapy has been reported to be effective in the acute treatment of patients with mild to moderately severe depressions, especially when combined with pharmacotherapy (43). Studies of the prophylactic value of behavior therapy in the acute phase, once discontinued, have been inconclusive(44) The utility of behavior therapy in continuation- and maintenance-phase treatment of depression has not been subjected to controlled studies.

6. Cognitive behavior therapy

The cognitive approach to psychotherapy maintains that irrational beliefs and distorted attitudes toward the self, the environment, and the future perpetuate depressive effects and that these may be reversed through cognitive behavior therapy. (45)There is some evidence that cognitive therapy reduces depressive symptoms during the acute phase of less severe, nonmelancholic forms of major depression but not significantly differently from pill placebo coupled with clinical management (41).

7. Marital therapy and family therapy

Marital and family problems are common in the course of mood disorders: comprehensive treatment demands that these problems be assessed and addressed. Marital and family problems may be a consequence of depression but may also increase vulnerability to depression and in some instances retard recovery (46).

Techniques for using marital/family approaches for the treatment of depression have been developed. These include behavioral approaches , a psychoeducational approach, and a ``strategic marital therapy'' approach . In addition, the use of family therapy in the inpatient treatment of depressed patients has been studied (47).

Research suggests that marital and family therapy may reduce depressive symptoms and the risk of relapse in patients with marital and family problems(48). The role of these treatments for depressed patients without specific family or marital discord is less clear.

8. Group therapy

The role of group therapy in the treatment of depression is based on clinical experience rather than on systematic controlled studies. It is particularly useful in the treatment of depression in the context of bereavement or such common stressors as chronic illness. Individuals in such circumstances particularly benefit from the example of others who have successfully dealt with the same or similar challenges. Survivors are offered the opportunity to gain enhanced self-esteem by making themselves models for others, and they offer newer patients successful role models.

Medication maintenance support groups, such as those comprising lithium-treated patients, offer similar benefits. In addition, such groups provide information to the patient and to family members regarding prognosis and medication issues, thereby providing a psychoeducational forum that makes a chronic mental illness understandable in the context of a medical model.

9. Selection and implementation of specific therapies

Patient preference plays a large role in the choice of a particular form of psychotherapy. In guiding the choice of individual therapy, the psychiatrist should consider that an interpersonal approach may be most useful for patients who are in the midst of recent conflicts with significant others and for those having difficulty adjusting to an altered career or social role or other life transition; a cognitive approach can be helpful for patients who seek and are able to tolerate explicit, structured guidance from another party. A psychodynamic or psychoanalytic therapeutic approach may best help those with a chronic sense of emptiness; harsh self-expectations and self-underestimation; a history of childhood abuses, losses, or separations; chronic interpersonal conflicts; or coexisting axis II disorders or traits. Factors contributing to the

success of a psychodynamic or psychoanalytic modality include motivation, the capacity for insight, psychological mindedness, a capacity to form a relationship, mild to moderate illness, and a stable environment.

Another factor influencing the selection of psychotherapeutic treatment is the stage and severity of the depressive episode. During the initial phase of a severe depression, depending on the patient's personality, social network, and other factors, the focus may have to include support and psychoeducation for the patient and the family, permission for the patient to excuse himself or herself from duties impossible to perform, and assistance regarding the making or postponing of major personal and business decisions. Some patients at this stage may not have the emotional energy or cognitive ability required for insight-oriented treatment. If indicated, this may be initiated later in the course of recovery.

The impact of the frequency of psychotherapeutic treatment on treatment outcome has not received the same scrutiny in controlled studies as have specific aspects of pharmacologic treatment (e.g., dosing); multiple considerations apply to the practice of psychotherapy that have little counterpart in the sphere of psychopharmacology. The psychiatrist must take into account not only the minimum frequency at which contact is required for a particular psychotherapeutic treatment but also other management factors, such as the frequency of visits required to ensure medication compliance, to monitor suicide risk, and to create and maintain a therapeutic relationship. Also affecting the frequency of psychotherapeutic contact are the severity of illness, presence and intensity of suicidal intent, the patient's cooperation with treatment, availability of social supports, and presence of coexistent general medical problems. The frequency of outpatient visits during the acute phase may therefore vary from once a week or every other week in routine cases to as often as several times a week. Treatments that aim at developing insight through free association and analysis of the transference tend to require more frequent and regular visits. During the continuation and maintenance phases, the frequency of visits may vary from once every several months, if the visits are for the purpose of providing psychotherapeutic management for

stable patients, to once or more per week, if active psychotherapy is to be maintained. Psychodynamic psychotherapy requires greater frequency, and if psychoanalysis is indicated, the frequency will be three to five times a week. Some patients with depression of mild severity can be treated with psychotherapeutic management or with psychotherapy alone; in such cases, the data indicate no difference in benefit between medication (in this case, imipramine) coupled with clinical management versus interpersonal psychotherapy, cognitive behavior therapy, or clinical management and pill placebo (36). Psychotherapy alone may be similarly sufficient and effective for those with primarily situational forms of depression (64). Even in cases of mild depression, if the symptoms do not respond to psychotherapy, somatic treatment should be considered. Optimal treatment of major depression that is chronic or is moderate to severe generally requires some form of somatic intervention, in the form of medication or electroconvulsive therapy, coupled with psychotherapeutic management or psychotherapy.

2.2.4.3 SOMATIC INTERVENTIONS

2.2.4.3.1 Antidepressant medications

a. General considerations. For cases of first-episode major depression uncomplicated by coexistent general medical illness or by special features such as atypical, psychotic, or bipolar symptoms, many equally effective agents are available. Antidepressant medications can be grouped as follows: 1) cyclic antidepressants, which include the tricyclic antidepressants as well as amoxapine, maprotiline, bupropion, and trazodone; 2) selective serotonin-reuptake inhibiting antidepressants, which currently include fluoxetine and sertraline but are likely to increase in the near future; and 3) monoamine oxidase (MAO) inhibitors, which include the commonly used phenelzine, isocarboxazid, and tranylcypromine.

Before the initiation of pharmacologic treatment, it is important to be aware of the possibilities of coexisting substance use disorders and of the existence of and

treatments for general medical conditions, because of the danger of drug interaction upon initiation of antidepressant medication treatment. In the first 3 weeks 10%-15% of patients drop out of medication trials. For those who continue through this initial period, the rate of response to antidepressants is reported to be as high as 60%-70% for all currently available agents; however, the rate of complete remission may be substantially lower. Patients may show some improvement by the end of the first week (49) but may not fully respond for more than 4 to 6 weeks (50) .Therefore, adequacy of response cannot be judged until after this period of time.

In nonselected cases of major depression, the data indicate similar rates of response to all antidepressant drugs; therefore, the choice must be predicated on other factors. These include the drug's tendency to evoke a particular constellation of side effects, as well as specific factors related to the patient's psychiatric and medical history, family history of psychiatric disorder, and response to specific treatments. Some patients may wish to take into account the costs of the various agents considered. Fluoxetine, sertraline, and bupropion have certain advantages given these agents' relative safety in overdose and their equivalent therapeutic efficacy compared to older agents. No one medication can be recommended as optimal for all patients because of the substantial heterogeneity among patients in their likelihood of beneficial response to these medications and the nature, likelihood, and severity of side effects. Furthermore, patients vary in the degree to which particular side effects and other inconveniences of taking medications (e.g., cost and dietary restrictions) affect their preferences.

b. Side effects. Adherence to a pharmacotherapeutic regimen is in most cases a prerequisite for the effective treatment of major depression. Antidepressant medications are capable of inducing unpleasant or even intolerable side effects; careful attention to the emergence of such complications enables the physician to effectively treat them or to select an alternative agent, thereby maximizing compliance with treatment.

2.2.4.3.2 INFLUENCE OF FAMILY HISTORY ON TREATMENT

2.2.4.3.2.1 Family history of depression

The presence of a positive family history of recurrent depression increases the chances that the patient's own illness will be recurrent and that the patient will not fully recover between episodes.

2.2.4.3.2.2 Family history of bipolar disorder

The presence in a depressed patient of a positive family history of bipolar disorder or acute psychosis probably increases the chances that the patient's own depressive disorder is a manifestation of bipolar rather than unipolar disorder and that antidepressant therapy may incite a switch into mania (113). Patients with such a family history should be particularly closely questioned regarding a prior history of mania or hypomania, since lithium used alone or in conjunction with another antidepressant is particularly likely to exert a beneficial effect in depressed patients with bipolar disorder. Depressed patients with a family history of bipolar disorder should be carefully observed for signs of a switch to mania during antidepressant treatment.

2.2.4.3.3 TREATMENT IMPLICATIONS OF VARIOUS DEMOGRAPHIC AND PSYCHOSOCIAL VARIABLES

2.2.4.3.3.1 Major stressors

Major depression may follow a substantial adverse life event, especially one that involves the loss of an important human relationship or life role. Major depressive episodes following life stresses are no less likely than others either to require or to benefit from antidepressant medication treatment. Nonetheless, attention to the relationship of both prior and concurrent life events to the onset, exacerbation, or maintenance of depressive symptoms is an important aspect of the overall treatment approach. A close relationship between a life stressor and major depression suggests the potential utility of a psychotherapeutic intervention, coupled, as indicated, with somatic treatment.

2.2.4.3.3.2 Bereavement

Bereavement is a particularly severe stressor and is commonly accompanied by the signs and symptoms of major depression. Historically, such depressive manifestations have been regarded as normative, and presentations otherwise diagnosable as major depression are therefore diagnosed in DSM-IV as ``uncomplicated bereavement'' when they begin within the first 3 months of the loss (10) Data indicate that almost one-quarter of bereaved individuals meet the criteria for major depression at 2 months and again at 7 months and that many of these people continue to do so at 13 months(51) Individuals with more prolonged depressive manifestations tend to be younger and to have a history of prior episodes of major depression. Although psychiatrists formerly believed that in most cases there was little reason to treat the depressive symptoms of bereavement with antidepressants or psychotherapy, it is now recognized that these treatments should be used when the reaction to a loss is particularly prolonged and psychopathology and functional impairment persist.

2.2.4.3..3.3 Family distress

The recognition of a problem in the family setting is important in that such a situation constitutes an ongoing stressor that may hamper the patient's response to treatment. Ambivalent, abusive, rejecting, or highly dependent family relationships may particularly predispose to depression. Such families should be evaluated for family therapy, which may be used in conjunction with individual and pharmacologic therapies. In some cases the stresses imposed on the patient by the family conflict may be so severe that hospitalization is indicated as a means of removing the patient from an otherwise unavoidable stressor. Even in instances where there is no apparent family dysfunction it is important to provide the family with education about the nature of the illness and to enlist the family's support and cooperation.

2.2.4.3..3.4 Old age

Indications for psychotherapy for the elderly are essentially the same as for younger patients. The elderly typically display more vegetative signs and cognitive disturbance and complain less of subjective dysphoria than do their younger

counterparts; depression may consequently be misattributed to physical illness, dementia, or the ageing process itself. It is recognized, however, that depression and general medical illness frequently coexist in this age group, and those undergoing their first major depressive episode in old age should be regarded as possibly harboring an as yet undiagnosed neurological or other general medical disorder that is responsible for the depressive condition. Some medications commonly prescribed for the elderly (e.g., beta blockers) are thought to be risk factors for the development of major depression. The clinician should carefully assess whether a given agent contributed to the depression before prematurely altering what may be a valuable medication regimen.

While elderly patients typically require a lower oral dose than younger patients to yield a particular blood level and tolerate a given blood level less well, the blood levels at which antidepressant agents are maximally effective appear to be the same as for younger patients. Elderly patients are particularly prone to orthostatic hypotension and cholinergic blockade, discussed elsewhere; for this reason, fluoxetine, sertraline, bupropion, desipramine, and nortriptyline are frequently chosen rather than amitriptyline, imipramine, and doxepin. Although the role of stimulants for antidepressant monotherapy is very limited, these compounds have some role in apathetic depression in elderly patients with complicating general medical conditions.

2.2.4.3.3.5 Gender

The diagnostic assessment for women, in particular, should include a detailed inquiry regarding sexual and physical abuse and reproductive life history, including menstruation, menopause, birth control, and abortion.

Some women who are taking birth control pills require higher doses of tricyclic antidepressants because of the induction of the hepatic enzymes responsible for drug metabolism. While newly menopausal women may exhibit depressive symptoms, there is no established role for estrogen replacement in the treatment of full-blown major depression in this group of patients.

An extensive review of overall efficacy of antidepressant drug treatment in patients with uncomplicated major depression indicates that approximately 65% of patients treated with antidepressants improve compared with 30% on placebo.(8,33)

There is no consensus regarding which clinical and psychosocial variables are associated with the response to the treatment.

2.2.4.3.4 ASSESSMENT OF THE NEED OF HOSPITALIZATION

2.2.4.3.4.1 The patient lacking the capacity to cooperate with treatment

Depressed patients who, along with any available social supports, are unable to adequately care for themselves, cooperate with outpatient treatment of their depression, and/or provide reliable feedback to their psychiatrist regarding their clinical status are candidates for hospitalization, full or partial, even in the absence of a tendency toward intentional self-harm.

2.2.4.3.4.2 The patient at risk for suicide and/or homicide

Patients with suicidal or homicidal ideation, intention, and/or a plan require close monitoring. Patients at particularly high risk may benefit from hospitalization, where close observation, restricted access to violent means, and more intensive treatment are possible.

2.2.4.3.4.3 The patient lacking psychosocial supports

Recovery from major depression is aided by an environment that encourages safety, constructive activity, positive interpersonal interactions, and compliance with treatment. If the environment lacks these features or exposes the patient to undesirable or dangerous activities, such as alcohol or drug abuse, admission to a hospital or an intensive day program should be considered.

2.2.4.3.4.4 Other factors influencing the need for hospitalization

Hospitalization may be necessary for patients with complicating psychiatric or general medical conditions that make outpatient treatment unsafe. Detoxification and/or withdrawal from psychoactive substances may necessitate hospitalization. Depressed patients, especially those with psychotic symptoms, may engage in bizarre or imprudent behavior that may endanger their important relationships, reputation, or assets; hospitalization may be necessary to protect the patient and others. Patients who have not responded to outpatient treatment may need to be hospitalized in order to receive the type or intensity of treatment that is deemed necessary.

## 2.3 CLINICAL AND FUNCTIONAL STATUS OF DEPRESSIVE PATIENTS

I would like to address the important secondary research question about the relationship between depression and daily functioning following a sufficient period of treatment of about 3 months.

First, in prior cross-sectional analyses, depressive symptoms were found to be uniquely associated with limitations in well-being and functioning . The clinical course of depression has been shown to be associated with functional outcomes (disability days) in a previous study. Second, it was reported previously that persons who exceeded a cut off point at screening but who did not have depressive disorder had almost as much limitation in functioning and well-being as those with the disorder, especially among patients in the general medical sector.

Wells and colleagues(52) have shown that depressed medically ill patients have significantly more bodily pain and functional impairment than do chronic sufferers of medical conditions who have no depressive symptoms. They note that depression is as physically and mentally disabling as the most severe chronic medical disorders. Only advanced coronary artery disease produced more "bed-disability days" than depression; only arthritis caused more chronic pain. Depression is more disabling than diabetes, hypertension, arthritis, and gastrointestinal or back disorders in terms of

reducing a patient's level of physical function and ability to work, function socially, and provide for home and family.

### 2.3.1 MEASURING OF THE CLINICAL STATUS

For the clinical status assessment in depression I adopt HAM-D Thai version(53). With the property of the psychometrics :The kappa value of the scale was 0.87. The Spearman's correlation coefficient which indicated the validity was -0.8239 ($P < 0.0001$). The internal consistency was good (standardized Cronbach's alpha coefficient equal 0.74). HAM-D was an acceptable and widely used measurement for clinical assessment in depression.

The HAM-D scale first published in 1960 and since revised, contains items that assess somatic symptoms, insomnia, working capacity and interest, mood, guilt, psychomotor retardation, agitation, anxiety, and insight. The HAM-D offers high validity and reliability in measuring response to treatment..

The HAM-D is sensitive in measuring response to treatment.

The HAM-D is designed to measure the severity of illness in patients already diagnosed as having depression. Only the 31 item HAM-D includes items used to rate the reversed vegetative symptoms of depression, such as oversleeping, overeating, and weight gain, which are particularly common in younger people.

The HAM-D is designed to measure severity of illness in patients already diagnosed with depression. The method of assessment is fairly straightforward. There should be an initial interview conducted in a relaxed and easy manner, giving patients time to unburden themselves, speak of problems, and ask questions. At subsequent assessments, interviews can be briefer and more focused.2 For some symptoms, it is difficult to elicit enough information from the patient to permit full quantification. In such cases, if a symptom is present, score ; if absent, score 0; and if doubtful or trivial, score 1. For those symptoms where more detailed information can be obtained, the score is

expanded: 2 indicates mild symptoms, 3 moderate symptoms, and 4 severe symptoms. Therefore, the higher the score, the more severe the depression. Successful therapy should result in a lower score in subsequent testing. Most experts agree that a reduction in the total score of at least 50% is necessary to consider a treatment to be effective.

Most people with clinical depression score 14 or more on the HAM-D. The maximum possible score for the 17-item HAM-D is 52; in practice, very few patients score above 35. Most people with depression score 14 or more. Scores of 30 or higher are more typical of severely depressed patients.

### 2.3.2 MEASURING OF FUNCTIONAL STATUS

A patient's functional status can be assessed in multiple domains ,especially interpersonal, domestic, vocational and educational. A patient's ability for self care, independent living, personal relationships and recreational pursuits are all important aspects to be considered. The evaluation will come together with the quality of life and functioning scale.

#### 2.3.2.1 Quality of life evaluation

For the quality of life evaluation I chose the Short Form 36 Health Survey (SF-36) (54, 55) because it is a multipurpose short-form measure of generic health status. The Short Form 36 Health Survey (SF-36) is a questionnaire that is widely used to measure health-related quality of life.

The dimensions of quality of life (56) are

1. Physical functions : for example, mobility, self care.
2. Emotional functions: for example, depression, anxiety.
3. Social functions: for example, intimacy, social support, social contact.
4. Role performance: for example, work, housework.
5. Pain

6. Other symptoms for example fatigue, disease specific symptoms.

The 36-item short-form health survey (the SF-36) includes eight multi-item measures of functioning and well-being that represent physical and mental health status: physical functioning (10 items), role limitations due to physical health problems (four items), role limitations due to emotional health problems (three items), social functioning (two items), emotional well-being (five items), pain (two items), energy and/or fatigue (four items), and general health perceptions (five items).

The physical functioning scale assesses limitations due to health in activities that range from self-care to vigorous activities. The role-limitations scales measure the extent to which physical health (emotional problems) interferes with doing work or other regular daily activities. The extent to which health interferes with social activities with family, friends, neighbors, or groups is assessed by the social-functioning scale. The emotional-well-being scale assesses general mood or effect, including depressive symptoms, anxiety, and positive well-being. Pain frequency and extent of role interference due to pain are tapped by the pain scale. The energy and/or fatigue scale assesses perceived energy level. General health perceptions are global evaluations of health, such as feeling well or ill.

Internal consistency reliability estimates (57) were 0.78 or greater for every scale. Multitrait scaling analyses (58) supported item convergence within hypothesized scales and item discrimination across scales(59). Additional empirical studies provide support for the construct validity of the measures(60).

All outcome measures are scored from 0 to 100, with 100 representing optimal health and 0 representing the poorest health on the scale.

There was a longitudinal follow-up of patients in the MOS SF-36 documents of the persistence of impairments in the functioning and well-being of patients with depression relative to patients with chronic medical illness. These impairments were

noteworthy at baseline of the study at the time of an office visit (61) and 2 years later, unrelated to an office visit. However, on many of the outcome measures, depressed patients improved over time, which is consistent with the fact that depression is often episodic and the patients were sampled at a symptomatic point of the illness. Nevertheless, the degree of persistence in functional limitations was greater than might be expected for an episodic disorder. This general conclusion applied across types of depression, even to patients with depressive symptoms but no depressive disorder and to depressed patients in both the general medical and mental health specialty sectors. The long-term functional impairment is not surprising given that about one fourth of the patients with subthreshold depression and over one half of the patients with dysthymia at baseline had a major depressive episode during follow-up.

Despite having somewhat better mental functioning and well-being at baseline than patients with depressive disorder, patients with subthreshold depressive symptoms in the general medical sector were stable over time, whereas those with depressive disorder tended to improve. The stability of functional limitations in patients with subthreshold symptoms is not due to their comorbid medical conditions because these results control the presence of medical comorbidity. Thus, this group appears to be of particular importance despite the weaker symptom presentation because of their persistent limitations, which could be due to untreated or partially treated depression.

Are the self-reports of functioning in depressed patients valid? Some have noted that depressed patients are unrealistically pessimistic, and this could result in poorer scores on self-report measures than on more objective measures. This is an important issue that requires further study. The same bias may hold for all patients with serious illnesses, but in general, studies have been focused largely on depression. The focus on self-reports emanates from the movement toward acknowledging patients' own view of their outcomes as of merit in health policy evaluations. Indeed, the results observed in the study 2 years after baseline are clinically reasonable in that depressed patients scored similarly to nondepressed patients on physical functioning, but noteworthy differences were observed on measures of mental functioning and well-being. These

and other results from the MOS SF-36 (62, 63) provide support for the validity of the self-reports of functioning and well-being. Lastly, even if depressed patients' assessments of their functioning are to some extent unrealistic, they are associated with events such as disability days and service use(4).

By following up patients over a 2-year period, it has been possible to document the long-lasting functional impairments associated with depression, whether defined by clinical disorder or subthreshold depressive symptoms, on the functional status and well-being of outpatients in both the medical and the mental health specialty sectors. The results of the study also make clear that appropriate caution is required in studying patients at the time of, or in close proximity to, an office visit for medical or mental health care. The time of a symptomatic office visit is opportune for clinical interventions, but health status measured in close proximity to this point in time may be unrepresentative of the patient's usual functional status and well-being. It is therefore critical that effectiveness studies include enough time points to separate the transitory from the long-term component of functioning and well-being.

In summary, despite substantial improvement in functional status and well-being, patients who were initially depressed at the time of a visit to their physician were for a long time afterward (ie, 2 years) still about as limited in physical health and more limited in mental health outcomes than were patients with chronic medical illnesses, regardless of whether depression was defined as depressive disorder or the broader phenomenon of depressive symptoms, and the same was true across different specialty sectors. The substantial persistence of limitations in functioning and well-being of depressed outpatients underscores the importance of efforts to improve the treatment of depressive illness in both the medical and the mental health specialty sectors, as reflected by clinical practice guidelines.

2.3.2.2 Functioning evaluation

For the functioning evaluation "Behavior and symptom Identification Scale (BASIS-32)" developed by Susan V.Eisen (64, 65) is an appropriate measurement.

The BASIS-32 is one of four quality indicators McLean Hospital has identified to measure clinical performance and is used to look at the immediate impact of hospital care. Four main features characterize the BASIS-32 and distinguish it from other outcome measures. First, the BASIS-32 was empirically derived from the patient's perspective (66). Second, it was developed with an acutely ill psychiatric inpatient population. Third, it includes the major psychiatric symptoms and functioning difficulties in one measure, and fourth, it combines individualized and standardized approaches to patient assessment.

BASIS-32 results tell us how patients feel before and after receiving inpatient care, which can be held up as a reflection of the quality of care they received. The BASIS-32 was developed to provide a brief, standardized assessment of symptoms and problems. Its empirical derivation focused on the patient's perspective. In addition to its usefulness in assessing outcome, the BASIS-32 can be used by clients and clinicians together to help identify, assess, and compare aspects of problem behavior at specified intervals during and after treatment(8, 67, 68).

Factor analysis of the instrument yielded five factors, on which subscales were based: relation to self and others, daily living and role functioning, depression and anxiety, impulsive and addictive behavior, and psychosis. Internal consistency of the subscales ranged from .63 to .80. Internal consistency of the full 32-item scale was .89. Test-retest reliability ranged from .65 to .81 for the five subscales. Concurrent and discriminant validity analyses indicated that the BASIS-32 ratings successfully discriminated between patients hospitalized six months after admission from those living in the community, patients working at follow-up from those not working, and patients with

particular diagnoses. Follow-up ratings indicated that the BASIS-32 is sensitive to changes in symptomatology and functioning.

## 2.4 SATISFACTION EVALUATION

Patients' satisfaction is a main criterion by which the care services should be judged, but the attitudes of the consumers of health care are an important factor which must be considered in evaluating quality of the services.

Quality is multifaceted and its assessment requires multiple measures of process, such as response times, telephone advice rates, prescribing, and admission rates combined with measures of outcome such as health status and satisfaction(69). Low patient satisfaction may result in poor compliance with the potential for waste of resources and suboptimal clinical outcome(70).Satisfaction of the legitimate demands of patients is therefore an objective of all medical care and should be included as an outcome measure(71, 72).

Measuring patient satisfaction with medical care is not straightforward. One approach is to use qualitative methods(71),but these are difficult to use for routine large scale service evaluation. An alternative is to use a quantitative questionnaire. Such a questionnaire must be reliable–that is, the random error of responses must be minimised so that consistency of measurement is achieved. The questionnaire must also be valid–that is, it must be a true measure of what it purports to measure and must not be subject to bias. Validity can further be characterised as face, content, criterion, or construct validity.

With the satisfaction of care ,CSQ(73, 74) (The client satisfaction questionnaire) will be used because it is a self-report questionnaire constructed to measure satisfaction with services received by individuals and families. It has been broadly adopted, nationally and internationally by investigators with good psychometric properties. Coefficient alpha for CSQ-8 is 0.93, indicating that it possesses a high degree of internal

consistency. In other words, the eight items provide a homogeneous estimate of general satisfaction with services.

# CHAPTER 3

# RESEARCH METHODOLOGY

This chapter is concerned with the methodology which was used to conduct the study. The research design, the sample and data collection procedures, instrument development and data analysis procedures are also described.

## 3.1 RESEARCH DESIGN

A prospective descriptive design was used to obtain the data of clinical and functional status of the depressive patients after 3 months of psychiatric care at the Department of Psychiatry, Ramathibodi Hospital during Jun-Dec 1999.

## 3.2 RESEARCH METHODOLOGY

### 3.2.1 POPULATION:

#### 3.2.1.1 Target population:

Depressive disorder patients.

#### 3.2.1.2 Sample population:

The sample group is depressive patients at Ramatibodi hospital (The Psychiatric Medical Centre).

#### 3.2.1.3 Criteria for the eligibility of samples to study

Inclusion Criteria

Patients may be included in the study only if they meet all of the following criteria :

1) Male or female patients aged 14-65 years with depressive disorder.
2) New depressive episode.
3) Severity of the illness > 18 in Hamilton rating score for depression.
4) Informed verbal consent.

Exclusion Criteria

1) Patients with severe cognitive dysfunction (severe mental retardation or severe dementia etc.)

3.2 .2 SAMPLE SIZE

The sample size is derived from a formula using the proportion of the clinical response to the treatment from the observational design.

The suitable formula(75) for sample size calculation is

$$\text{Sample size } n = \frac{Z\alpha^2 PQ}{d^2}$$

Specify $\alpha$ = 5%

$Z\alpha$ = 1.96

P = proportion of the response=0.65(7)

Q= proportion of the non response =1-P = 0.35

d = Precision of the difference = 10%

$$n = \frac{1.96^2 * (0.65)(0.35)}{0.1*0.1} = 87$$

Dropout rate = 10 %

$$n = 87/0.9 \approx 97$$

3.2.2.1 Sampling

This study will include all the patients who are eligible cases within the period of study because this is an observational study at one setting. No sampling technique was used.

# CHAPTER 4

# INSTRUMENT & DATA COLLECTION

## 4.1 OUTCOME MEASUREMENT

Patients baseline data: age, sex, diagnosis, severity of illness, duration of illness, education, supporting system, family history, previous psychiatric history(Appendix).

Physician's background data

Mode of treatment.

Clinically response rate.

Score from HAM-D (Thai Hamilton rating scale for depression) (Appendix).

Score from BASIS-32 (Thai Behavior and Symptom Identification Scale) (Appendix).

Score from SF-36( Thai MOS 36 item short-form health survey) (Appendix).

Score from CSQ (Thai Client Satisfaction Questionnaire) (Appendix).

## 4.2 DATA COLLECTION PROCEDURES

All the patients at OPD will be screened by a self administered questionnaire ( Appendix ) for depressive symptoms. The potential cases will be assessed by the principal investigator by mental status examination and HAM-D scale for eligible criteria.

After verbal consent to participate in the study, eligible patients will then be assessed by self administered BASIS-32 and SF-36 before undergoing treatment.

The second measurement will be 2 weeks after psychiatric care with the HAM-D for clinical assessment.

The third measurement will be 6 weeks after psychiatric care with the HAM-D for clinical assessment.

The final measurement will be 12 weeks after psychiatric care using HAM-D,SF-36, BASIS-32 as the first assessment and additional CSQ will be administered.

This information was reflected by psychometric scales administered by one to three trained raters who were not involved in the clinical management of the patients. Interrater reliability was reflected by intraclass correlation coefficients of at least 0.7 for the Hamilton depression scale. The Hamilton scale was completed using information from direct observation during the time intervals described.

Interrater reliability for this instrument was fostered by periodic training sessions and monitored on a regular basis.

The physician who takes care of the patients will be asked for the background information and the mode of treatment for each patient.

## 4.3 INSTRUMENT DEVELOPMENT

The instruments which need to be developed and validated before using in the study are SF-36, BASIS-32 and CSQ.

Steps in the development of a Thai version.

1. Translate into Thai.
2. Back -translated by bilingual person to have the same meaning close to the original version.
3. Validity and reliability testing.

### 4.3.1 VALIDITY

Validity concerns the extent to which an instrument measures what it is intended to measure.

#### 4.3.1.1 Content Validity

The validity of a questionnaire is concerned with whether the instrument adequately probes the specific domain that is required and if there is any difference with the culture in Thai. To verify this, the Thai version BASIS-32 and CSQ, SF-36 will be sent to the content experts(one psychiatrist and two social scientists). The experts are asked to give opinions by scoring.

The score obtained from each item will be calculated to demonstrate the correlation of item to item to content of variables by using formula(76) (42) :

$$IC = \frac{\sum R}{N}$$

Where IC= Item correlation

R = Total score of that item

N = Number of experts

The content validity with the IC in each item should be over 0.5 to be accepted.

4.3.1.2 Criterion Validity

These questionnaires have to be compared with gold standard. There is no definite gold standard so the criterion validity will not be estimated.

4.3.1.3 Construct validity

These are translated versions of the original BASIS-32, SF-36, CSQ-8, which have already been assessed in construct validity by operationally defined and hypothetical constructs , so I will not validate this aspect due to the aforementioned assumption .

4.3.2 RELIABILITY

The reliability is a measurement of the reproducibility of the data collected during the study. Reliability can be obtained in two most importance parts; test for internal consistency and stability.

4.3.2.1 Internal consistency

Internal consistency assesses the extent to which individual items are correlated with each other and with over all scale score.

These questionnaire uses Likerts scale continuous data in measurement. Cronbach's Alpha is the appropriate statistical test(76). The data can be calculated by using the following formula:

$$\alpha = \frac{n}{n-1}\left\{1 - \frac{\sum Si^2}{St^2}\right\}$$

Where $\alpha$ = Cronbach's Alpha

$n$ = Number of items

$Si^2$ = Items Variance

$St^2$ = Total Variance

The standard cut point for internal consistency should be 0.8 .

4.3.2.2 Split-half method

The total set of items is divided into halves and the scores on the halves are correlated to obtain an estimate of reliability.

The statistical formula used is Spearman-Brown's formula(76) .

$$P_{xx'} = \frac{2}{1 + P_{xx'}}$$

Where $P_{xx'}$ = reliability coefficient for the whole test

$P_{xx'}$ = split-half correlation

4.3.2.3 Stability

The stability is the reproducibility of a measure administered on different occasions. As these questionnaires are self-administered , the test retest reliability is the only method to test for stability.

The test retest reliability will be performed with a period of time for retest about one week after the first test.

The agreement index(76) is measured in term of intraclass correlation coefficient (ICC).

$$ICC = \sigma^2 sample \ / (\sigma^2 sample + \sigma^2 error)$$

# CHAPTER 5

# RESULTS OF THE INSTRUMENT DEVELOPMENT

## 5.1 SETTING

The study took place at the outpatient and inpatient Department of Psychiatry , Ramatibodhi Hospital during April 1,1999 – June 30, 1999 with the assistance of 4 psychiatric nurses at two settings.

## 5.2 PATIENT SAMPLE AND FOLLOW UP

During the study period the sample consisted of mental disorder patients. The nurse handed out information of this study to all the patients on arrival. The entry criteria were that the patient gave consent, presented a symptom of more than seven days' duration of mental illness. If the patient was eligible, baseline data was completed and gave the BASIS-32, SF-36, CSQ-8 Thai version to be scored. All were followed up with the postal questionnaire after 2 weeks from the previous score. Demographic data of the samples are shown in Table 2.

Table 2 Demographic data of the sample( N=100)

| Characteristic | N | % |
|---|---|---|
| Age (year) Range | 20-73 | |
| Mean age (S.D.) | 36.35(10.42) | |
| Median | 35 | |
| Sex | | |
| Male | 32 | 32 |
| Female | 62 | 62 |
| Education | | |
| Primary school | 12 | 12 |
| Secondary school | 26 | 26 |
| Vocational | 15 | 15 |
| Bachelor degree | 40 | 40 |
| Post-graduate | 7 | 7 |
| Diagnosis | | |
| Organic disorder | 3 | 3 |
| Schizophrenia | 20 | 20 |
| Other psychotics | 9 | 9 |
| Mood disorder | 35 | 35 |
| Neurotic disorder | 33 | 33 |

5.3 RESULT

Back translation gives almost the same meaning as the original version. So we can have some assurance that the psychometric properties of the scale have remained constant.

PROPERTIES OF THE INSTRUMENT

5.3.1 BASIS-32

5.3.1.1 VALIDITY STUDIES

CONTENT VALIDITY

The IC value of Thai BASIS scale ranges from 0.75-1 from 5 experts with 3 psychiatrists and 2 social scientists so the content validity is accepted.

Concurrent and discriminant validity have not been analysed with the Thai version but with the original version which indicated that the BASIS- 32 ratings successfully discriminated patients hospitalized six months after admission from those living in the the community, patients working at follow-up from those not working, and patients with particular diagnoses.(77) Follow-up ratings indicated that the BASIS-32 is sensitive to changes in symptomatology and functioning.

5.3.1.2 RELIABILITY STUDIES

Internal consistency

The reliability coefficient tests were performed using the SPSS version 7.5 for window. The Cronbach's alpha compare to the English version was shown in table 4

Table 3 The Cronbach's alpha in each domain of BASIS-32 English and Thai version.

| Domain | Items | Alpha(Thai) | Alpha(Eng) |
|---|---|---|---|
| 1. Daily living and role functioning | 1,5,13,16,21,32 | .6975 | .76 |
| 2. Respectively:relation to self and others | 7,8,10,11,12, 14 15 | .8708 | .80 |
| 3. Depression and anxiety | 6,9,17,18,19,20 | .8303 | .74 |
| 4. Psychosis | 22,23,24,27 | .6802 | .63 |
| 5. Impulsive and addictive behavior | 25,26,28,29,30,31 | .7052 | .71 |
| Total scale | | .9349 | .89 |

The coefficient of the total items is 0.9349 . The value is acceptable based on the cut off point set for internal consistency (>0.8). When compared to the original version ( 64) they are quite similar in each domain.

In some domains such as daily living and role functioning, depression and anxiety and psychosis in the Cronbach's Alpha shows less than 0.8, When analyzed in subscale the alpha (if item deleted) is not very different with the total Cronbach's Alpha.

Using split half analysis .Alpha for part 1 is 0.9080 compared to part 2 which is 0.8657 and these are quite correlated so the reliability is good for this instrument.

5.3.1.2.2 Test-retest study

The Pearson correlation of the test and retest score after two weeks apart comes out; as follows;-

Table 4 The result of the Pearson correlation between the test and retest of BASIS-32 Thai version

| Domain | Test | Retest | Correlation |
|---|---|---|---|
| | Mean score(S.D.) | Mean score (S.D.) | |
| Daily living and role functioning | 9.06(4.66) | 8.7(5.1) | 0.517 |
| Respectively:relation to self and others | 10.26(6.3) | 10.77(6.4) | 0.676 |
| Depression and anxiety | 8.98(5.77) | 8.32(5.7) | 0.834 |
| Psychosis | 2.98(3.07) | 3.25(3.36) | 0.725 |
| Impulsive and addictive behavior | 4.91(3.97) | 6.81(5.61) | 0.410 |
| Total scale | 40.37(2.37) | 41.57(2.66) | 0.76 |

This instrument BASIS-32 Thai version has given the test outcome of acceptable validity and reliability for the total scale, the same as the original version.

5.3.2 SF-36

Table 5 Mean score of each domain of SF-36 Thai version

| | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| Mental health | .00 | 92.00 | 54.7629 | 21.0029 |
| General health | 14.00 | 85.00 | 53.8065 | 16.0693 |
| Bodily pain | .00 | 100.00 | 69.6250 | 26.1874 |
| Physical functioning | .00 | 85.00 | 29.6907 | 23.3275 |
| Role, physical | .00 | 100.00 | 55.0505 | 41.3392 |
| Role, emotional | .00 | 100.00 | 55.7823 | 44.0700 |
| Vitality | .25 | 71.25 | 35.8182 | 14.6348 |
| Social functioning | .00 | 100 | 62.875 | 25.0287 |

5.3.2.1 VALIDITY STUDIES

5.3.2.1.1 Content validity

The IC value of Thai SF-36 range from 0.6-1 from 5 experts so the content validity is accepted.

5.3.2.2 RELIABILITY STUDIES

5.3.2.2.1 Internal consistency

The reliability coefficient tests were performed using the SPSS version 7.5 for window. The coefficient alpha are:

Table 6 The Cronbach's alpha in each domain of SF-36 English(54) and Thai version

| Domain | Number of items | Alpha(Thai version) | Alpha(Eng. version) |
|---|---|---|---|
| Physical functioning | 10 | 0.88 | 0.93 |
| Role limitation due to physical problems | 4 | 0.86 | 0.89 |
| Bodily Pain | 2 | 0.82 | 0.9 |
| Social functioning | 2 | 0.60 | 0.68 |
| Mental health | 5 | 0.88 | 0.84 |
| Role limitation due to emotional problems | 3 | 0.86 | 0.82 |
| General health perceptions | 5 | 0.75 | 0.81 |
| Vitality | 4 | 0.72 | 0.86 |
| Total | | 0.92 | |

The coefficient of the total items is 0.92 . The value is acceptable based on the cut off point set for internal consistency (>0.8) .When compared to the original version

there is quite some similaririty but some domains such as general health perception and vitality,in the Thai version have less numbers in coefficient than the English Version ,The reason may be the difference of the patients or the difference of the culture.

In some domains such as social functioning, general health perception and vitality the Cronbach's Alpha shows less than 0.8. When analyzed in subscale the alpha, if item deleted, is not very different from the total Cronbach's Alpha.

Using split half analysis. Alpha for part 1 is 0.8258 compared to part 2 is 0.8724 these are quite correlated so the reliability is good for this instrument.

Test-retest study

The retest after 2 weeks of previous scoring, the intraclass correlation was 0.6.

This instrument SF-36 Thai version has given the test outcome of acceptable validity and reliability for the total scale, the same as the original version.

5.3.3 CSQ-8

5.3.3.1 RELIABILITY STUDIES

Table 7 The mean score of the samples with CSQ-8 Thai version

| | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| CS1 | 1.00 | 4.00 | 3.2887 | .6448 |
| CS2 | 2.00 | 4.00 | 3.3505 | .5781 |
| CS3 | 1.00 | 4.00 | 3.0825 | .8250 |
| CS4 | 1.00 | 4.00 | 3.6289 | .5649 |
| CS5 | 2.00 | 4.00 | 3.3918 | .6218 |
| CS6 | 3.00 | 4.00 | 3.4845 | .5024 |
| CS7 | 2.00 | 4.00 | 3.4082 | .6395 |
| CS8 | 1.00 | 4.00 | 3.7653 | .5137 |
| Tatal score | 19.00 | 32.00 | 27.4063 | 3.1575 |

Internal consistency

The reliability coefficient tests were performed using the SPSS version 7.5 for window. The coefficient alpha are shown in table 8.

Table 8 Item-total Statistics of Thai CSQ-8

| | Mean if Item Deleted | Variance if Item Deleted | Item-Total Correlation | Squared Multiple Correlation | Alpha if Item Deleted |
|---|---|---|---|---|---|
| CS1 | 24.1146 | 7.6815 | .5208 | .3660 | .7620 |
| CS2 | 24.0521 | 8.1552 | .4463 | .2929 | .7737 |
| CS3 | 24.3229 | 6.8946 | .5483 | .4159 | .7613 |
| CS4 | 23.7708 | 8.5364 | .3383 | .2030 | .7888 |
| CS5 | 24.0104 | 7.4209 | .6356 | .4672 | .7431 |
| CS6 | 23.9271 | 8.2367 | .5138 | .3308 | .7656 |
| CS7 | 24.0000 | 7.4105 | .6143 | .4497 | .7461 |
| CS8 | 23.6458 | 8.5680 | .3739 | .1886 | .7833 |

The total Cronbach's Alpha. of CSQ-8 = .7897

Using split half analysis. Alpha for part 1 is .6277 compared to part 2 which is .7308 is quite correlated so the reliability is good for this instrument.

Test-retest study

The Pearson correlation of the test and retest score after two weeks apart comes out = 0.697

## 5.4 CONCLUSION

All three measurements have good validity and reliability the same as the original version so we can use them in the outcome measurement with the psychiatric patient in Thai setting.

# CHAPTER 6

# DATA ANALYSIS & INTERPRETATION

The analysis helps to provide answers to primary and secondary research question.

## 6.1 DATA ANALYSIS

All tests were two-tailed; statistical significance was set at $\alpha$ =0.05.

The drop out will be reported.

Estimation of the magnitude of difference:

A 95 % confidence interval will be calculated for the mean and proportion of the outcome.

For the baseline data:

1.Patients baseline data : age, sex, diagnosis, severity of illness, duration of illness, education, supporting system, family history, previous psychiatric history.

2.Physician's background data

3. Mode of treatment.

These will be summarized by using descriptive statistics to present in mean and SD with continuos data and proportion with the categorical data.

For the outcomes the statistical analysis(78)are:

Table 9 The summary of the statistic analysis

| Outcome variable | Type of data | Statistical method | Variable |
|---|---|---|---|
| Clinically response | categorical data | Descriptive :Proportion | Dependent variable |
| HAM-D | continuous data | Repeated measured | Dependent variable |
| BASIS-32 | continuous data | Paired t-test | Dependent variable |
| SF-36 | continuous data | Paired t-test | Dependent variable |
| CSQ | continuous data | Describe with mean | Dependent variable |
| Response rate* Predictive factors | categorical outcome | Logistic regression | Dependent variable * Independent variable |
| Correlation between change of HAM-D * change of SF-36,BASIS-32 | continuous data* continuous data | Pearson correlation | Dependent variable * Dependent variable |

# CHAPTER 7

# RESULT

## 7.1 RESULT

The sample consisted of 96 cases of depressive disorder with the eligibility criteria. Complete follow up was for 3 months with 82 cases (85.4%). There was a 14 case (14.5%) drop out from the study with the following reasons:- loss of follow up 12 cases , attempted suicide 2 cases. In the analysis the drop out cases would be treated as non response cases (Intention to treat analysis).

### 7.1.1 GENERAL CHARACTERISTIC OF THE SAMPLE

The basic patient characteristics are summarized in table 10. The mean age of the sample was 39.2 (13.39) years, with a range of 17-65 years. The sample consisted of females 81 (84.4%) : males 15 (15.6%) = 5.4 : 1. The majority of the type of depression was Major depression, Dysthymia 47.9% and 19.8% respectively. Most of the cases have a history of medical illness 63.5%. The cases with a previous history of depression 3536.5%. From the past year 21.9% had a history of bereavement. 55.2% of the cases had a history of suicidal ideation, 14.6% had a family history of depression , 32.3% had a family history of medical illness. Most of the cases (77.1%) have no history of alcohol usage. With the economic status 42.7% had income less than 5000 baht per month and 57.3% had income more than 5000 baht per month.

The recent stress within 2-3 months showed 41% of the cases present with marital conflict. 41% problem with work, 53% problem with economics,7% problem with the law, 14% problems with a friend. There were 55.2% cases with a supporting system and 60.4% had no problem with the expense of the treatment.

Most of the cases 58.3% work in the private sector and 15.6% work in the government sector others do not work.

Table 10 Demographic characteristic of the patient sample.

| Demographic characteristic | | N (96) | % |
|---|---|---|---|
| Age Mean (S.D.) | 39.2 (13.39) | | |
| Range | 17-65 | | |
| Median | 37 | | |
| sex | Male | 15 | 15.6 |
| | Female | 81 | 84.4 |
| Type of Depression | Major Depressive | 46 | 47.9 |
| | Dysthymia | 19 | 19.8 |
| | Depression NOS | 12 | 12.5 |
| | Atypical depression | 12 | 12.5 |
| | Depression & psychosis | 2 | 2.1 |
| | Double depression | 4 | 4.2 |
| Education level | None | 6 | 6.3 |
| | Elementary | 35 | 36.5 |
| | Secondary | 16 | 16.7 |
| | Vocational | 11 | 11.5 |
| | Bachelor's degree | 26 | 27.1 |
| | Post graduate | 2 | 2.1 |
| Marital status | Single | 30 | 31.3 |
| | Married | 49 | 51.0 |
| | Widow | 17 | 17.7 |
| Income | No income-5000 | 41 | 42.7 |
| | 5001-10000 | 24 | 25 |
| | 10001-20000 | 18 | 18.8 |
| | >20000 | 13 | 13.54 |

| Demographic characteristic | | N (96) | % |
|---|---|---|---|
| Hx of Medical illness | Yes | 61 | 63.5 |
| | No | 35 | 36.5 |
| Hx of Depression | Yes | 35 | 36.5 |
| | No | 61 | 63.5 |
| Hx of suicidal idea | Yes | 53 | 55.2 |
| | No | 43 | 44.8 |
| Family Hx of Depression | Yes | 14 | 14.6 |
| | No | 81 | 84.4 |
| Alcohol Used | None | 74 | 77.1 |
| | Seldom | 20 | 20.8 |
| | Often | 2 | 2.1 |
| Family Hx of Psychiatric | Yes | 20 | 20.8 |
| illness | No | 76 | 79.2 |
| Family Hx of Medical illness | Yes | 31 | 32.3 |
| | No | 65 | 67.7 |
| Dead of Family member in | Yes | 21 | 21.9 |
| the past year | No | 75 | 78.1 |
| Supporting system | None | 43 | 44.8 |
| | Yes | 53 | 55.2 |
| Problem with medical | Yes | 38 | 39.6 |
| expense | No | 58 | 60.4 |
| Occupational | None | 14 | 14.6 |
| | Student | 11 | 11.5 |
| | Governor | 15 | 15.6 |
| | Agriculture | 3 | 3.1 |
| | Official | 5 | 5.2 |
| | Private | 9 | 9.4 |
| | Employee | 17 | 17.7 |
| | Others | 22 | 22.9 |

| STRESSOR FROM LAST 2-3 MONTHS | PRESENT | ABSENT |
|---|---|---|
| Marital problem | 41 | 55 |
| Family conflict | 53 | 43 |
| Problem with work | 41 | 55 |
| Economic problem | 53 | 42 |
| Problem with Law | 7 | 88 |
| Problem with friend | 14 | 81 |

7.1.2 BASELINE DATA OF CLINICAL AND FUNCTIONAL STATUS

The mean score of the clinical status from HAM-D scale of the baseline was 24.25 (SD. 4.60), the mean score of the functional status from BASIS-32 was 48.43 ( SD.18.38) and SF-36 was 445.98 (SD 81.03) as shown in table 11.

Table 11 Baseline clinical and functional status

| Type of measurement | Mean score | S.D. | N |
|---|---|---|---|
| HAM-D | 24.25 | 4.60 | 96 |
| SF-36 | 445.98 | 81.03 | 96 |
| BASIS-32 | 48.43 | 18.38 | 96 |

7.1.3 THE MEAN CHANGE OF CLINICAL STATUS FROM BASELINE TO END POINT.

The mean HAM-D score of the study group at the time of 12 weeks was 7.39 (SD=6.27 ) compared with the mean score at admission (24.25, SD=4.61) there was a mean reduction of 17.04 (SD=8.94) as shown in table12.

Table 12 HAM-D score in each period.

| | Baseline ( 0 week) | 2 weeks | 6 weeks | 12 weeks |
|---|---|---|---|---|
| N | 96 | 87 | 84 | 82 |
| Mean HAM-D (S.D.) | 24.25 (4.61) | 13.02 (6.8) | 10.2 (6.016) | 7.39 (6.27) |

7.1.4 THE RESPONSE RATE AFTER 12 WEEKS OF THE PSYCHIATRIC CARE.

65 cases (67.7%, 95%C.I.=58.18-77.23 ,N=96) had a full response by the time of 12 weeks, as judged by 50% reduction from baseline of Hamilton Depression Scale scores . 31 patients (32.3%) were classified as non responders as shown in table13.

Table13. Response rate after 3 months of psychiatric care.

| Outcome | N | % |
|---|---|---|
| Response | 65 | 67.7 (95%C.I.=58.18-77.23) |
| Non response | 31 | 32.3 |

7.1.5 THE COMPLETE RESPONSE OF DEPRESSIVE PATIENTS IN EACH PERIOD.

While a post treatment Hamilton depression scale score <7 is a commonly used criterion for complete response( in remission) to treatment among depressed patients (20,25), according to the criterion, 48 ( 50%) of the patients with depression exhibited a full remission by the time of 12 weeks. Of the remaining 48 patients, 17(17.7%) had experienced at least a 50% reduction in their admission Hamilton depression scale scores during psychiatric care. As shown in table14.

Table 14. The remission proportion rate in each observation period.

| | N | % | Total |
|---|---|---|---|
| Full remission 2 week | 16 | 16.7 | 96 |
| Full remission 6 week | 29 | 30.2 | 96 |
| Full remission 12 week | 48 | 50 | 96 |

7.1.6 COMPARION OF CLINICAL OUTCOME IN EACH PERIOD

This study has four periods of observation with the clinical status of the patients, Using the repeated measure to see the association of each period as shown in the table 15.

Table 15. Result of the repeated measure of HAM-D score in 4 period of time.

| Period | Mean HAM-D(SD) | Wilks' Lambda | Sig ( 2 tailed) |
|---|---|---|---|
| 0 week | 24.2500 (4.6089) | | |
| 2 week | 13.0230 (6.7960) | F=189.435 | P<.001 |
| 6 week | 10.2024 (6.0156) | | |
| 12 week | 7.3902 (6.2672) | | |

The result shows that there is a statistical difference in the clinical status of each period with p <0.005 .

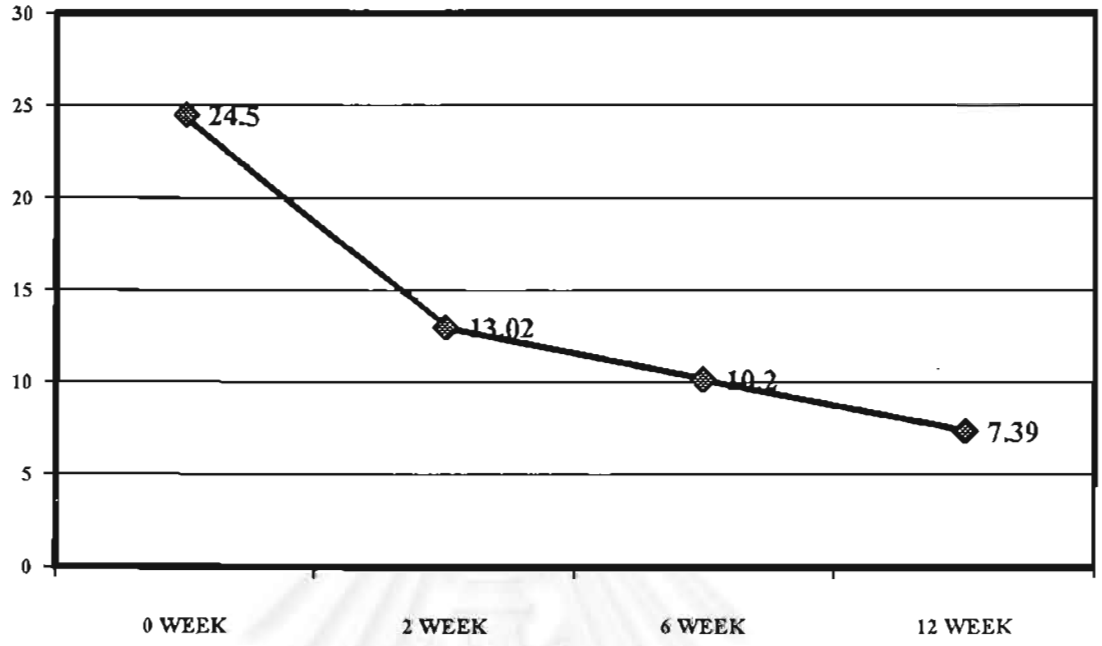



Figure 2 The mean HAM-D score in each period of observation

7.1.7 OUTCOME IN FUNCTIONAL MEASUREMENT

Table 16 shows the association between baseline functional status and the endpoint functional status. With the BASIS-32 there was a statistical difference between baseline and the endpoint but with the SF-36 there was no statistical difference.

Table 16 The difference between baseline functional status and the endpoint functional status.

| Measurement | Mean ( SD) | Compare mean | P VALUE |
|---|---|---|---|
| Baseline BASIS-32 | 48.44 (18.38) | t = 3.467 | <0.01 |
| End point BASIS-32 | 41.24 (19.89) | | |
| Baseline SF-36 | 445.99 (81.03) | t = -.505 | 0.615 |
| End point SF-36 | 453.15 (79.07) | | |

7.1.8 THE MEAN CHANGE OF FUNCTIONAL STATUS

Table 17 gives the mean change of the functional status from the baseline to the endpoint after psychiatric care

Table 17. Outcome in functional measurements : Mean change from baseline to week 12. endpoint.

| Outcome Measure | Score improvement | S.D. |
|---|---|---|
| SF-36 | 5.379 | 90.92 |
| BASIS-32 | -8.312 | 21.44 |

### 7.1.9 THE PEARSON CORRELATION BETWEEN CLINICAL AND FUNCTIONAL STATUS IMPROVEMENT

The correlation between the change of the clinical status and functional status from baseline to the end point of the study is shown in the table 18.

The result shows there was a statistical significance in the correlation (p= 0.014) between HAM-D and BASIS-32. The correlation follows the same direction but the correlation coefficient is 0.274 . It means that the improvement of clinical status has some correlation with the improvement of functional status by the same direction but the correlation is very low.

The result between HAM-D and SF-36 is shown in table 19. The result shows there was no statistical significance in correlation (p= 0.298) between HAM-D and SF-36.

Table 18. The Pearson correlation of clinical improvement and functional improvement in BASIS- 32

| Variable | Pearson Correlation | Sig. ( 2-tailed) |
|---|---|---|
| Improvement in HAM-D | | |
| #Improvement in total BASIS-32 | 0.29 | P<.01* |
| #Daily living and role functioning | .32 | P<.01* |
| #Respectively:relation to self and other | .1 | .34 |
| #Depression and anxiety | .33 | P<.01* |
| #Psychosis | .13 | .26 |
| #Impulsive and addictive behavior | .26 | P<.05* |

* Correlation is significant at the 0.05 level ( 2-tailed)

Table 19. The correlation of clinical improvement and functional improvement in SF-36

| Variable | Pearson Correlation | Sig. ( 2-tailed) |
|---|---|---|
| Improvement in HAM-D | | |
| # Improvement in TOTALSF-36 | 0.124 | 0.29 |
| # Physical functioning | -.184 | .1 |
| # Role limitation due to Physical | -.378 | .001* |
| # Bodily pain | .094 | .408 |
| # Social functioning | .135 | .237 |
| # Mental health | .252 | .024* |
| # Role limitation due to Emotional | -.204 | .076 |
| # General health perception | .252 | .025* |
| # Vitality | .189 | .09 |

* Correlation is significant at the 0.05 level ( 2-tailed)

7.1.10 THE CORRELATION BETWEEN SF-36 AND BASIS-32 IMPROVEMENT

The result between BASIS-32 and SF-36 is shown in table 20. The result shows no significant correlation between these two outcomes.

Table 20. The correlation between BASIS-32 and SF-36 improvement.

| Variable | Pearson Correlation | Sig. ( 2-tailed) |
|---|---|---|
| Improvement in BASIS-32# | -.077 | .518 |
| Improvement in SF-36 | | |

* Correlation is significant at the 0.05 level ( 2-tailed)

7.1.11 FACTORS ASSOCIATED WITH RESPONSE OUTCOME

All the independent factors including age, sex, status, educational level, income, type of depressive disorder, severity categorized by HAM-D score, History of

depressive illness, History of suicidal idea, History of physical illness, family history of depression, family history of medical illness, supporting system, expense of the treatment, bereavement, defining stress in the past 2-3 years were separately tested for their association with the response rate with the univariate analysis. The factors shown, associated with the response rate, were later included in a multivariate analysis.

7.1.12 UNIVARIATE ANALYSIS

CRUDE ODDS RATIO

Table 21 Crude odds ratios for the response cases.

| | Response | Non response | Odds ratio | 95% C.I. | p |
|---|---|---|---|---|---|
| Age group | | | | | |
| <30 | 19 | 4 | 1 | | |
| >=30 | 46 | 27 | .359 | .110-1.165 | .08 |
| Sex | | | | | |
| Male | 11 | 4 | 1 | | |
| female | 54 | 27 | .727 | .212-2.498 | .61 |
| Marital status | | | | | |
| Single | 36 | 11 | 1 | | |
| Couple | 29 | 20 | .443 | .183-1.072 | .07 |
| Education | | | | | |
| Elementary | 28 | 13 | 1 | | |
| Undergraduate | 17 | 10 | .79 | .28-2.19 | |
| Graduate | 20 | 8 | 1.16 | .4-3.3 | .79 |
| Income | | | | | |
| <5000 | 17 | 4 | 1 | | |
| 5000-10000 | 31 | 13 | .56 | .07-1.05 | |
| >=10000 | 17 | 14 | .28 | .16-1.99 | .12 |
| | Response | Non response | Odds ratio | 95% C.I. | p |
| Severity | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| HAM-D<30 | 57 | 27 | 1 | | |
| HAM-D>=30 | 8 | 4 | .947 | .262-3.42 | .93 |
| Hx.Depression | | | | | |
| Present | 25 | 10 | 1 | | |
| Absent | 40 | 21 | .762 | .309-1.881 | .56 |
| Suicidal idea | | | | | |
| Present | 35 | 18 | 1 | | |
| Absent | 30 | 13 | 1.187 | .5-2.816 | .69 |
| Fm.Hx.Psy.illness | | | | | |
| Present | 15 | 5 | 1 | | |
| Absent | 40 | 26 | .641 | .210-1.960 | .43 |
| Type of depress | | | | | |
| Major Depress | 38 | 14 | 1 | | |
| Depression NOS | 15 | 9 | .61 | .22-1.7 | |
| Dysthymia | 11 | 8 | .51 | .17-1.52 | .4 |
| Supporting | | | | | |
| Present | 34 | 19 | 1 | | |
| Absent | 31 | 12 | 1.444 | .604-3.45 | .41 |
| Bereavement | | | | | |
| Present | 16 | 5 | 1 | | |
| Absent | 49 | 26 | .589 | .194-1.789 | .35 |
| Alcohol used | | | | | |
| No | 51 | 23 | 1 | | |
| Yes | 14 | 8 | .789 | .291-2.142 | .64 |
| Expense | | | | | |
| Difficulty | 29 | 9 | 1 | | |
| No problem | 36 | 22 | .51 | .203-1.27 | .14 |
| | Response | Non response | Odds ratio | 95% C.I. | p |
| Stressor within 2-3 months | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Marital | | | | | |
| Present | 28 | 13 | 1 | | |
| Absent | 37 | 18 | .95 | .401-2.269 | .92 |
| Family | | | | | |
| Present | 32 | 21 | 1 | | |
| Absent | 33 | 10 | 2.166 | .884-5.307 | .09 |
| Work | | | | | |
| Present | 27 | 14 | 1 | | |
| Absent | 38 | 17 | 1.159 | .489-2.746 | .74 |
| Economic | | | | | |
| Present | 36 | 17 | 1 | | |
| Absent | 28 | 14 | .944 | .399-2.238 | .89 |
| Friend | | | | | |
| Present | 11 | 3 | 1 | | |
| Absent | 53 | 28 | .516 | .133-2.004 | .33 |
| Law | | | | | |
| Present | 4 | 3 | 1 | | |
| Absent | 60 | 28 | 1.607 | .337-7.669 | .55 |
| Drug group | | | | | |
| TCA | 12 | 26 | 1 | | |
| SSRI | 17 | 29 | .78 | .32-1.95 | |
| Admission | 2 | 4 | .92 | .15-5.75 | .87 |

7.1.12.1 AGE

The mean age of the response group and the non-response group was 39.02 (SD =13.92 ) and 39.58 (SD = 12.43 ) respectively. This difference is not statistically significant ( t= 0.192 df= 94 , p= .848 ) with the age of both group.

With the age group I had separate in two group by using 30 years to see is there any association to the response due to some study showed that there was lower

rate of response from the old age. From this study. there is no statistical difference in age groups with the response and the non- response group, but the proportions of response cases in ages <30 and age >=30 was different in some degree of odds ratio in >= 30 years group=.359 compare to <30 years group.

7.1.12.2 SEX

There is no statistical difference in gender with the response and the non-response group, the proportions of response cases in male and female are not different.

7.1.12.3 MARITAL STATUS

There is no statistical difference in marital status with the response and the non-response group, the proportions of response cases in male and female are not different. The odd ratio was nearly the same.

7.1.12.4 EDUCATION

The level of education had divided in three categories. There is no statistical difference in difference level of education with the response and the non- response group.There was some trend in the study the graduate group had more response rate.

7.1.12.5 INCOME

There is no statistical difference in difference groups of income with the response and the non- response group.The odd ratio shows that low income gave more response comparing to higher income group.

7.1.12.6 SEVERITY OF DEPRESSION

There is no statistical difference in severity of the depression with the response and the non- response group, the proportions of response in cases with HAM-D score <30 and cases with HAM-D score>=30 are not different. The odd ratio was nearly the same.

7.1.12.7 HISTORY OF DEPRESSIVE ILLNESS

There is no statistical difference in Hx of depressive illness with the response and the non- response group, the proportions of response cases in Hx of depressive illness are not different. With history of depressive illness gave more response rate.

7.1.12.8 HISTORY OF PSYCHIATRIC ILLNESS IN THE FAMILY

There is no statistical difference in Hx of psychiatric illness with the response and the non- response group, the proportions of response cases in Hx of psychiatric illness are not different. More response rate in group of psychiatric illness in the family.

7.1.12.9 HISTORY OF SUICIDAL IDEA

There is no statistical difference in Hx of suicidal idea with the response and the non- response group, the proportions of being response cases in Hx of suicidal idea are not different.No suicide gave more response rate ( Odds ratio= 1.187).

7.1.12.10 TYPE OF DEPRESSION

There is no statistical difference in the type of depression with the response and the non- response group, the proportions of response cases in type of depression are not different. The worst response group was dysthymia( Odds ratio =.51).

7.1.12.11 SUPPORTING SYSTEM

There is no statistical difference in the supporting system with the response and the non- response group, the proportions of response cases in supporting system are not different.

7.1.12.12 BEREAVEMENT PAST ONE YEAR

There is no statistical difference in bereavement past one year with the response and the non- response group, the proportions of response cases in bereavement after one year are not different.The group with history of bereavement gave more number of response( odds ratio of absent group= .589)

7.1.12.13 ALCOHOL USED

There is no statistical difference in alcohol used with the response and the non-response group, the proportions of response cases in alcohol used are not different.

7.1.12.14 TREATMENT EXPENSE

There is no statistical difference in treatment expense with the response and the non- response group, the proportions of response cases in treatment expense are not different.

7.1.12.15 STRESSOR FROM MARITAL PROBLEMS

There is no statistical difference in stressor from marital problems with the response and the non- response group, the proportions of response cases in stressor from marital problem are not different.The odds ratio was nearly the same ( .95, 1)

7.1.12.16 STRESSOR FROM PROBLEM WITH FRIEND

There is no statistical difference in stressor from problem with friend with the response and the non- response group, the proportions of response cases in stressor from problem with friend are not different. With the group of no problem gave less response rate.

7.1.10.17 STRESSOR FROM PROBLEMS WITH ECONOMY

There is no statistical difference in stressor from problems with economy with the response and the non- response group, the proportions of response cases in stressor from problem with economy are not different.

7.1.12.18 STRESSOR FROM PROBLEMS WITH LAW

There is no statistical difference in marital status with the response and the non-response group, the proportions of response cases in male and female are not different. Some how with no problem in law gave more response to the treatment.

7.1.12.19 STRESSOR FROM PROBLEMS WITH A FAMILY MEMBER

There is no statistical difference in stressor from problems with a family member with the response and the non- response group, the proportions of response cases in stressor from problems with a family member are not different.But the odds ratio gave the figure of difference with the absent of family conflict the number was 2.166 times more response than family conflict group.

7.1.12.20 STRESSOR FROM PROBLEMS WITH WORK

There is no statistical difference in stressor from problems with work with the response and the non- response group, the proportions of response cases stressor from problems with work are not different.

7.1.12.21 MODE OF TREATMENT

All the patient were treated at Out-Patient Department of Psychiatry except 2 cases had been admitted Inpatient psychiatric ward then come to follow up at Out-Patient Department of Psychiatry. The psychiatrist who looked after these group of patients were 13 staffs of the Department of Psychiatry, Ramathibodi Hospital. Mode of the treatment were mainly with antidepressant accompany with supportive psychotherapy, other special interventions used in these group were cognitive psychotherapy 2 cases, intensive psychotherapy 1 case, family intervention 1 case.

The table 22 shows the variety of the drug of treatment . The highest treatment group was using selective serotonin reuptake inhibitors( SSRI) ( 25.56% ). Others were tricyclic antideprssants( TCA) ( 12.2%) , SSRI combine benzodiazepine (24.44% ) , TCA combine with benzodiazepine (21.11% ), TCA combine with antipsychotics( 8.8%), SSRI combine with antipsychotics(1% ) TCA combine with SSRI ( 3.33%) , admission (3.33% ).

Table 22 Mode of treatment and response rate

| Mode of treatment | Response | | Total |
|---|---|---|---|
| | Non response | Response | |
| Tricyclic Atidepressant (TCA) | 3 | 8 | 11 |
| Selective serotonin reuptake inhibitor (SSRI) | 10 | 13 | 23 |
| TCA+BZP | 5 | 14 | 19 |
| SSRI+BZP | 7 | 15 | 22 |
| TCA+antipsychotic | 4 | 4 | 8 |
| SSRI+ antipsychotic | | 1 | 1 |
| TCA+SSRI | 1 | 2 | 3 |
| Admission | 1 | 2 | 3 |
| Total | 31 | 59 | 90 |

There were two groups usually used in the treatment : Tricyclic Antidepressant (TCA) and Serotonin Selective Reuptake Inhibitors(SSRI). The univariate analysis shows there is no statistical difference in drug groups with the response and the non- response group as shown in table 21.

All of the factors used in analysis during the univariate analyses were not shown to be significant when associated with the response rate at the level of p=0.05.

7.1.13 MULTIVARIATE ANALYSIS

A multiple logistic regression analysis was performed to derive a best-fitting model to predict the response and nonresponse categories from the sociodemographic and clinical variables included in tables 10 and 11.

A best-fitting multiple logistic regression model predicting the response of a depressive patient to the 3 months psychiatric care from the sociodemographic and clinical variables must come after the univariate analysis to show the crude odd ratio.

With the review of the literature, there is no consensus regarding which clinical and psychosocial variables are associated with recovery. There has been some suggestion in the literature that depression becomes responsive to treatment in lower age groups than advanced age group (32-34). The gender, the economic status, the stressor also have some predictive to response of the treatment. Therefore I try to test with the multi logistic regression by using the backward stepwise method to give the fit model then come to the enter method to have the final model. The result is shown in Table 23.

LOGISTIC REGRESSION ANALYSIS

Table23 shows the factors included in the fit model to predict response cases.

| Variable | B | Adj.OR | 95% C.I. | p |
|---|---|---|---|---|
| Income <5000 | 1.4 | 4.09 | 1.06-15.72 | ..01 |
| Income 5001-10000 | .77 | 2.17 | .79-5.91 | .04 |
| Stressor with family problem | -.74 | .48 | .19-1.19 | .13 |
| Bereavement | .77 | 2.15 | .67-6.98 | .19 |
| Constants | .396 | | | .43 |

This final model gave the Hosmer and Lemeshow Goodness of fit = .766.

The factors shown in the equation to give the predictive for the response rate were:

1. Income.
2. History of bereavement from the last year.
3. Stressor from the family conflict.

The variables that did not contribute to the prediction of the depressive patient to the treatment response in either model are also noteworthy. Such as the sociodemographic variables age group, level of education, type of depression, history of depression or medical illness, stressor from the marital problem. Moreover, the likelihood of significant clinical improvement was not predicted by the severity of the depression as reflected by the Hamilton depression scale score on admission, the suicidal idea was also did not predict the response rate.

### 7.1.14 SATISFACTION

Table 24 shows the mean score of the CSQ-8 from the patients who had completed 12 weeks of psychiatric care.

Table 24 The mean score of CSQ-8

| N = 80 | Mean | SD |
|---|---|---|
| Total CSQ score | 28.21 | 2.74 |

# CHAPTER 8

# SUMMARY , DISCUSSION , RECOMMENDATIONS

## 8.1 SUMMARY OF THE STUDY

This study aims to observe the response rate of the depressive patients who have undergone 3 months of psychiatric care at one medical center ( Ramathibodi Hospital) and identify the predictive factors which influenced the response of the depressive patients. A prospective observational study was used to study the response rate of the depressive patients to the psychiatric care and the relationship among variables and determination of the explanatory power of the selective factors in predicting response to the treatment of depressive patients. This observational study has been conducted at the Out Patient Department of Psychiatry, Ramathibodi Hospital for 6 Months period, collecting 96 eligible cases and observation for 3 months with periodic assessment with clinical and functional measurement . There were 82 cases completed in the follow up and 14 cases dropped out.

65 cases (67.7%, 95%C.I.=58.18-77.23, N=96) had a response to the treatment by the time of 12 weeks, as judged by 50% reduction from baseline Hamilton Depression Scale scores . 31 patients (32.3%) were classified as nonresponders.

With the univariate analysis, there were no factors showing the association to the response rate at the significant level 0.5.

Multivariate analyses was performed to examine which factors would have some association or predictive value to the response and nonresponse categories from the sociodemographic and clinical variables included in tables 10 and 11 . A description of the resulting model is presented in table 23 . Each made a significant independent contribution to the prediction of therapeutic response. Income, Stress from the family conflict, History of bereavement from last year show predictive association to the

response rate with the predictive power of 72.73 % and Hosmer and Lemeshow Goodness-Of-Fit = .776.

The correlation between improvement in clinical status and quality of life of this group of the patients did not significantly correlate.

The correlation between improvement in clinical status and the functional status was very low of correlation.

This group of patients gave a high rate of satisfaction to the psychiatric care they had received in 12 weeks of the observation period.

## 8.2 DISCUSSION

### CLINICAL RESPONSE OF THE DEPRESSIVE PATIENTS

As a group, the depressive patients suffered from significant medical and psychiatric comorbidity . In primary care this group of patients is common, disabling, costly, and treatable but Patients are frequently unrecognized and therefore not treated. Nonetheless, their response to the psychiatric care was substantial.

From the study with this observational design in a group of depressive patients who had undergone 12 weeks of psychiatric care in a medical setting. The response rate was 67.7%(95%C.I.=58.18-77.23) ( table 13) . The absence of the controlled design limits conclusions because the possibility of spontaneous remission cannot be definitely excluded. However, the rate of response observed at 67.7% , is comparable to the other studies (50) with response and efficacy of the treatment with the depressive patients. Furthermore there was no difference between the classes of antidepressant used with the response to the acute treatment ( table 21), but from the other study with the long term treatment there were significant differences due to more compliance and the less side effect in the SSRI group than TCA group(79).

The average Hamilton depression scale score was nearly halved during 2 weeks after treatment ( mean score of HAM-D at week 0= 24.25 change to 13.02 at week 2 in table 15) , which typically lasted 12 weeks, and nearly one-half of the patients experienced resolution of their depressive symptoms in 12 weeks( the number of the cases with HAM-D<7 = 48 from table 14) .

With the improvement rate from table14, we can notice the early response of the depressive patients to the psychiatric care by two weeks, It gave the number of remission proportion ( HAM-D<7) 16.7% and within 12 weeks it was 50% of the cases. From the literature review with the somatic treatment with antidepressant the timing was more than 6 weeks to show the complete response rate and the rate of complete remission may be substantially lower. Patients may show some improvement by the end of the first week (49) but may not fully respond for more than 4 to 6 weeks(50) . Therefore, adequalt of response cannot be judged until after this period of time. but in this study it was earlier than that figure.

The psychiatric care for this group of patients was treatment in a medical setting with the average psychiatric practice experience of 13 staff = 10.36 years. The mode of treatment was almost the same with the first choice of care with antidepressants accompanied with supportive psychotherapy.

THE PREDICTIVE FACTORS TO THE RESPONSE RATE

From the univariate analysis there were no factors showing the association to the response rate at the significant level 0.5. The main reason may be that the power of the sample size to detect the association was insufficient. As this was the secondary question, another possibility may be there were no association with the sociodemographic variable as the previous study (80).

Multivariate analyses was performed. It indicated 3 factors that were the important in predicting response to the treatment : income of the patient, recent stressor in family problem and bereavement.

There has been some suggestion in the literature that major depression becomes less responsive to treatment with advancing age (32-34), especially when the oldest strata of the population is considered. I observed no effect of age from the study on response to treatment for major depression when controlling for the other independent effects.

With a series of studies conducted by the Kelly group of the NIMH(28) Collaborative Study on the Psychobiology of depression it is suggested that starting treatment early in an episode is important in speeding the recovery. Of several variables examined, Keller and coworker ( 1984)(27) found that a long index episode before entry into the study was the only characteristic that strongly predicted a chronic outcome.

With the study of Duggan : (81)the family history of severe psychiatric illness in a first-degree relative may be useful as one of the vulnerability factors for predicting poor long-term outcome in depression. From this study there was some association of family history of depression to the outcome response of the depressive patients (table 23). A number of studies have indicated that social support is associated with the course of depression.(82) with the reason of psychological support and the compliance to the treatment but in this study due to the small number of cases had not showed the association.

In spite of the apparent greater prevalence of major depression among women in middle age (1,2), This study found no evidence of an independent effect of sex on response to psychiatric care treatment at our setting. Moreover, marital status, when considered in univariate analysis (single, married, separate or divorce ) failed to enter the multivariate model. Maximal level of education and index of socioeconomic status, also failed to contribute independently to the prediction of treatment responsiveness.

The level of severity of depression and occupation also has no evidence of effect. The history of psychiatric illness, suicidal ideation and the family history of psychiatric illness or medical illness were also not associated with the response rate.

The findings in this study do not enable clear guidelines to be given as to which sociodemographic factors of patients with depression in medical setting might response to the psychiatric care. It need to have a further study with more sample size to detect the predictive factors to the response of the psychiatric care.

## THE FUNCTIONAL STATUS OF THE DEPRESSIVE PATIENTS

The functional status of this group of depressive patients with the baseline of BASIS-32 scale (mean ± SD =48.4646 ±18.4702) and SF-36 (mean ± SD =445.985 ± 81.0327) compared to general psychiatric patients ( Result from the instrument development in table 5,6) with BASIS-32 scale (mean ± SD =40.37 ± ) and SF-36 (mean ± SD =364.87 ±81.0327), suggest they were more disabled in functional status. People who suffer from depression usually experience as much or more limitation in multiple aspects of their daily functioning and well-being as is associated with most chronic medical conditions (83). Depression tends to be more debilitating than diabetes, arthritis, back problem, and hypertension, in term of physical functioning ( e.g., sport activity, climbing stair, walking, dressing, and bathing), role functioning ( e.g., interference in work, housework, or school work), and normal social functioning. After 12 weeks of psychiatric care changes were observed. There was significant improvement ( $p<0.05$) with the mean difference in BASIS-32 = -8.4815 (21.4989) but in SF-36 mean difference = 5.379(90.9261) there was no statistical significance ( $p=0.615$) .Because the BASIS-32 is sensitive to change with the symptom improvement and it is more specific to measure in symptom and behavior domain in psychiatric patients more than SF-36. SF-36 is a general health measurement in quality of life with the 12 weeks of treatment we can notice that the symptom had improved significantly but the quality or disability of the patients still remained. Once depression develops, it may result in

further narrowing of social repertoire, compounding the problem.(84) Notwithstanding some of the difficulties in measuring social functioning and quality of life, progress has been made in defining the extent of these problems in depressed individuals. The impact treatment of depression has on these parameters is becoming increasingly recognised and evaluated in clinical trials. The study suggests that effective treatment of psychiatric symptoms might be expected to lead to improvement in quality of life measurement. A better understanding of the clinical and social variables associated with quality of life will be of practical use to clinicians in the design as models of case management that are likely to have most impact on patients' subjective quality of life. This study of depression shows the general practice in the caring of depressive patients. We must concern the aspect in functional improvement in the long term rather than on clinical improvement in the short term because the disabilities of the patients still remain.

The profile of functioning and well-being corresponds well with known clinical features of depressive disorder. The profile raises the important policy question of where health care resources should be preferentially allocated; to a condition that is associated with limitations in psychological and role functioning of people and is treatable, or to conditions that affect the physical functioning of persons and whose treatment response varies. Further research will need to assess the degree to which undiagnosed depressive disorder sufferers and other patient samples have morbidity profiles similar to those of the treated patients described here. In addition, future research should follow these multiple domains of health over time to evaluate both the short- and long-term course of functioning and well-being of patients with depressive disorders.

## THE CORRELATION BETWEEN IMPROVEMENT OF CLINICAL STATUS AND FUNCTIONAL STATUS

The correlation of the clinical status and functional status improvement had the statistical significance in the same direction of improvement but the correlation was very

low ( r = 0.274 ). This is the same result as the previous study with the conclusion that social dysfunctioning of the depressive patients may vary relatively independently to the clinical status of the patients (85). There was a longitudinal follow-up of patients in the MOS SF-36 documents having persistent impairments in the functioning and well-being of patients with depression relative to patients with chronic medical illness (84). These impairments were noteworthy at baseline of the study at the time of an office visit (61) and 2 years later, unrelated to an office visit. However, on many of the outcome measures, depressed patients improved over time, which is consistent with the fact that depression is often episodic and the patients were sampled at a symptomatic point of the illness. Nevertheless, the degree of persistence in functional limitations was greater than might be expected for an episodic disorder. This general conclusion applied across different types of depression, even to patients with depressive symptoms but no depressive disorder and to depressed patients in both the general medical and mental health specialty sectors.

For example, there was a case in the sample group that attended for the psychiatric care after 12 weeks treatment as a result of suicidal ideation . She was a response case but she still cannot work properly and complained to the physician that she felt no interest in doing anything and her self esteem was very low so she still stayed at home and did not associate with other people.

My results lend further support to the suggestion that depressive disorder is a serious health problem with especially large consequences for role functioning, which can have large direct and indirect economic consequences for both the patient who is suffering from depressive disorder and his or her family members. Treatment for depressive disorder commonly includes medication or cognitive or behavioral psychotherapy that is aimed at specific social problems. More attention may need to be aimed at refining clinical treatments to address problems in role functioning, given the substantial limitations reported here.

## THE SATICFACTION

The satisfaction of the depressive patients to the treatment at one setting of psychiatric care of this group of patients was 28.2125 (2.7407) from the CSQ-8 . It means that they are quite satisfied with the service because the average total score of the norm group was 27.09 (4.01) ( Table 7) .

## CONCLUSION

In summary, my results demonstrate the effectiveness of the psychiatric care, and multidisciplinary approach to the treatment of depressive patients and the satisfaction of the patients to the service was very good. The predictive factors for the response to the psychiatric care were the income, the family conflict and the history of bereavement. Long term course of functioning and well-being of patients with depressive disorders must be addressed because the improvement in functioning was not statistically significant in the short term of the acute treatment with low correlation to good clinical improvement. For general practice with the treatment in depressive patients, the disability and functioning of the patients must be considered in the modality of the treatment besides medication.

## IMPLICATION

1. This study provides the information for educating and counseling the depressive patients and their family members or caregivers about the course of depressive disorders who come to the psychiatric care.
2. For mobilizing community resources that are often overlooked. These clinical issues are more consistently present and more prominent among the depressive patients of psychiatric patients.

3. Three instruments can be used for the evaluation in the functioning status of Thai depressive patients in the further study.
4. To provide basic data for future comparison with other alternative care such as that given by religious institutions , primary medical care which generally provides less intensive psychiatric care.
5. To provide basic data for further investigation into different variables in depressive disorders in Thailand.
6. To guide cost effectiveness or cost utility analysis.
7. Preliminary data for the future study in a mental evaluation program.
8. To increase depressive patients' awareness of the treatment.

LIMITATION

1. Limited interpretability because of no comparison to other programs and the study is only in one setting.
2. Depression is usually a chronic condition which needs long term treatment therefore 3 months of study may yield only (preliminary) limited information. It needs to be a longitudinal study in the future.
3. I accept the loose definition of "Supposedly acceptable psychiatric care" as it is an observational study and this thesis makes no attempt to compare the efficiency of any type of treatment.

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# APPENDIX

# ข้อมูลที่ผู้ป่วยควรทราบ

ชื่อโครงการวิจัย สถานะทางคลีนิค และความสามารถทางหน้าที่การงานของผู้ป่วยโรคซึมเศร้า ภายหลังการรักษาทางจิตเวชระยะเวลา ๓ เดือน

สถานที่ทำการวิจัย หน่วยผู้ป่วยนอกจิตเวช ภาควิชาจิตเวชศาสตร์ รพ.รามาธิบดี
ผู้ทำการวิจัย ผ.ศ.นพ.รณชัย คงสกนธ์
อาจารย์ที่ปรึกษา ร.ศ.พญ.นันทิกา ทวิชาชาติ

ขอมูลทั่วไป โรคซึมเศร้าเป็นโรคทางจิตเวชที่เป็นปัญหาทางสาธารณสุขที่สำคัญโรคหนึ่ง ที่ผ่านมาจะมีการประเมินติดตามโรคเพียงด้านอาการวิทยา แต่ไม่ได้มีการประเมินผลอย่างเป็นระบบในด้านของผลกระทบทางหน้าที่การงานของผู้ป่วย และในประเทศไทยยังไม่มีการศึกษาอย่างเป็นระบบต่อผู้ป่วยโรคซึมเศร้าที่ผ่านกระบวนการรักษาทางจิตเวชในระยะเวลาหนึ่ง ทั้งทางด้านคลีนิคและผลกระทบทางหน้าที่การงาน ของผู้ป่วย จึงนำมาสู่การวิจัยในครั้งนี้ เพื่อเป็นข้อมูลพื้นฐาน ในการศึกษาวิจัยต่อไป

ขบวนการวิจัย การศึกษาครั้งนี้เป็นการเก็บรวบรวมข้อมูลพื้นฐานของผู้ป่วยโรคซึมเศร้า และติดตามประเมินผลการรักษา 2 ครั้ง ที่ระยะเวลา 6 สัปดาห์ และ 3 เดือน ภายหลังที่ผู้ป่วยได้รับการรักษาทางจิตเวชตามปกติ โดยจะใช้แบบสอบถาม และการประเมินผลโดยจิตแพทย์

ประโยชน์ที่จะได้รับจากการวิจัย

1. ได้รับข้อมูลเกี่ยวกับสถานะทางคลีนิตและความสามารถทางหน้าที่การงานของผู้ป่วย ก่อนและหลังการรักษาทางจิตเวชในระยะเวลา ๓ เดือน
2. ทราบถึงปัจจัยที่เกี่ยวข้องกับผลการตอบสนองต่อการรักษาของผู้ป่วยโรคซึมเศร้า
3. ข้อมูลที่ได้จะสามารถนำไปประยุกต์ในการรักษาโรคซึมเศร้าต่อไป
4. ข้อมูลพื้นฐานเพื่อนำไปสู่การวางแผนการวิจัยในโรคซึมเศร้าต่อไป

ผลกระทบต่อผู้ป่วยที่เข้าร่วมการวิจัย

การวิจัยครั้งนี้เป็นเพียงการเก็บรวบรวมข้อมูล โดยไม่ได้มีขบวนการรักษาที่แตกต่างจากขบวนการรักษาตามปกติแก่ผู้ป่วย จึงไม่มีผลอันตรายใดใดกับผู้ป่วยที่เข้าร่วมโครงการวิจัย ผู้วิจัยจะถือเป็นความลับต่อข้อมูลส่วนตัวของผู้ป่วย โดยไม่มีการเปิดเผยข้อมูลส่วนตัวของผู้ป่วยโดยไม่ได้รับอนุญาต

จากข้อมูลข้างต้น ผู้ป่วยจะเป็นผู้ตัดสินใจเองว่าจะเข้าร่วมโครงการศึกษาวิจัยครั้งนี้หรือไม่ และสามารถสอบถามรายละเอียดเพิ่มเติมได้จาก นพ.รณชัย คงสกนธ์ ที่เบอร์โทรศัพท์ 2011235

ข้อมูลเกี่ยวกับผู้เข้าร่วมวิจัย

ชื่อ..... H.N. .....

ที่อยู่.....

.....

เบอร์โทร..... เบอร์โทรญาติ.....

หมายเลขวิจัย.....

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| 1. เพศ ☐(1) ชาย ☐(2) หญิง | SEX |
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| ☐ (1) ไม่มีอาชีพ ☐ (5) ทำงานบริษัทเอกชน | ☐ OCC |
| ☐ ( 2) นักเรียน / นักศึกษา ☐ (6) ทำธุรกิจส่วนตัว | |
| ☐ ( 3) รับราชการ / รัฐวิสาหกิจ ☐ (7) รับจ้าง | |
| ☐ (4) เกษตรกรรม ☐ (8) อื่น ๆ (ระบุ) ..... | |
| 6. รายได้ / เดือน (บาท) | |
| ☐ (1) ไม่มีรายได้ ☐ (2) 1,000 - 5,000 | ☐ INC |
| ☐ (3) 5,001 - 10,000 ☐ (4) 10,001 - 20,000 | |
| ☐ (5) 20,001 – 30,000 ☐ (6) 30,001 - 40,000 | |
| ☐ (7) 40,001 – 50,000 ☐ (8) มากกว่า 50,000 | |
| 7. การศึกษา | |
| ☐ (1) ไม่เคยเรียน ☐ (2) ประถมศึกษา | ☐ EDU |
| ☐ (3) มัธยมศึกษา ☐ (4) อนุปริญญา (ป.ว.ช ป.ว.ส) | |
| ☐ (5) ปริญญาตรีขึ้นไป ☐ (6) อื่น ๆ (ระบุ)..... | |
| 8. ภูมิลำเนาเดิม | |
| ☐ (1) กรุงเทพ ฯ และ ปริมณฑล | ☐ LOCAT |
| ☐ (2) ต่างจังหวัด (ระบุ) ..... | |
| 9. ท่านมีปัญหาสุขภาพทางกายในขณะนี้หรือไม่ | |
| ☐ (1) ไม่มี | ☐ HEALTH |
| ☐ (2) มี (ระบุ) ..... | |
| Dx..... | ☐☐ DX |

10. ท่านเคยป่วยเป็นโรคซึมเศร้ามาก่อน

☐ เคย ☐ ไม่เคย ☐ DIS

11. ท่านเคยมีความคิดอยากฆ่าตัวตายมาก่อน ☐ SUICIDE

☐ เคย ☐ ไม่เคย

12. บุคคลในครอบครัว(ญาติใกล้ชิด)เจ็บป่วยด้วยโรคซึมเศร้า ☐ RELA

☐ มี ☐ ไม่มี

13 การดื่มสุรา

☐ ไม่ดื่มเลย

☐ ดื่มนานๆครั้ง

☐ ดื่มบ่อยๆ ☐ ALC

14 บุคคลในครอบครัวเจ็บป่วยทางจิต ☐ PSY

มี ☐ ไม่มี ☐

15 บุคคลในครอบครัวเจ็บป่วยร้ายแรง

มี ☐ ไม่มี ☐ ☐ PHYSICAL

15 บุคคลในครอบครัวเสียชีวิต ในช่วง ๑ ปีที่ผ่านมา ☐ ONEYEAR

มี ☐ ไม่มี ☐

17 ในช่วง ๒-๓ เดือนที่ผ่านมา

| | | | | | |
|---|---|---|---|---|---|
| ปัญหากับคู่สมรส | ☐ | มี | ☐ | ไม่มี | ☐ COUPLE |
| ปัญหากับสมาชิกในครอบครัว | ☐ | มี | ☐ | ไม่มี | ☐ FAMILY |
| ปัญหาเกี่ยวกับการทำงาน | ☐ | มี | ☐ | ไม่มี | ☐ WORK |
| ปัญหาเศรษฐกิจ | ☐ | มี | ☐ | ไม่มี | ☐ ECO |
| ปัญหาคดีความ/กฎหมาย | ☐ | มี | ☐ | ไม่มี | ☐ LAW |

| | | | |
|---|---|---|---|
| ปัญหากับเพื่อน | ☐ มี | ☐ ไม่มี | ☐ FRIEND |
| 13. การเจ็บป่วยครั้งนี้มีญาติดูแลใกล้ชิด | ☐ มี | ☐ ไม่มี | ☐ LOOK |
| 14. มีปัญหาในค่าใช้จ่ายการรักษา | ☐ มี | ☐ ไม่มี | ☐ EXPENSE |

# แบบสอบถามภาวะอารมณ์เศร้า

กรุณาวงกลมรอบข้อที่ตรงกับท่าน หรือใกล้เคียงมากที่สุด ในช่วง 2 สัปดาห์ที่ผ่านมา

1. ท้อแท้ใจ หมดหวังในอนาคต
   2 เป็นบ่อย
   1 เป็นบ้างบางครั้ง
   0 ไม่มี

2. คิดอยากตาย
   2 บ่อยมาก
   1 เป็นบ้างบางครั้ง
   0 ไม่มี

3. รู้สึกว่าตัวเองเป็นคนไม่ดี หรือไม่มีค่าเลย
   2 เป็นบ่อย
   1 เป็นบ้างบางครั้ง
   0ไม่มี

4. คิดอะไร ทำอะไรเชื่องช้าลงมาก
   2 เป็นบ่อย
   1 เป็นบ้างบางครั้ง
   0 ไม่มี

5. คิดมาก กังวลใจไปหมดทุกเรื่อง
   2 เป็นบ่อย
   1 เป็นบ้างบางครั้ง
   0 ไม่มี

6. รู้สึกเบื่อ ไม่มีความเพลินใจ
   2 เป็นบ่อย

1 เป็นบ้างบางครั้ง

0 ไม่มี

7. หลับยากทุกคืน นอนหลับๆ ตื่นๆ

2 เป็นบ่อย

1 เป็นบ้างบางครั้ง

0 ไม่มี

8. ความสนใจทางเพศลดลง

2 เป็นบ่อย

1 เป็นบ้างบางครั้ง

0 ไม่มี

9. ลังเลใจ ตัดสินใจไม่ค่อยได้แม้แต่เรื่องเล็กๆ น้อยๆ

2 เป็นบ่อย

1 เป็นบ้างบางครั้ง

0 ไม่มี

10. ซึมเศร้า ร้องไห้ง่าย

2 เป็นบ่อย

1 เป็นบ้างบางครั้ง

0 ไม่มี

# แบบสำรวจสุขภาพทั่วไป (SF-36)

## Rand 36- Item Health Survey 1.0

คำถามเหล่านี้จะถามเกี่ยวกับสุขภาพของท่าน ว่าท่านรู้สึกอย่างไรและสามารถทำกิจกรรมต่าง ๆตามปกติได้อย่างไร ถ้าท่านไม่มั่นใจการตอบคำถาม โปรดให้คำตอบที่ดีที่สุดเท่าที่ท่านเข้าใจ

โปรด เลือกกาในช่องที่ตรงกับความเห็นของท่าน<u>เพียงหนึ่งช่องในแต่ละข้อ</u>

๑. โดยทั่วไป ที่ผ่านมา๑ เดือนสุขภาพของท่าน..... (เลือกเพียงหนึ่งช่อง)

| | |
|---|---|
| | ดีเยี่ยม |
| | ดีมาก |
| | ดี |
| | พอใช้ |
| | ไม่ดีเลย |

๒. เปรียบเทียบช่วง ๑ ปีที่ผ่านมา ปัจจุบันสุขภาพของท่าน.....(เลือกเพียงหนึ่งช่อง)

| | |
|---|---|
| | ดีขึ้นมาก |
| | ดีขึ้นบ้าง |
| | เหมือนเดิม |
| | แย่ลงบ้าง |
| | แย่ลงมาก |

Code.....

ภาวะสุขภาพของท่านในปัจจุบัน <u>มีผลกระทบหรือเป็นข้อจำกัด</u>ในการประกอบกิจกรรมต่างๆ เหล่านี้หรือไม่ มากน้อยเพียงใด (เลือกเพียงหนึ่งช่องในแต่ละข้อ)

| | มีผลมาก | มีบ้างเล็กน้อย | ไม่มีผล |
|---|---|---|---|
| ๓. กิจกรรมที่ต้องออกแรงมาก เช่น วิ่ง ยกของหนักๆ เล่นกีฬาที่ ใช้ แรงมาก | | | |
| ๔. กิจกรรมที่ออกแรงปานกลาง เช่น ย้ายโต๊ะ ถูบ้าน | | | |
| ๕. ยกของ หรือหิ้วตะกร้าจ่ายตลาด | | | |
| ๖. เดินขึ้นบันไดหลายๆชั้น | | | |
| ๗. เดินขึ้นบันได ๑ชั้น | | | |
| ๘. ก้มตัว หรือคุกเข่า หรือโค้งตัว | | | |
| ๙. เดินทางระยะมากกว่า ๑ กิโลเมตร | | | |
| ๑๐. เดินทางหลายช่วงเสาไฟฟ้า | | | |
| ๑๑. เดินทางมากกว่า ๓๐ เมตร หรือประมาณครึ่งทางระหว่างเสาไฟฟ้า | | | |
| ๑๒. อาบน้ำและแต่งตัว | | | |

ในช่วงหนึ่งเดือนที่ผ่านมา สุขภาพร่างกายของท่านมีผลต่อการทำงานหรือกิจวัตรประจำวันบ้างหรือไม่.....(เลือกเพียงหนึ่งช่องในแต่ละข้อ)

| | ใช่ | ไม่ใช่ |
|---|---|---|
| ๑๓. ทำให้ต้องลดเวลาในการทำงานหรือกิจกรรมลง | | |
| ๑๔. ทำงานได้น้อยกว่าที่ตั้งใจไว้ | | |
| ๑๕. ทำงานหรือกิจกรรมบางอย่างไม่ได้อย่างที่เคย | | |
| ๑๖. มีความยากลำบากในการทำงานหรือกิจกรรม ต้องใช้ความพยายามเพิ่มมากขึ้น | | |

ในช่วงหนึ่งเดือนที่ผ่านมา ปัญหาทางอารมณ์( เช่นซึมเศร้า หรือวิตกกังวล)มีผลต่อการทำงานหรือกิจวัตรประจำวันบ้างหรือไม่ .....(เลือกเพียงหนึ่งช่องในแต่ละข้อ)

| | ใช่ | ไม่ใช่ |
|---|---|---|
| ๑๗. ลดเวลาในการทำงานหรือกิจกรรมลง | | |
| ๑๘. ทำงานได้น้อยกว่าที่ตั้งใจไว้ | | |
| ๑๙. ขาดความรอบคอบในการทำงานหรือกิจกรรมเหมือนอย่างที่เคยทำได้ | | |

๒๐. ในช่วง ๑ เดือนที่ผ่านมา ปัญหาสุขภาพกายหรือปัญหาทางอารมณ์รบกวนความสัมพันธ์ของท่านกับครอบครัว เพื่อนฝูง หรือเพื่อนบ้าน บ้างหรือไม่อย่างไร..... (เลือกเพียงหนึ่งช่อง)

| | |
|---|---|
| | ไม่เลย |
| | เพียงเล็กน้อย |
| | ปานกลาง |
| | ค่อนข้างมาก |
| | มาก |

๒๑. ในช่วง ๑ เดือนที่ผ่านมา ท่านมีอาการเจ็บปวดตามร่างกายหรือไม่... (เลือกเพียงหนึ่งช่อง)

| | |
|---|---|
| | ไม่มีเลย |
| | เพียงเล็กน้อย |
| | ปานกลาง |
| | รุนแรง |
| | รุนแรงมาก |

๒๒. ในช่วง ๑ เดือนที่ผ่านมา อาการปวดรบกวนการทำงานตามปกติของท่านหรือไม่..... (เลือกเพียงหนึ่งช่อง)

| | |
|---|---|
| | ไม่เลย |
| | เพียงเล็กน้อย |
| | ปานกลาง |
| | ค่อนข้างมาก |
| | มาก |

คำถามต่อไปนี้ ถามเกี่ยวกับความรู้สึกและเรื่องราวที่ผ่านมาในช่วง ๑ เดือน โปรดเลือกข้อที่ใกล้เคียงกับความรู้สึกของท่านมากที่สุด ในแต่ละข้อ.....(เลือกเพียงหนึ่งช่องในแต่ละข้อ)

| | ตลอดเวลา | เกือบตลอดเวลา | บ่อยๆ | บางเวลา | นานๆครั้ง | ไม่มีเลย |
|---|---|---|---|---|---|---|
| ๒๓. รู้สึกสดชื่นมีชีวิตชีวา | | | | | | |
| ๒๔. ประสาทเครียด | | | | | | |
| ๒๕. หดหู่จนไม่มีอะไรทำให้สดชื่นขึ้นได้ | | | | | | |
| ๒๖. สงบและเป็นสุข | | | | | | |
| ๒๗. มีพลังมาก | | | | | | |
| ๒๘. ท้อแท้ ห่อเหี่ยว | | | | | | |
| ๒๙. รู้สึกว่าจะทนอะไรไม่ได้ | | | | | | |
| ๓๐. มีความสุข | | | | | | |
| ๓๑. รู้สึกเหนื่อยล้า | | | | | | |

๓๒.ในช่วง ๑ เดือนที่ผ่านมา ปัญหาสุขภาพทางกายหรือจิตใจทำให้รบกวนต่อการเข้าสังคม การพบปะเพื่อนฝูง และญาติสนิทของท่านอย่างไรบ้าง .....(เลือกเพียงหนึ่งช่อง)

| | |
|---|---|
| | ตลอดเวลา |
| | เกือบตลอดเวลา |
| | บางเวลา |
| | นานๆครั้ง |
| | ไม่รบกวน |

เลือกคำตอบที่ตรงกับสุขภาพของท่านให้มากที่สุด.....(เลือกเพียงหนึ่งช่องในแต่ละข้อ)

| | ถูกต้องที่สุด | ถูกต้องส่วนมาก | ไม่ทราบ | ไม่ถูกเป็นส่วนมาก | ไม่ถูกต้องเลย |
|---|---|---|---|---|---|
| ๓๓. ฉันดูเหมือนจะป่วยง่ายกว่าคนอื่นๆ | | | | | |
| ๓๔. ฉันมีสุขภาพดีเหมือนทุกคนที่ฉันรู้จัก | | | | | |
| ๓๕. ฉันคาดว่าสุขภาพของฉันจะแย่ลง | | | | | |
| ๓๖. สุขภาพของฉันดีเยี่ยม | | | | | |

# แบบสอบถามชี้วัดพฤติกรรมและอาการทางจิต

Behavior and symptom identification scale

ชื่อ..... รหัส.....วันที่.....

สถานที่.....เวลา.....

**คำแนะนำ**

ต่อไปนี้เป็น คำถามเกี่ยวกับปัญหา และ กิจกรรมในชีวิตประจำวัน ซึ่งท่านอาจประสพความยุ่งยาก กรุณาใส่คำตอบลงในช่อง สี่เหลี่ยม ที่เข้ากับปัญหาท่านมากที่สุด ด้วยระดับความยุ่งยากที่ท่านได้ประสพมาในแต่ละหัวข้อ ในช่วงหนึ่งสัปดาห์ที่ผ่านมา

0 ไม่มีปัญหา
1 เล็กน้อย
2 ปานกลาง
3 ค่อนข้างมาก
4 มากที่สุด

โปรดใส่คำตอบทุกข้อ กรุณาอย่าเว้นข้อใดข้อหนึ่ง ถ้ามีข้อใดที่ท่านคิดว่าไม่ตอบ จะบ่งชี้ว่า ไม่มีปัญหาในข้อนั้น

**ตัวอย่าง**

ท่านมีความลำบากในปัญหาสัมพันธภาพกับเพื่อนอย่างไร [2]

ท่านมีปัญหาในหัวข้อเหล่านี้ มากน้อยอย่างไร

1. จัดการกับชีวิตประจำวัน ( ตัวอย่าง เช่น ไปที่ต่างๆตรงตามนัดหมาย หรือทันเวลา,จัดการเรื่องเงินทอง,การตัดสินใจในเรื่องต่างๆแต่ละวัน ) [ ]

2. รับผิดชอบการทำกิจกรรมภายในบ้าน( ตัวอย่าง เช่น จับจ่ายข้าวของ ปรุงอาหาร ซักเสื้อผ้า ทำความสะอาดบ้าน เป็นต้น ) [ ]

3. ทำอาชีพการงาน ( ตัวอย่าง เช่น ทำงานได้สำเร็จ ความก้าวหน้าในอาชีพ ความสามารถในการทำงาน การหางานหรือคงงานที่ทำอยู่ได้ ) [ ]

coda.....

ใส่ตัวเลขในช่องสี่เหลี่ยม

0 ไม่มีปัญหา
1 เล็กน้อย
2 ปานกลาง
3 ค่อนข้างมาก
4 มากที่สุด

---

ท่านมีปัญหาในหัวข้อเหล่านี้ มากน้อยอย่างไร

4. โรงเรียน การศึกษาอบรม( ตัวอย่าง เช่น ความสามารถทางการศึกษา ทำงานสมบูรณ์ได้ตามที่มอบหมาย การเข้าเรียน) ☐

5. ทำกิจกรรมยามว่าง และกิจกรรมพักผ่อนหย่อนใจ ☐

6. ปรับตัวกับปัญหาความตึงเครียดในชีวิตที่สำคัญ(ตัวอย่าง เช่น การแยกจากกัน หย่า ทำงานใหม่ เข้าโรงเรียนใหม่ การตาย) ☐

7. ความสัมพันธ์กับสมาชิก ในครอบครัว ☐

8. ความสัมพันธ์ที่ดีกับคน ภายนอกครอบครัว ☐

9. แยกตัว หรือ อยากอยู่คนเดียว ☐

10. รู้สึกสามารถใกล้ชิดกับบุคคลอื่น ☐

11. รู้สึกสามารถเข้าใจในตัวเองหรือผู้อื่นได้อย่างดี ☐

12. เข้าใจและแสดงออกทางอารมณ์ที่เหมาะสม ☐

13. มีความเป็นตัวของตัวเอง ไม่ยึดติดกับผู้อื่น ☐

☐

14. มีเป้าหมายและแนวทางในชีวิต

ใส่ตัวเลขในช่องสี่เหลี่ยม

0 ไม่มีปัญหา
1 เล็กน้อย
2 ปานกลาง
3 ค่อนข้างมาก
4 มากที่สุด

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ท่านมีปัญหาในหัวข้อเหล่านี้ มากน้อยอย่างไร

15. ขาดความมั่นใจ รู้สึกไม่ดีเกี่ยวกับตัวเอง ☐

16. เฉยเมย ขาดความสนใจในสิ่งต่างๆ ☐

17. เศร้าเสียใจ รู้สึกสิ้นหวัง ☐

18. มีความรู้สึกอยากฆ่าตัวตาย หรือเคยทำ ☐

19. อาการเจ็บป่วยทางกาย( ตัวอย่างเช่น ปวดศีรษะ การนอนผิดปกติ ปวดท้อง วิงเวียนศีรษะ เป็นต้น ) ☐

20. กลัว วิตกกังวลหรือตื่นตระหนก ☐

21. สับสน ไม่มีสมาธิ หรือ ความจำไม่ดี ☐

22. ถูกรบกวน ด้วยความคิดที่ผิดปกติ หรือความเชื่อที่ผิดผิด ☐

23. ได้ยินเสียงแว่ว หรือเห็นภาพหลอนต่างๆ ☐

24. อารมณ์ครื้นแครง พฤติกรรมแปลกแปลก ☐

☐

25. อารมณ์เปลี่ยนแปลงง่าย ไม่คงที่

ใส่ตัวเลขในช่องสี่เหลี่ยม

0 ไม่มีปัญหา
1 เล็กน้อย
2 ปานกลาง
3 ค่อนข้างมาก
3 มากที่สุด

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ท่านมีปัญหาในหัวข้อเหล่านี้ มากน้อยอย่างไร

26. ไม่สามารถควบคุมตัวเอง มีพฤติกรรมย้ำทำในเรื่องต่างๆ( ตัวอย่าง ล้างมือบ่อยๆ ตรวจเช็คของซ้ำๆ ) โปรดระบุ..... ☐

27. หมกมุ่นในกิจกรรมทางเพศ ☐

28. ดื่มเหล้า หรือเสพของมึนเมา ☐

29. ใช้ยาเสพติด หรือใช้ยาผิดวัตถุประสงค์ ☐

30. ควบคุมอารมณ์โกรธ แสดงอารมณ์โกรธรุนแรงใส่ผู้อื่น ☐

31. วู่วาม มีพฤติกรรมที่ผิดกฎหมายหรือขาดการยั้งคิด ☐

32. รู้สึกพึงพอใจในชีวิต ☐

## แบบสอบถามความพึงพอใจของผู้รับบริการ

## The Client Satisfaction Questionnaire

โปรดช่วยตอบคำถามเหล่านี้ เพื่อ เป็นประโยชน์ในการปรับปรุง บริการที่ท่านได้รับ เราสนใจในข้อคิดเห็นที่ตรงไปตรงมาของท่านไม่ว่าจะเป็นในแง่บวก หรือ แง่ลบ โปรดให้คำตอบทุกข้อ เรายินดีรับข้อเสนอแนะและคำแนะนำจากท่าน ขอบคุณครับ

กรุณาวงกลมหมายเลขในแต่ละข้อที่เป็นคำตอบของท่าน

๑. ท่านจะประเมิน คุณภาพของการบริการที่ท่านได้รับอย่างไร

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ดีมาก | ดี | ปานกลาง | ไม่ดี |

๒. ท่านได้รับสิ่งที่ท่านต้องการมากน้อยเพียงใด

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ไม่ได้รับเลย | ไม่ได้รับมาก | ได้รับทั่วๆไป | ได้รับตามความต้องการทั้งหมด |

๓. การรักษาที่ผ่านมา ตรงกับความต้องการของท่านอย่างไร

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ตรงกับความต้องการทั้งหมด | ตรงเกือบทั้งหมด | ตรงเพียงบางส่วน | ไม่ตรงกับความต้องการเลย |

๔. ถ้ามีเพื่อนที่มีปัญหาเหมือนท่าน ท่านจะแนะนำให้มารักษาที่นี้หรือไม่

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ไม่แนะนำแน่นอน | ไม่คิดจะแนะนำ | คิดว่าคงจะแนะนำ | แนะนำอย่างแน่นอน |

๕. ท่านรู้สึกพึงพอใจในปริมาณความช่วยเหลือที่ท่านได้รับความช่วยเหลืออย่างไร

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ไม่พอใจ | เฉยๆหรือไม่พอใจบ้าง | ส่วนใหญ่พอใจ | พอใจมาก |

code.....

๖. สิ่งที่ท่านได้รับความช่วยเหลือ สามารถช่วยท่าน แก้ไขปัญหาได้อย่างมีประสิทธิภาพ

มากขึ้น หรือไม่

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ช่วยได้อย่างมาก | ช่วยได้บ้าง | ไม่เลย | ไม่ช่วยและรู้สึกทำให้ปัญหาแย่ลง |

๗. ในภาพรวม ทั่วๆไป ท่านรู้สึกพอใจกับการบริการรักษาที่ผ่านมาอย่างไร

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| พอใจมาก | ส่วนใหญ่พอใจ | เฉยๆ หรือ ไม่พอใจเล็กน้อย | ไม่พอใจ |

๘. ถ้าท่านต้องการความช่วยเหลืออีก ท่านจะกลับมารักษาที่นี่หรือไม่

| ๔ | ๓ | ๒ | ๑ |
|---|---|---|---|
| ไม่มาแน่นอน | คิดว่าไม่มา | คงจะมา | มาแน่นอน |

# Rand 36-Item Health Survey 1.0
# Questionnaire Items

1. In general, would you say your health is:

| | (circle one number) |
|---|---|
| Excellent | 1 |
| Very good | 2 |
| Good | 3 |
| Fair | 4 |
| Poor | 5 |

2. Compared to one year ago, how would you rate your health in general now?

| | (circle one number) |
|---|---|
| Much better now than one year ago | 1 |
| Somewhat better now than one year ago | 2 |
| About the same | 3 |
| Somewhat worse now than one year ago | 4 |
| Much worse now than one year ago | 5 |

The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

| | (circle one number on each line) | | |
|---|---|---|---|
| | *Yes, Limited a Lot* | *Yes, Limited a Little* | *No, Not Limited at All* |
| 3. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports | 1 | 2 | 3 |
| 4. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf | 1 | 2 | 3 |
| 5. Lifting or carrying groceries | 1 | 2 | 3 |
| 6. Climbing several flights of stairs | 1 | 2 | 3 |
| 7. Climbing one flight of stairs | 1 | 2 | 3 |
| 8. Bending, kneeling, or stooping | 1 | 2 | 3 |
| 9. Walking more than a mile | 1 | 2 | 3 |
| 10. Walking several blocks | 1 | 2 | 3 |
| 11. Walking one block | 1 | 2 | 3 |
| 12. Bathing or dressing yourself | 1 | 2 | 3 |

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

(circle one number on each line)

| | Yes | No |
|---|---|---|
| 13. Cut down the amount of time you spent on work or other activities | 1 | 2 |
| 14. Accomplished less than you would like | 1 | 2 |
| 15. Were limited in the kind of work or other activities | 1 | 2 |
| 16. Had difficulty performing the work or other activities (for example, it took extra effort) | 1 | 2 |

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

(circle one number on each line)

| | Yes | No |
|---|---|---|
| 17. Cut down the amount of time you spent on work or other activities | 1 | 2 |
| 18. Accomplished less than you would like | 1 | 2 |
| 19. Didn't do work or other activities as carefully as usual | 1 | 2 |

20. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

(circle one number)

Not at all ..... 1
Slightly ..... 2
Moderately ..... 3
Quite a bit ..... 4
Extremely ..... 5

21. How much bodily pain have you had during the past 4 weeks?

(circle one number)

None ..... 1
Very mild ..... 2
Mild ..... 3
Moderate ..... 4
Severe ..... 5
Very severe ..... 6

22. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

(circle one number)

Not at all ..... 1
A little bit ..... 2
Moderately ..... 3
Quite a bit ..... 4
Extremely ..... 5

These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the past 4 weeks . . .

(circle one number on each line)

| | *All of the Time* | *Most of the Time* | *A Good Bit of the Time* | *Some of the Time* | *A Little of the Time* | *None of the Time* |
|---|---|---|---|---|---|---|
| 23. Did you feel full of pep? | 1 | 2 | 3 | 4 | 5 | 6 |
| 24. Have you been a very nervous person? | 1 | 2 | 3 | 4 | 5 | 6 |
| 25. Have you felt so down in the dumps that nothing could cheer you up? | 1 | 2 | 3 | 4 | 5 | 6 |
| 26. Have you felt calm and peaceful? | 1 | 2 | 3 | 4 | 5 | 6 |
| 27. Did you have a lot of energy? | 1 | 2 | 3 | 4 | 5 | 6 |
| 28. Have you felt downhearted and blue? | 1 | 2 | 3 | 4 | 5 | 6 |
| 29. Did you feel worn out? | 1 | 2 | 3 | 4 | 5 | 6 |
| 30. Have you been a happy person? | 1 | 2 | 3 | 4 | 5 | 6 |
| 31. Did you feel tired? | 1 | 2 | 3 | 4 | 5 | 6 |

32. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

(circle one number)

All of the time ..... 1
Most of the time ..... 2
Some of the time ..... 3
A little of the time ..... 4
None of the time ..... 5

How TRUE or FALSE is *each* of the following statements for you?

(circle one number on each line)

| | *Definitely True* | *Mostly True* | *Don't Know* | *Mostly False* | *Definitely False* |
|---|---|---|---|---|---|
| 33. I seem to get sick a little easier than other people | 1 | 2 | 3 | 4 | 5 |
| 34. I am as healthy as anybody I know | 1 | 2 | 3 | 4 | 5 |
| 35. I expect my health to get worse | 1 | 2 | 3 | 4 | 5 |
| 36. My health is excellent | 1 | 2 | 3 | 4 | 5 |

WRITE THE NUMBER IN THE BOX

0 no difficulty
1 a little
2 moderate
3 quite a bit
4 extreme

TO WHAT EXTENT ARE YOUR EXPERIENCING DIFFICULTY IN THE AREA OF:

5. LEISURE TIME OR RECREATIONAL ACTIVITIES ☐

6. ADJUSTING TO MAJOR LIFE STRESSES (e.g., separation, divorce, moving, new job, new school, a death) ☐

7. RELATIONSHIPS WITH FAMILY MEMERS ☐

8. GETTING ALONG WITH PEOPLE OUTSIDE OF THE FAMILY ☐

9. ISOLATION OR FEELINGS OF LONELINESS ☐

10. BEING ABLE TO FEEL CLOSE TO OTHERS ☐

11. BEING REALISTIC ABOUT YOURSELF OR OTHERS ☐

12. RECOGNIZING AND EXPRESSING EMOTIONS APPROPRIATELY ☐

13. DEVELOPING INDEPENDENCE, AUTONOMY ☐

14. GOALS OR DIRECTION IN LIFE ☐

15. LACK OF SELF-CONFIDENCE, FEELING BAD ABOUT YOURSELF ☐

16. APATHY, LACK OF INTEREST IN THINGS ☐

17. DEPRESSION, HOPELESSNESS ☐

18. SUICIDAL FEELINGS OR BEHAVIOR ☐

19. PHYSICAL SYMPTOMS (e.g., headaches, aches & pains, sleep disturbance, stomach aches, dizziness) ☐

The Client Satisfaction Questionnaire, *See Chapter 23*

CSQ-8
CLIENT SATISFACTION QUESTIONNAIRE

Please help us improve our program by answering some questions about the services you have received. We are interested in your honest opinions, whether they are positive or negative. *Please answer all of the questions.* We also welcome your comments and suggestions. Thank you very much, we really appreciate your help.

CIRCLE YOUR ANSWERS

1. How would you rate the quality of service you have received?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *Excellent* | *Good* | *Fair* | *Poor* |

2. Did you get the kind of service you wanted?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *No, definitely not* | *No, not really* | *Yes, generally* | *Yes, definitely* |

3. To what extent has our program met your needs?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *Almost all of my needs have been met* | *Most of my needs have been met* | *Only a few of my needs have been met* | *None of my needs have been met* |

4. If a friend were in need of similar help, would you recommend our program to him or her?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *No, definitely not* | *No, I don't think so* | *Yes, I think so* | *Yes, definitely* |

5. How satisfied are you with the amount of help you have received?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *Quite dissatisfied* | *Indifferent or mildly dissatisfied* | *Mostly satisfied* | *Very satisfied* |

6. Have the services you received helped you to deal more effectively with your problems?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *Yes, they helped a great deal* | *Yes, they helped somewhat* | *No, they really didn't help* | *No, they seemed to make things worse* |

7. In an overall, general sense, how satisfied are you with the service you have received?

| 4 | 3 | 2 | 1 |
|---|---|---|---|
| *Very satisfied* | *Mostly satisfied* | *Indifferent or mildly dissatisfied* | *Quite dissatisfied* |

8. If you were to seek help again, would you come back to our program?

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| *No, definitely not* | *No, I don't think so* | *Yes, I think so* | *Yes, definitely* |

Subject: Permission to use SF-36

Date: Tue, 1 Jun 1999 16:13:00

From: Erin Sparrow <esparrow@qmetric.com>

Organization: QualityMetric, Inc.

To: rarks@mucc.mahidol.ac.th

Tuesday, June 01, 1999

Ronnachai Kongsakon Ramatibodi Hospital

Assistant Professor

Medicine

Ramatibodi Hospital

Bangkok, 10140

Thailand

Dear Ronnachai:

In response to your recent request, I am happy to grant you permission To use and reproduce the SF-12 or SF-36 Health Surveys for the following: Depressive Disorder. Permission to use the SF-36 and SF-12 is granted royalty free for individual research and institutional non-commercial use. Organizations wishing to resell, sub license, or otherwise distribute the SF-36 or SF-12 survey forms or scoring algorithms as part of their product or service offerings (whether or not a fee is charged) should contact QualityMetric for commercial licensing information.Contact QualityMetric for permission to use the surveys for additionalprojects as they occur. Information about related publications is available on the Internet at www.sf-36.com and www.QMetric.com.

We have added you to our mailing list and will also forward your name And address to the Medical Outcomes Trust (MOT). We encourage you to become An MOT member.

Sincerely,

John E. Ware, Jr., Ph.D.

Executive Director, Health Assessment Lab

Senior Scientist, The Health Institute

President and Chief Executive Officer

QualityMetric, Inc.

Research Professor of Psychiatry

Tufts University School of Medicine

Adjunct Professor of Health and Social Behavior

Harvard University School of Public Health

Subject:

Date:

Thu, 10 Sep 1998 14:20:15 -0400

From:

Sue Eisen <seisen@world.std.com>

To:

rarks@mahidol.ac.th

Dear Dr. Kongsakon,

An information packet containing a sample copy of BASIS-32, instruction manual and several published papers regarding reliability, validity and use of BASIS-32 is available for $50. Your request can be faxed to 617-855-2550. If you would like to pay by credit card you can call 617-855-2328.

Automated scanning/software are available from several commercial vendors including HCIA/Response (800-522-1440) and BHOS, Inc. (800-494-2467).

Thanks for your interest.

Sincerely,

Sue Eisen, Ph.D.

# VITAE

Mr.Ronnachai Kongsakon was born on 23 November 1960 in Yala, Thailand. He graduated Medical Doctor from Siriraj Hospital, Mahidol University,in 1985. In 1989, he got Board of Psychiatry from the Royal College of Psychiatrist of Thailand. He has been enrolled in the Master Degree of Science in Health Development at Faculty of Medicine, Chulalongkorn University since 1998. The present position is Assist. Professor at Department of Psychiatry, Faculty of Medicine, Ramathibodi Hospital, Mahidol University.